

# ARUNDEL COMPREHENSIVE PLAN UPDATE



**2005**

**VOLUME II – INVENTORY AND APPENDIX**

**June 15, 2005**

**Amended: June 13, 2007 and November 13, 2007**



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## CHAPTER 1 DEMOGRAPHIC CHARACTERISTICS

Demographics is the name of the science of population and statistics regarding people. In this chapter we are looking at both the total population of the town and figures which indicate various characteristics of portions of the population. Arundel became a separate municipality in 1916. Therefore, information on its population is available from only 1920 on. The 1920 Census reported a total population for the town of 564. The population dropped during the 1920s but increased substantially during the 1930s, rising to 866. For the next twenty years, Arundel's population rose slightly and then dropped a little for a net increase of less than fifty people between 1940 and 1960. Since 1960 Arundel's population has increased steadily and dramatically: increasing 46% in the sixties,

Table 1-1 Population of Arundel and the Surrounding Municipalities, 1920-2000

Town	1920	1930	1940	1950	1960	1970	1980	1990	2000
ARUNDEL	564	546	866	939	907	1,322	2,150	2,669	3,571
Biddeford	18,008	17,633	19,790	20,836	19,255	19,983	19,638	20,710	20,942
Dayton	391	379	454	502	451	546	882	1,197	1,805
Kennebunk	3,138	3,302	3,698	4,273	4,551	5,646	6,621	8,004	10,476
Kennebunkport	1,431	1,184	1,448	1,552	1,851	2,160	2,952	3,356	3,720
Lyman	415	370	385	499	529	864	2,509	3,390	3,796
Subregion	23,947	23,414	26,641	28,601	27,544	30,521	34,752	39,326	44,310
York County	70,696	72,914	85,750	93,541	99,402	111,596	139,666	164,587	186,724

an additional 63% during the seventies, on top of that was a 24% increase during the eighties and finally a 38% increase during the 1990s. The numeric increase during the 1990s was the largest Arundel has ever experienced, for a 2000 population for the town of 3,571. Table 1-1 below shows the population from the decennial censuses for Arundel and the surrounding municipalities. Also shown is the population for York County. This same information for the municipalities is presented in Figure 1-1, with the exception of Biddeford, to preserve the scale of the graph.

Figure 1-1. Population of Arundel and Surrounding Municipalities, 1920-2000

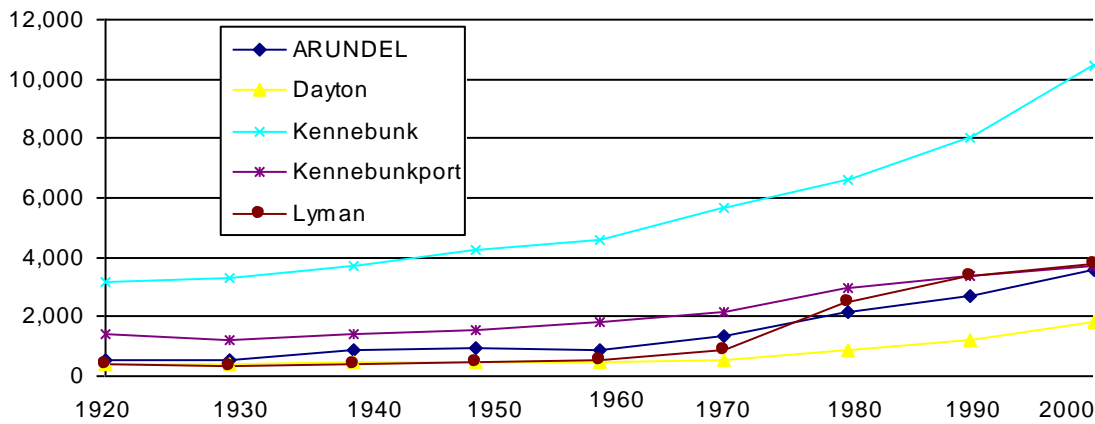


Figure 1-1 indicates roughly similar growth curves for the five municipalities shown, with the exception of Lyman and Kennebunk. Lyman's growth during the seventies far outstripped any of the surrounding municipalities, and in fact Lyman had the largest growth rate in the state during that decade. However, during the nineties, Arundel's population has caught up with Lyman's. Kennebunk had experienced rather steady growth throughout the time period shown but its growth has accelerated since 1980. Generally, the area experienced slow to moderate growth during the period 1920 to 1960. Growth rates picked up in the sixties, accelerating even more in the seventies. Table 1-2 compares Arundel's growth rates with the subregion's. Biddeford's large population (approximately 60% of the subregion) and lack of population growth in the past fifty years depresses the growth rates of the subregion. Therefore, the subregion without Biddeford has been presented as well.

Table 1-2. Population Change in Arundel and the Surrounding Municipalities, 1920-2000

	ARUNDEL			ARUNDEL SUBREGION			ARUNDEL SUBREGION w/o Biddeford		
	Population	Change	% Change	Population	Change	% Change	Population	Change	% Change
1920	564			23,947			5,939		
1930	546	-18	-3.2%	23,514	-433	-1.8%	5,881	-58	-1.0%
1940	866	320	58.6%	26,641	3,127	13.3%	6,851	970	16.5%
1950	939	73	8.4%	28,601	1,960	7.4%	7,765	914	13.3%
1960	907	-32	-3.4%	27,544	-1,057	-3.7%	8,289	524	6.7%
1970	1,322	415	45.8%	30,521	2,977	10.8%	10,538	2,249	27.1%
1980	2,150	828	62.6%	34,752	4,231	13.9%	15,114	4,576	43.4%
1990	2,669	519	24.1%	39,326	4,574	13.2%	18,616	3,502	23.2%
2000	3,571	902	33.8%	44,310	4,984	12.7%	23,368	4,752	25.5%

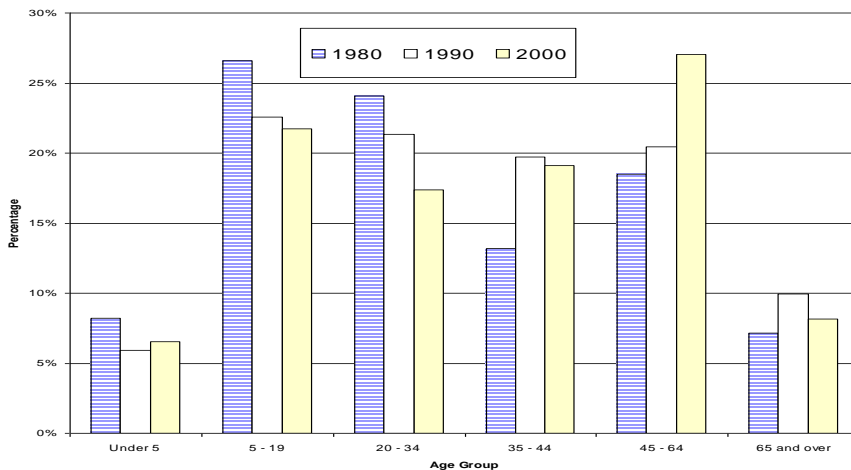
Table 1-3 presents information on the distribution of the population by various age categories. These data show that the portion of the population that has been growing the fastest in Arundel since 1980 is ages 35-44 and 45-64. It is within these age groups that the "baby boom generation" can now be found.

Table 1-3. Age Distribution

Age	1980		1990		2000		1990-2000 Change		1980 - 2000 Change	
	#	%	#	%	#	%	#	%	#	%
Under 5	177	8%	158	6%	234	7%	76	48%	57	32%
5 - 19	572	27%	603	23%	776	22%	173	29%	204	36%
20 - 34	518	24%	570	21%	621	17%	51	9%	103	20%
35 - 44	283	13%	527	20%	683	19%	156	30%	400	141%
45 - 64	398	19%	546	20%	966	27%	420	77%	568	143%
65 and over	154	7%	265	10%	291	8%	26	10%	137	89%
<b>Total</b>	<b>2,150</b>		<b>2,669</b>		<b>3,571</b>		<b>902</b>	<b>34%</b>	<b>1,421</b>	<b>66%</b>

Figure 1-2 shows the same information as the Table 1-3 and clearly show the shift in age distribution that has taken place. In 1980, the median age was 29.1 years and 30% of the population was under 18 years old. By 2000, the median age had increased to 37.3 years and the percentage of the population under age 18 had dropped to 26%.

Figure 1-2. Age Distribution, 1980 - 2000 by percent of Total Population



Accompanying the change in the distribution of the population there has been a change in the makeup of the households and families in the town. In 1980, there were 2,128 people living in 692 households. The average household size was 3.08 (down from 3.42 a decade earlier). In 2000, there were 3,560 people living in 1,363 households. The average household size had decreased to 2.61. In 1980, there were 94 people living in single-person households. By 2000, this figure nearly tripled to 264 people living by themselves, almost 20% of all households. The number of 2-person households increased by over 90%. In 1970, 73 households, or 10.5% of the total, were families with one parent not present. In 2000, the number had grown to 163, or 12% of the total.

The importance of the changes in household characteristics is not merely an academic exercise in statistics. The continued decline in average household size means that more housing units are needed even if the population remains the same. Between 1990 and 2000, the number of housing units in the town grew by 37% while the number of people grew by 34%. Changing demographics also have implications for the type of services the community will be expected to provide to its citizens

The Future

Although making population projections is a risky business at best, it is imperative to develop some indication of future population levels in order to plan. Looking at recent population trends, and making certain assumptions, one can make "educated guesses" about what may take place in the future. As long as the assumptions are clearly understood and the limitations of the projections are recognized, the need for future public services and facilities can be gauged.

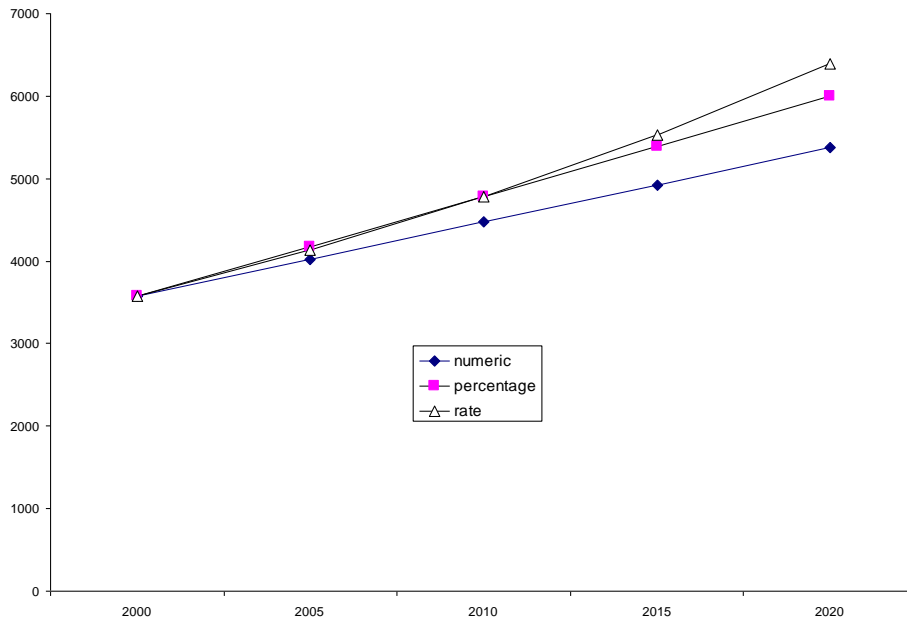
Population projections are usually based on the continuation of a trend between the present and some point in the past. The projections below are based on a continuation of the population trends during the 1990s. Table 1-4 and Figure 1-3 indicate various projections of Arundel's population based on three different methodologies, but all assuming the continuation of trends from 1990-2000. The various methodologies are explained following.

Table 1-4. Projections of Arundel's Population, 2005-2020

Year	Numerical	Percentage	Rate
2000	3,571	3,571	3,571
2005	4,020	4,180	4,130
2010	4,470	4,790	4,780
2015	4,920	5,390	5,530
2020	5,380	6,000	6,390

Arundel's population grew from 2,669 in 1990 to 3,571 in 2000. The increase in population was 902 people. This is average growth of 90 people per year. The numerical projection assumes that Arundel will continue to grow by 90 people per year during the time period covered by the projections. All the projections above are rounded to the nearest ten.

Figure 1-3. Projections of Arundel's Population, 1990-2010



The average annual growth represents a growth rate of 3.4% per year. The percentage projection assumes that Arundel's population will grow 17.0% (5 X 3.4%) between 2000 and 2005, 34% (10 X 3.4%) between 2000 and 2010, and so forth.

The rate projections assumes that the current growth rate will continue, and essentially "compounds the interest," resulting in higher projections. In this methodology, the population is projected to increase a certain percentage above the previous year's population each year.

All projections must be looked at in light of the assumptions behind them. Again all three of the above projections assume that the trend between 1990 and 2000 will continue. Whereas building activity was in a slump in the early 1990s and increased during the middle of the decade, the validity of that assumption can be questioned. However, the building industry is extremely cyclical. For the past several years the demand for housing starts has exceeded the number of permits available under the town’s Residential Growth Control Ordinance.

In December 2001, the Maine State Planning Office prepared population forecasts for all of Maine’s counties and municipalities. The State Planning Offices population forecast for Arundel is shown in Table 1-5. The SPO forecast for 2015 is about 7% lower than the numerical growth forecast discussed above.

Table 1-5. Maine State Planning Office Projected Population

2005	2010	2015
4,054	4,383	4,592

Table 1-6 below shows projected age group populations based on a total population from the numerical projection. These projections are based on some assumptions of the continuation of the shifts in age distribution shown in Table 1-3. It is assumed that the portion of the population younger than 18 years old will continue to decline, but not at as fast a rate. The 18-44 year old group will continue to grow but a slower rate in the later years of the table. As the "baby boom" generation matures, the percentage of the population in the 45 and older age-groups will climb, with the number of individuals age 65 and over projected to triple.

Table 1-6. Projected Population by Age Group

Age Group	2000	2005	2010	2015	2020
Under 5	234	275	300	325	350
5-19	776	850	900	920	940
20-34	621	675	700	725	750
35-44	683	725	810	850	1,480
45-64	966	1,185	1,260	1,350	1,440
65 & over	291	310	500	750	1,000
Total	3,571	4,020	4,470	4,920	5,380

Table 1-5 indicates a continuation of the maturation of Arundel's population: the number of persons age 65 and over may triple in the next twenty years. The shift in population may result in a shift in the types of services provided by the town in areas such as recreation and education.

## CHAPTER 2. ECONOMICS

For purposes of economic analysis the state has been divided into "Labor Market Areas". A Labor Market Area is a geographic area, in which based on the 1990 Census there was a recognizable pattern of commuting, usually around a "central city". It is an area within which an individual could change jobs without changing their residence. Arundel is a part of the Biddeford Labor Market Area. Most economic statistics are only collected on a Labor Market Area basis. Detailed statistics on a municipal basis are collected as part of the decennial censuses. As mentioned in Chapter 1, Arundel's population is about 3,600. The Biddeford Labor Market Area contains seven municipalities: Arundel, Biddeford, Dayton, Kennebunk, Kennebunkport, Lyman and Saco, with a total population of approximately 62,000. Therefore, Arundel is only a very small portion of the Labor Market Area, and the economic trends such as changes in employment that have taken place in the area may not necessarily be mirrored in Arundel. Secondly, most employment data is reported based on the location of the jobs, not the residence of the employees. The fact that few of Arundel's residents work in the town means the data has less validity for describing changes or the current situation in Arundel. However we shall present in this chapter what data are available and relevant for planning Arundel's future.

The following pages shall look at data compiled from the 1990 and 2000 Censuses and from publications of the Maine Department of Labor. In addition, some data were collected by the Planning Committee from the general survey questionnaire circulated to every household in town. The data collected present information about people, just as the previous chapter did. In this chapter we discuss what people do for a living, how much money they earn, where they work and in which industries they are employed.

In addition to information about the economic activity of the people of Arundel, information on the economic activity that takes place in Arundel is also presented. This information includes data regarding the number and types of businesses in town.

### Arundel's Role in the Area Economy

Arundel mostly plays the role of a bedroom community providing commuters to jobs in Biddeford, the Kennebunks and Portland. Of 1,388 workers reporting their place of work in the 1990 Census, 465, or 34% worked in Biddeford-Saco (down from 42% in 1980); 329 (24%) worked in Kennebunk-Kennebunkport (up from 23%); and 132 (10%) worked in Greater Portland (up from 8%). In 1990, only 181 Arundel residents (13%) worked in Arundel. Consistent with this information, the census reports that one third of the work force spent between 15 and 30 minutes traveling to work, and that 25% traveled greater than 30 minutes on a daily basis. This is a substantial increase from 1980 when half traveled between 15 and 30 minutes and only 15% traveled more than 30 minutes.

The 1990 questionnaire conducted by the Planning Committee asked respondents where they worked. The responses indicated that 19% of the respondents work in Arundel; 26% work in Biddeford-Saco; 23% work in the Kennebunk-Kennebunkport-Wells area; and 11% work in the Portland area. The same question was asked in the winter of 2002. The number of respondents reporting working in Arundel had decreased to 14%; Biddeford-Saco had decreased to 20%; Kennebunk-Kennebunkport-Wells had increased to 25%; and Portland had increased to 18%.

### Employment

Arundel has traditionally enjoyed a higher rate of employment than the surrounding towns and York County. Table 2-1 shows average annual unemployment rates for Arundel and surrounding towns for five recent years. While Arundel's unemployment rate remains lower than the York County average in recent years it has increase so that it is higher than rate for the sub-region and in 2003 was the highest of any municipality in the sub-region.

Table 2-1. Unemployment Rates

Town/City	1999	2000	2001	2002	2003
ARUNDEL	1.6	1.5	2.9	3.1	3.9
Biddeford	2.8	2.0	3.5	3.2	3.5
Dayton	1.2	1.5	1.8	2.7	2.5
Kennebunk	2.5	2.2	2.4	2.7	3.0
Kennebunkport	3.9	2.8	3.0	3.3	3.6
Lyman	1.9	1.8	2.6	3.0	3.7
Sub-region	2.6	2.0	3.1	3.0	3.4
York County	2.8	2.5	3.6	4.6	4.9

source: Maine Dept. of Labor

The average monthly labor force statistics for Arundel in 2003 reveal a total labor force of approximately 2,300 people. An individual is considered in the labor force if they are either working or looking for work. The 2000 Census counted 2,729 people over the age of 16. The Census reported that 2,029 or 74% of the population over the age 16 were in the labor force and increase of only 1% since 1990. The most recent data available, for the month of April 2004, indicate a labor force of 2,242, with 79 unemployed for an unemployment rate of 3.5%.

The decennial censuses report employment by occupation and employment by industry. In 2000, 77% of the employed people in Arundel were private wage and salary workers; 9% were self employed; and 13% worked for the federal, state, or local governments.

Table 2-2 presents information on the industries in which residents of Arundel and surrounding communities worked in 2000 as reported by the US Census. The sub-region is made of the municipalities adjacent to Arundel that are listed in the table. From Table 2-2 one can see that the major difference between Arundel and the sub-region is that Arundel had a higher percentage of its work force employed in the agriculture, forestry and fishing industries and fewer workers in service industries.

Comparing these data with similar data from the 1990 indicates that the percentage of Arundel workers employed in manufacturing continued to decline. This trend is reflective of the overall structural changes in our national economy during the past 25 years. In its place employment in retail trade and service industries had increased. The percentage of Arundel workers in the retail industries declined between the two censuses, contrary to most regional and national trends. This could be the result of changing demographics in the community, as reflected in the change in the occupational makeup of the community.

Table 2-3 presents the distribution of the work force by occupation for Arundel and the surrounding communities for 2000. Consistent with the above analysis, there was also a significant shift in the type of occupations held by Arundel residents during the 1990s. In 1980 over half of the town's workers were employed in "blue collar" occupations, such as production, crafts, repair, fabricators and laborers. By 1990 the percentage of workers in those occupations had dropped from 54% to 39% while the percentage employed in sales, administrative support including clerical and service occupations increased from 28% to 38%. In 2000 the occupational grouping with the largest increase was Executive, Managerial & Professional. During this decade the Construction, Extraction, & Maintenance occupations saw the largest decrease in the percentage of workers from Arundel. Even with these trends, in Arundel there are more blue-collar workers, and fewer executives, managers and professionals than the subregion and the county as a whole.

As mentioned above Arundel is part of the Biddeford Labor Market Area. According to the 2000 Census, just over 60% of Arundel workers are employed in the labor market area. This is a decrease from almost 80% in 1980, and approximately 70% in 1990. While this is a decrease, it still represents the majority of jobs for Arundel residents. The 2001 survey of Arundel residents revealed a similar percentage of the respondents worked in Arundel, the Kennebunks, Biddeford, Saco, or Old Orchard Beach. Comparing available data from the 2000 to the 1990 census it can be determined that there has been a substantial increase in the number of Arundel residents working outside of the immediate area. The 2000 Census reports that over 10% of the workers now commute to Portland, South Portland, or Westbrook for jobs. While the total number of workers increased by 37% during the decade, the number of workers commuting out of state increased by over 200%. The number working in a metropolitan area, increased by 66%, most likely indicating more residents commuting to Portland and Portsmouth.

Changes in employment opportunities in the LMA have an impact on Arundel residents. Table 2-4 presents data on wage and salary employment by industry for the Biddeford Labor Market Area for 1999 and 2002. The industrial classification system used to compile these data changed between these periods of time, resulting in apparent shifts where none actually took place. In those three years, there was a loss of 250 manufacturing jobs in the Biddeford area. This may be partially be the result of the industrial classification change mentioned above (newspaper printing and publishing was a manufacturing industry and is now an information industry). Compared to 1989, there were 500 fewer manufacturing jobs in the LMA. This is particularly important to Arundel, where 20% of the population was employed in manufacturing. The largest growth in employment took place in the service industries. Again part of this growth is due to the shift in industrial classifications (restaurants were a retail industry and are now a service industry).

## **Income**

Table 2-5 shows the changes in per capita income in Arundel and the surrounding municipalities between 1979 and 1999. In 1979, Arundel's per capita income was above only Dayton's and Lyman's within the subregion and about 10% less than the County per capita income. During the 1980s, Arundel's per capita income increased faster than any municipality in the subregion and was third, below the Kennebunks, surpassing Biddeford and nearly equaling the County's. During the 1990s, Arundel's per capita income grew at a slower rate than most of the surrounding towns and was once again the third lowest of the six municipalities.

Table 2-2. Employment by Industrial Grouping, Arundel and Subregion, 2000

Town/City	Agriculture forestry, fisheries, & Mining	Construction	Manufacturing	Transportation, Information, Warehousing and public utilities	Wholesale	Retail	Finance, insurance, & real estate	Services	Public administration	Total
Arundel	54 3%	152 8%	407 21%	139 7%	42 2%	230 12%	121 6%	387 27%	44 3%	1,419
Biddeford	82 1%	615 6%	3,037 29%	453 4%	271 3%	1,951 19%	696 7%	2,908 28%	335 3%	10,348
Dayton	17 3%	50 8%	153 25%	31 5%	18 3%	82 13%	41 7%	180 29%	42 7%	614
Kennebunk	93 2%	263 7%	570 14%	214 5%	166 4%	719 18%	306 8%	1,479 38%	132 3%	3,942
Kennebunkport	30 2%	102 6%	176 11%	90 6%	59 4%	388 24%	66 4%	680 42%	39 2%	1,630
Lyman	45 3%	195 12%	539 32%	111 7%	74 4%	214 13%	54 3%	392 23%	46 3%	1,370
Subregion	307 2%	1402 7%	4,824 25%	975 5%	614 3%	3,605 18%	1,232 6%	6,026 31%	638 3%	19,323
York County	1,579 2%	6,186 8%	20,964 27%	4,290 6%	2,480 3%	14,397 18%	4,989 6%	20,051 26%	2,999 4%	77,935

Table 2-3. Employment by Occupational Grouping, Arundel and Subregion, 2000

Town/City	Executive, Managerial & Professional	Service	Sales & Office Occupations	Farming, Forestry & Fishing	Construction, extraction, & Maintenance	Production, Transportation, & material	Total
Arundel	556 28%	256 13%	478 24%	42 2%	247 13%	380 19%	1,959
Biddeford	2,589 25%	1,775 17%	2,705 26%	32 0%	1,242 12%	2,136 20%	10,479
Dayton	274 28%	114 11%	238 24%	9 1%	133 13%	226 23%	994
Kennebunk	2,263 45%	591 12%	1,414 28%	27 1%	356 7%	378 8%	5,029
Kennebunkport	849 49%	183 11%	450 26%	17 1%	73 4%	158 9%	1,730
Lyman	538 26%	354 17%	454 22%	12 1%	322 16%	395 19%	2,075
Subregion	7,069 32%	3,273 15%	5,739 26%	139 1%	2,373 11%	3,673 16%	22,266
York County	29,435 31%	13,664 14%	24,906 26%	639 1%	10,486 11%	15,886 17%	95,016

Table 2-4. Employment by Industry, Biddeford LMA, 1999-2002

Industry	1999		2002		99-02 change	
	Employment	%	Employment	%	Change	%
Manufacturing	5,160	17.2%	4,910	15.5%	-250	-4.8%
Construction	1,060	3.5%	1,290	4.1%	230	21.7%
Trans. & Pub. Util.	700	2.3%	1,350	4.3%	650	92.9%
Wholesale Trade	1,260	4.2%	570	1.8%	-690	-54.8%
Retail Trade	7,650	25.6%	4,620	14.6%	-3,030	-39.6%
Fin., Ins. & Real Est.	1,010	3.4%	1,150	3.6%	140	13.9%
Services	10,000	33.4%	14,390	45.4%	4,390	43.9%
Government	3,100	10.4%	3,450	10.9%	350	11.3%
Total	29,940	100.0%	31,730	100.0%	1,790	6.0%

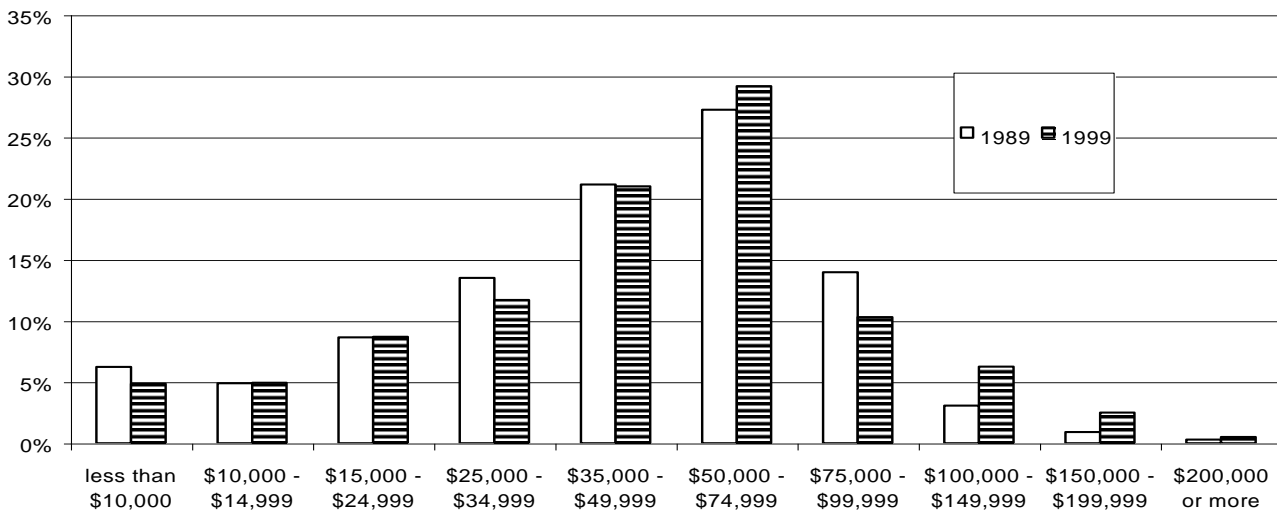
Table 2-5. Per Capita Income

Town	1979	1989	1999	Change	
				1979-89	1989-1999
ARUNDEL	\$5,530	\$13,920	\$20,538	152%	48%
Biddeford	\$5,717	\$12,796	\$18,214	124%	42%
Dayton	\$5,369	\$12,804	\$20,629	138%	61%
Kennebunk	\$7,649	\$18,665	\$26,181	144%	40%
Kennebunkport	\$8,906	\$22,347	\$36,707	151%	64%
Lyman	\$5,413	\$12,940	\$20,203	139%	56%
York County	\$6,210	\$14,131	\$21,225	128%	50%

Source: U.S. Census Bureau

Figure 2-1 compares the distribution of annual income among Arundel households in 1989 and 1999. The 1989 incomes have been adjusted for inflation to be roughly equivalent to the 1999 incomes. The graph shows two significant trends. The first is that the income levels in 1999 were fairly evenly distributed but more slightly weighted towards the lower income levels. The second trend is that between 1989 and 1999, there was significant growth in the percentage of households with a household income over \$100,000. The 1999 median household income in Arundel was \$49,484. The median household income for York County was \$43,630, or about 10% less than Arundel's.

Figure 2-1. Distribution of Income, 1989, 1999



Source: U. S. Census

### Economic Activity in Arundel

The 1992 plan noted the impact the construction of a water pipe in Route One has had on the growth of the commercial economy of Arundel. A review of the tax assessment records reveals about 150 businesses in Arundel. There may be others that do not appear on the list.

Table 2-6. Types of Businesses in Arundel

Business Type	Number
Agriculture/Forestry/Fishing	9
Construction	19
Manufacturing	18
Professional Services	16
Retail Trade	32
Services	57
Wholesale Trade	2

Agriculture/Forestry/Fishing includes 3 operating dairy farms, a sawmill, livestock farms, vegetable and flower farms, fishermen and lobster bait cooler. Construction includes building contractors, electricians, excavation contractors, and paving companies. The manufacturing companies in Arundel include canvas fabrication, ceramics, electronic controls, furniture, printing, signs, wind chimes and boats. The wholesale trade companies are involved in seafood and restaurant and hotel supplies

Table 2-7 presents data on recent taxable consumer retail sales in Arundel, the Kennebunk Economic Summary Area and York County between the years 1990 and 2001. The Economic Summary Area is made up of Arundel, Kennebunk and Kennebunkport. During that time total consumer sales in Arundel grew from \$10,770,000 to \$33,379,000. This increase was more than twice the rate of growth in the Kennebunk economic summary area and 2½ times the rate of growth in York County. Between 1995 and 2001 the increase in retail sales in Arundel was approximately 3 times that of the Economic Summary Area and the County.

Table 2-7. Total Taxable Sales, 1990-2003 (\$1,000)

	Arundel	K'bunk ESA	York Co
1990	10,770	96,742	819,938
1995	13,130	121,120	1,018,651
1997	25,451	138,773	1,137,709
1998	28,737	159,341	1,232,932
1999	30,603	169,512	1,338,773
2000	29,899	175,814	1,394,501
2001	33,379	179,345	1,445,668
2002		197,163	1,498,407
2003		204,863	
1990-2000	178%	82%	70%
1995-2000	128%	45%	37%
2000-2002	12%	9%	7%

Source: Maine State Planning Office



## CHAPTER 3. HOUSING SUPPLY

The decennial censuses, conducted by the federal government, give us a very complete look at the housing supply within Arundel and allow comparison of changes over time. From these sources of information we can confirm that Arundel residents primarily live in fairly new single family dwellings which we own ourselves. Other sources of data regarding current conditions have been the tax assessment records.

The 2000 Census counted a total of 1,415 housing units in Arundel an increase of 379 units from the 1990 Census count of 1,036. Of these, the Census Bureau classified only 36 as seasonal. Unlike many of Arundel's neighboring communities, there are a very small number of seasonal dwellings in town. Of the 1,379 year-round housing units, 1,363 were occupied at the time of the Census. There were no vacant housing units available for rent and only 16 vacant homes for sale. A vacancy rate of less than one percent may lead to the occupancy of substandard housing units, due to the lack of choice of other units in which to move. In 1990 there were 108 housing units occupied by renters. By 2000, that had increased to 203, nearly doubling. Owner-occupied units accounted for 89% of the housing in 1990 and 85% in 2000. This is a higher figure than most of the surrounding towns and than York County.

Between January 1 2000 and June 30, 2004, building permits for an additional 169 housing units have been issued. The town has an ordinance in place limiting the number of new homes that may be built in any year. The ordinance allows 36 new units annually. This ordinance has been in place since 1977. The limit on the number of new homes has been reached each year since 2002.

### Housing Types

The vast majority of housing units in Arundel are located in single family dwellings. Only 56 units were located in duplexes or multifamily structures. Another 39 units are identified as being single family attached structures. These likely include the units in the Rose Terrace housing developments and others similar. In 1990, one quarter of the dwelling units were mobile homes. From 1980 to 1990, the year round housing stock grew by 43%, but the number of mobile homes increased by 65% as they made up nearly one third of the new housing units. During the 1990s mobile homes made up only 12% of the new housing and the number of mobile homes increased at less than half the rate as single family homes. Table 3-1 presents information on the types of housing in Arundel in 1980, 1990, and 2000.

Table 3-1. Distribution and Growth of Housing Types, 1980-2000

Housing Type				1980-90			1990-2000		
	1980	1990	2000	Change	% Change	% of New Units	Change	% Change	% of New Units
Single Family	552	760	1,086	208	38%	67%	326	43%	86%
Multi-family	38	49	56	11	29%	3%	7	14%	2%
Mobile Home	134	227	273	93	65%	30%	46	20%	12%
Total	724	1,036	1,415	312	43%	100%	379	37%	100%

Arundel's mix of housing types shows a higher percentage of mobile homes and single family structures than neighboring towns (Table 3-2). Arundel, Dayton and Lyman share similar characteristics, with relatively high percentages of mobile homes and low percentages of multifamily units, which are different than the other three towns and the county.

Table 3-2. Distribution of Housing Types in the Arundel Sub-region, 2000

Town/City	Single Fam		Multifam		Mobile Home	
ARUNDEL	1,086	77%	56	4%	273	19%
Biddeford	4,590	48%	4,944	51%	91	1%
Dayton	571	86%	28	4%	64	10%
Kennebunk	4,011	80%	871	17%	103	2%
Kennebunkport	2,269	89%	238	9%	48	2%
Lyman	1,503	86%	18	1%	219	13%
Subregion	14,030	67%	6,155	29%	798	4%
York County	66,567	71%	20,318	22%	6,988	7%

Source: U.S. Census Bureau

Arundel, Dayton and Lyman are suburbanizing rural communities, traditionally made up of owner-occupied single family homes. Biddeford is an older community, which developed rapidly around the turn of the century as the textile industry grew, and a majority of its housing stock is renter occupied multifamily units. The Kennebunks fall in between. Both have older village centers that the three other communities lack, with a higher percentage of multifamily units.

The Census reports the distribution of the housing units by the number of bedrooms. Eighty percent of the housing units had two or three bedrooms. Although there were 263 one-person households and 493 two-person households, there

were only 60 one-bedroom housing units. This indicates a potentially large unmet demand for smaller homes by the growing number of small households (in 1990 there were only 488 one- and two-person households compared to 756). There were 225 units with four or more bedrooms in 1990 and only 109 households of 5 or more people.

Table 3-3. Housing Tenure in the Arundel Subregion, 2000

Town	Total Housing Units	Year-Round Housing Units	Seasonal Housing Units	Total Occupied Housing Units	Owner Occupied	Renter Occupied
ARUNDEL	1,415	1,386	29	1,363	1,157	206
Biddeford	9,631	7,990	646	8,636	4,193	4,443
Dayton	663	655	8	638	560	78
Kennebunk	4,985	4,362	623	4,229	3,362	867
Kennebunkport	2,555	1,681	874	1,615	1,351	264
Lyman	1,749	1,413	336	1,366	1,241	125
Subregion	20,998	17,487	2,516	17,847	11,864	5,983
York County	94,234	77,637	16,597	74,563	54,157	20,406

Source: U.S. Census Bureau

Table 3-4 shows the changes in housing between 1990 and 2000, based on the available data from the 2000 Census.

Table 3-4. Housing Growth in Arundel 1990-2000

	Total Housing Units	Year-Round Housing Units	Seasonal Housing Units	Total Occupied Housing Units	Owner Occupied	Renter Occupied
1990	1,036	1,029	7	973	865	108
2000	1,415	1,386	29	1,363	1,157	206
Change 1990-2000	379	357	22	390	292	98
% increase 1990-2000	37%	35%	314%	40%	25%	91%

Source: U.S. Census Bureau

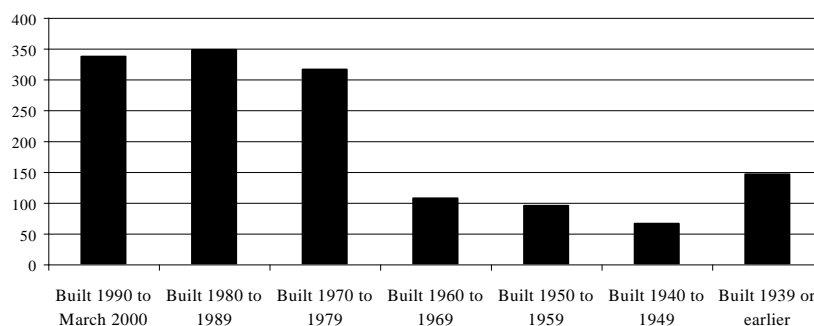
It should be noted that the 1980 Census reported 31 seasonal housing units. Most likely the 1990 Census count is erroneous, as it would be unusual for there to such a change during one decade to have it be reversed in the next.

### Age and Condition of Housing

As mentioned above, the year-round housing stock increased by about 40% each decade between 1980 and 2000. Over 1,000 of the 1,415 homes in Arundel have been built since 1970.

According to data from the Census, only 146 housing units, or 10%, are in structures built prior to 1940. Half are in structures built in the past twenty years. Figure 3-1 shows the distribution of housing units by date of construction.

Figure 3-1. Distribution of Housing by Age of Construction



Source: U.S. Census Bureau

Whereas Arundel's housing stock is new, it therefore should exhibit relatively little structural problems. When the town's property valuation records were updated in 1989, the appraisal firm made an assessment of structure condition as part of the valuation process. Structures were graded on a scale of zero to 100. In the preparation of the 1992 comprehensive plan, the Planning Committee reviewed the assessment records and tabulated the distribution of properties according to grade. Dwellings which received a grade of 90 or better are considered in excellent condition. Dwellings that

received a grade of between 70 and 90 are considered in good to fair condition. Dwellings that received a grade of less than 70 are considered in poor condition. At that time, only 18% of the units were in poor condition or worse. It can be assumed that new housing built since then is in good to excellent condition. Therefore, it is estimated that no more than 10% of Arundel's housing is in poor condition.



## CHAPTER 4. HOUSING COSTS

Nearly everyone today is aware of the rapid escalation in housing costs in southern Maine during the past fifteen years. There was rapid growth in housing costs in the mid-1980s. After a period of stability or even cost decreases during the recession of the early 1990s, prices have again been inflating during the past five years. Quantifying that escalation and its impacts is not an easy task however. Data on housing costs in recent years comes from two sources: the real estate brokers through the Multiple Listing Service, and from the real estate transfer tax forms filed with each sale. The collection and reporting of housing costs is not an exact science. The decennial Census contains extensive detail on housing costs, but due to the nature of the information collection system, may contain inaccuracies. The census data is based on figures reported by the homeowner. A homeowner's opinion of the value of their house may not be an accurate reflection of market conditions.

The median value of an owner occupied "specified" single family house in 1980 was \$43,300. The 1990 census reported that value had increased to \$117,300. Census 2000 reports the median value as \$130,000. The Census Bureau uses the term "specified" unit to mean single family homes which are not mobile homes, are located on ten acres of land or less, and contain no business use such as an office or shop. Half of the specified single family homes in 2000 had an estimated value of between \$99,600 and \$166,000.

A review of the real estate transfer tax data on file at the assessors office reveals a median sales price of \$191,500 for sales of single-family homes (including mobile homes) on lots of less than 10 acres that sold between April 1, 2003 and March 31, 2004. The table below shows the distribution of the homes by sales price.

Table 4-1. Distribution of Sales Prices of Single Family Homes, April 2003 to March 2004

Number Of Homes	Price Range
6*	less than \$100,000
3	\$100,001 - 125,000
2	\$125,001 - 150,000
3	\$150,001 - \$175,000
3	\$175,001 - \$200,000
4	\$200,001 - 250,000
7	\$250,001 - 300,000
4	more than \$300,000

\* mobiles home in mobile home park, no land included

Source: Arundel Assessor's Office

Only 15% of the homes in Arundel were rented in 2000. Renters in 25 of the rental units paid no cash rent. The median monthly rent for those with cash rent was \$588, up from \$453 in 1990. Half of the rental units with cash rent paid between \$494 and \$729 per month. There were 7 units with a monthly rent of less than \$300 and 30 units with a monthly rent of \$1,000 or more. Of 190 rental units, 102 were located in single family attached or detached structures, 38 were in structures with 2 to 4 units, and 50 were mobile homes.

There are no housing developments in Arundel constructed with government subsidized funding, nor are there any units approved for subsidized rent. .



## CHAPTER 5. HOUSEHOLD CHARACTERISTICS

As mentioned in the chapter on Demographics, changes in Arundel’s household composition have reflected national demographic trends. This chapter looks at reports from the 2000 Census to provide useful insights into the characteristics of the households in town and changes in recent years. The overarching trend for the past forty years is that households have been getting smaller and fewer households are made up of what was thought to be the traditional two-spouse and children composition.

In 1980, there were 2,128 people living in 692 households. The average household size had dropped to 3.08 from 3.42 in 1970. In 1990, there were 2,669 people living in 973 households. The average household size had decreased to 2.74. The 2000 Census reports that 3,560 people were living in 1,363 households and the average household size continuing to decrease to 2.61. In 1980 there were 94 people living in single-person households. By 1990, the number of people living by themselves had increased by nearly half to 136. The 2000 Census reports 263 one-person households in Arundel, comprising 19% of all households. Table 5-1 presents information on the number of households, by household size for

Table 5-1. Distribution of Household Size, 1980 to 2000

Size of Household	1980		1990		2000	
1 person	94	14%	136	14%	263	19%
2 persons	208	30%	352	36%	493	36%
3 persons	117	17%	210	22%	261	19%
4 persons	167	24%	198	20%	237	17%
5 persons	54	8%	61	6%	82	6%
6 or more persons	52	7%	16	2%	27	2%

Source: U.S. Census Bureau

1980 through 2000. The percentage of households with five or more persons in the household did not change from 8% of the total between 1990 and 2000. The number of 3-person and 4-person households decreased from 44% to 36%. The number of 1-person and 2-person households increased from 50% to 55%.

The implications of this trend include two significant points. More housing and more land will be needed for the same population. For instance, if the population of the town had remained *unchanged* between 1980 and 2000, but the average household size had declined as it did, the town would have needed an additional 123 housing units just to house the same number of people. Secondly, declining household size may foretell an increased demand for smaller dwellings and more multi-family units, even in communities such as Arundel.

Besides the size of our households, there has been another significant change going on the characteristics of households. This involves the relationships of the people in the household. In 1990, there were 788 households made up of at least two people related to each other, for 81% of all households. By 2000, the number of families had grown to 999, or but the percentage declined to 73% of the households. Families made of married couples declined from 70% of households in 1990 to 61 % in 2000. The number of families with a female householder, no husband present and her own children nearly doubled from 35 in 1990 to 69 in 2000.

Nonfamily households, either those made up of an individual living alone or unrelated individuals living together, increased from 185 in 1990 to 364 in 2000. Single-person households are discussed above and make up the majority of these nonfamily households. The number of nonfamily households with two or more people doubled from 49 in 1990 to 100 in 2000. The “traditional” family made up of a married couple with their own children now comprise only 28% of the households in Arundel. This is a decrease from 33% in 1990.



## CHAPTER 6. HOUSING AFFORDABILITY

### Definition of Affordable Housing

Issues of housing affordability deal with a comparison of the distribution of housing costs to the distribution of income in the municipality and in the housing market in which the municipality is located, with a goal of providing all citizens safe, sanitary and decent housing. Housing experts in both the private and public sectors have set a target of households spending no more than a certain percentage of their income on housing costs. These percentages vary from source to source, but generally range from 25% to 33% of income.

The Maine State Planning Office has, for the purposes of municipal comprehensive plans, established a definition of affordability and set criteria for income levels for whom towns should be concerned about the supply of affordable housing. The rules adopted by the Office indicate that an owner-occupied housing unit is considered affordable if the unit's selling price is one that can result in the monthly costs (mortgage, insurance, taxes, and utilities) of no more than 33% of the household's gross monthly income. A rental unit is considered affordable if the unit's monthly costs (rent and utilities) are no more than 33% of the household's gross monthly income.

The Planning Office defines "affordable housing" as housing units which are affordable to households whose income do not exceed 80% of the median income for the area. Portions of York County are in the Portsmouth-Dover-Rochester Metropolitan Area or the Portland Metropolitan Area, however Arundel is located in the non-metropolitan portion of the county.

### Affordability Index

Though not using the same definition of affordable as in the State Planning Office Rules, the Maine State Housing Authority publishes an index of housing affordability. The index compares the median price of single family homes in the community with the price of a home a family with the community's median income could afford. An index of 1.00 would indicate that a family with a median income could afford the median priced home. An index of less than one indicates that the median income family could not afford the median priced home. The data published by the MSHA for 2003 indicate that the affordability index for Arundel was 0.85. This means that a family with Arundel's median income in 2003 could afford to buy a home with a price of 85% of the median-priced home.

Arundel is grouped in the Biddeford Housing Market by MSHA. Of the nine municipalities in the housing market, the MSHA calculated the 2003 median price house in Arundel to be the most affordable and it is more affordable than York County, the first congressional district, or the State.

According to these same calculations, the affordability index for Arundel has been improving during the past three years for which MSHA has provided comparable data. The index in 2001 was 0.76, meaning that a family with Arundel's median income could afford a home with a price of 76% of median sales price of a home in the town. In 2002, the index had improved to 0.78 and then grew 0.85 in 2003. Using the MSHA data, the rate of change in Arundel of the cost of the median priced home between 2001 and 2003 was the second lowest of the municipalities in the housing market area.

### Demand for Affordable Housing

The U.S. Department of Housing and Urban Development publishes the median household income for areas on an annual basis. H.U.D. publishes the income figures for regulatory purposes to set thresholds to qualify for their various programs. This is a projection of incomes for the given year, not a report of actual earnings. The median income the non-metropolitan portion of York County for 2003 is reported as \$45,400.

Prior to discussing target prices and rents for affordable housing, let us take a moment to discuss the statutory guideline for meeting affordable housing needs in light of the definitions discussed above. The 2000 Census provides information on the distribution of income in the town. The 1999 median household income in Arundel was \$49,484. By definition, fifty percent of the households made more than or less than the median. Table 6-1 indicates the number of household making less than various percentages of the median household income.

Table 6-1. Distribution of 1999 Income in Arundel

Percent of Households	With Incomes not Exceeding
89%	200% of median
80%	150% of median
66%	120% of median
50%	100% of median
36%	80% of median
18%	50% of median

Source: U.S. Census Bureau

The Legislature has mandated that each municipality make an effort to have 10% of the new housing starts be “affordable.” Looking at the distribution of income in Arundel and using the definitions from the State Planning Office, one can see that 36% of the households qualify as low or moderate income families. Clearly, the town must make an effort to assure that more than 10% of the new housing units in the town are priced to be affordable by as much as 36% of the population.

The term affordable housing, shall mean a unit that can be purchased with only 28% of the household's monthly income going to mortgage payments, insurance, taxes, and utilities, or rented with 30% of the household's income used to pay rent and utilities.

**Affordable Housing Supply**

There are several components of affordable housing supply. The discussion in Chapter 3 presents general information regarding the housing supply in Arundel. This section will provide some further analysis of that information and present some data on recent housing price trends in Arundel.

Manufactured homes are generally more affordable housing than site-built homes. The increase in affordability is provided by the fact that manufactured housing units generally contain smaller living quarters than site-built homes and some economies of construction can be provided. Based on the 2000 Censuses, 19% of the housing stock in Arundel at the current time is manufactured housing. Since 1990, manufactured housing has made up 12% of the new housing in the town.

The town currently permits the placement of manufactured housing units on individual lots throughout the town. However there are performance standards in the Land Use Ordinance that require a pitched roof, siding similar to that found on most site-built residential structures and placement of a suitable foundation. Since late 1989, mobile home parks have been restricted to two locations within the town. There are currently three mobile home parks in the town. One mobile home park that was located on Portland Road when the last comprehensive plan was drafted has closed, for a loss of 14 lots. The Shady Oaks park has expanded since the previous plan and The Pines was built. There are now a total of 158 lots provided in the parks and they range in size from four units to 71 units.

During the past few years, the percentage of new homes that are manufactured homes has decreased. In the 1980s, 37% of the new homes were manufactured homes. During the 1990s, only 12% of the new homes have been manufactured homes. Since 2000, approximately 10% of the new homes have been manufactured homes.

Using the definitions stated above, one can calculate the selling price for an owner occupied home to be “affordable.” For the figures presented in Table 6-2, additional assumptions needed to be made. The figures below, for home ownership, assumed a 10% down payment and a 30-year mortgage at 7% interest and are based on a median household income for non-metropolitan York County of \$45,400, as mentioned above.

Table 6-2. Affordable Housing Price

80% of Median Income	Monthly Income	28% of Monthly Income	Affordable House Price
\$36,320	\$3,027	\$847	\$110,000

Of the 2003-04 sales evaluated in Chapter 4, only one of 26 houses, or 4%, would qualify as affordable. There were six mobile home s in mobile homes parks that were sold for less than \$100,000, but this price did not include the land..

The above data indicate a lack of affordable home ownership opportunities in Arundel. The average price of building lots in Arundel, from the sales figures appears to be approximately \$50,000. If one assumes a \$65 per square foot building cost (on the low side), would allow for a 1,000 square-foot house.

Not only is the affordable house price affected by income, it is also affected by average available mortgage rates. By 2005, the median income for non-metropolitan York County had increased to \$56,450 and national average 30-year mortgage rates were at 5.5%. This results in an increase to the price of an affordable home to \$207,000. It should also be noted that by 2005 the average sales price of house lots in Arundel has increased to \$80,000.

Chapter 4 presented information on rental costs. Median monthly rent was reported as \$588. In order to be considered affordable, rent, heat, and utilities should not exceed \$850. There were 91 households identified as renting their homes and having incomes of \$35,000 or less. Of these, the percentage of their income paid towards gross rent was calculated for 66 households. Of these 66 households, more than half paid more than 35% of their gross income for rent. This indicates the need for additional affordable rental units. There is currently under construction a development of 17 one-bedroom rental units. Although the rental price may not meet definition of an affordable rental unit, as smaller homes they should be more affordable than a larger unit.

According to the 1990 and 2000 Censuses, an average of 38 new dwelling units were added to the town's housing stock per year. If we assume this trend will continue, Arundel will need to provide 40 new "affordable" units during then next decade to meet the statutory guideline and 140 to realistically begin to meet the demand.



## Chapter 7. Community Setting, Topography

Arundel, being situated on the Atlantic coastal plain, is generally flat, extending inland to gentle rolling hills in the northern end of town. The town extends from tidal marshes and flats along the Kennebunk River at sea level to several hills with elevations over 200 feet. Figure 7-1 shows the elevation of the town, shaded to 100 foot increments. Approximately half the town is situated below 100 foot elevation. Only a small portion of the town extends above 200 foot elevation.

The town contains a land area of 15,450 acres, or slightly over 24 square miles. Compared to other municipalities in York County, this is a relatively small geographic area. The town contains one small pond, with a surface area of 15 acres.

The ground is generally flat except for the northern portion of the town, where rolling hills form the landscape. Only isolated areas, mostly cut by streams and the Kennebunk River, have slopes at a grade that may present obstacles for development. Figure 7-2 is based on the York County Soil Survey and shows those areas mapped as having a 15% slope or greater. A 15% slope means that a hill rises 15 feet within a 100 foot horizontal distance. When working on or around slopes above 15%, care must be taken to avoid erosion problems during construction, agricultural, or forestry activities. Subsurface wastewater disposal systems are not permitted on sites with a slope of 20% or greater. The relatively small and isolated nature of the steeper areas in Arundel means that development should be able to be “designed around” the steep slopes and avoid problems.

The Kennebunk River makes up the southwesterly boundary of the town. Except for a short portion of Goff Mill Brook on the southerly boundary, the other municipal boundaries are all artificially drawn straight lines. Arundel’s easterly boundary with Kennebunkport follows the old streetcar line to Biddeford, a portion of which is now the Log Cabin Road.

Most of Arundel is wooded. West of the Maine Turnpike, a higher percentage of the land is in open fields, as this is where the soils better suited for agriculture are found. The flat nature of the land combined with the type of soils typically found in the town result in a prevalence of wetland areas throughout the town.

The lack of topographic features and the generally wooded nature of the town result in few areas of the town having outstanding scenic value. There are relatively few areas in town that have a broad landscape available to be viewed. It is the northern end of town, along Route 111, that has a prevalence of open fields that provide panoramic views, though in recent years new homes have been built in those fields.

Figure 7.1 - Elevation

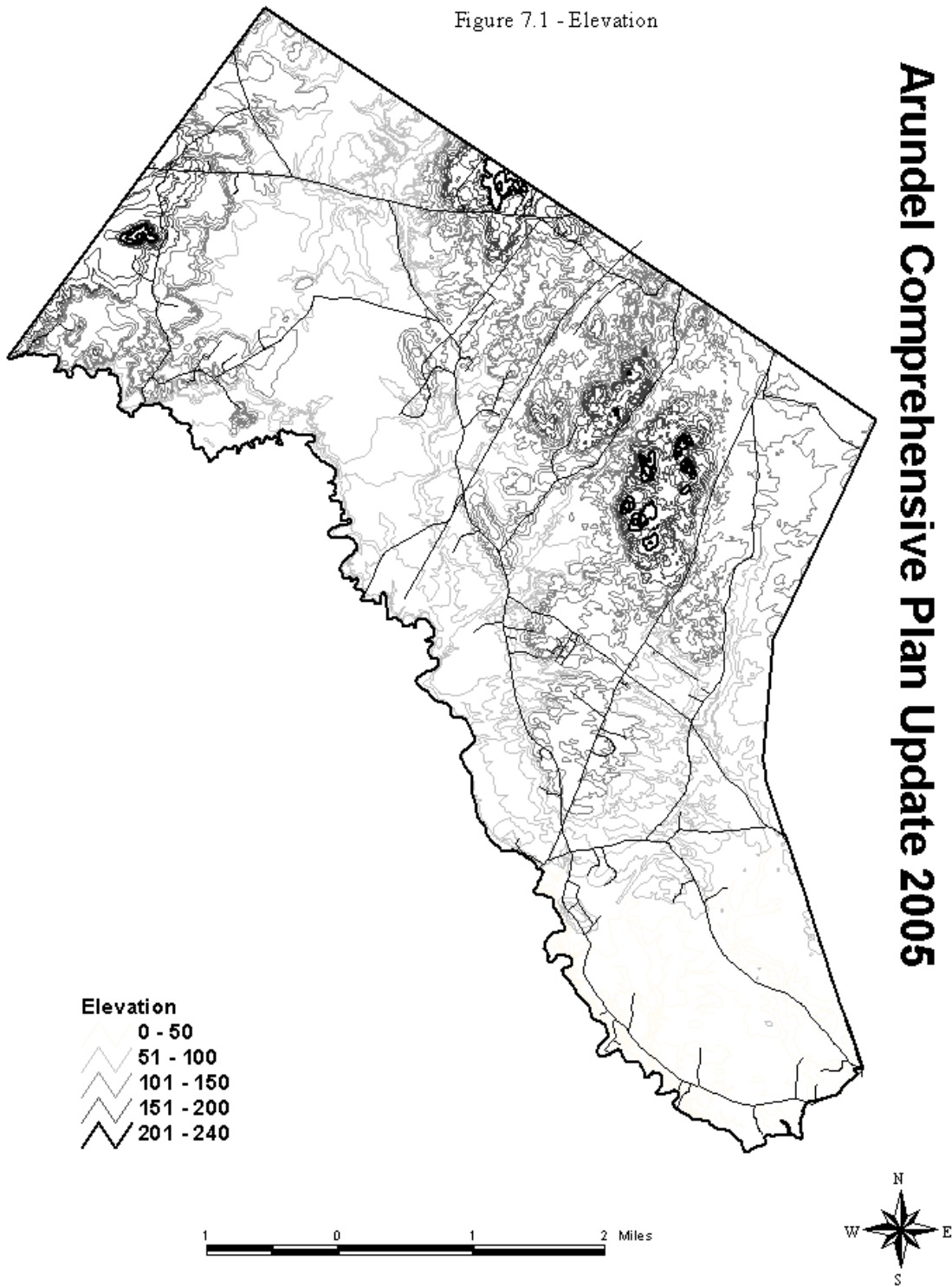
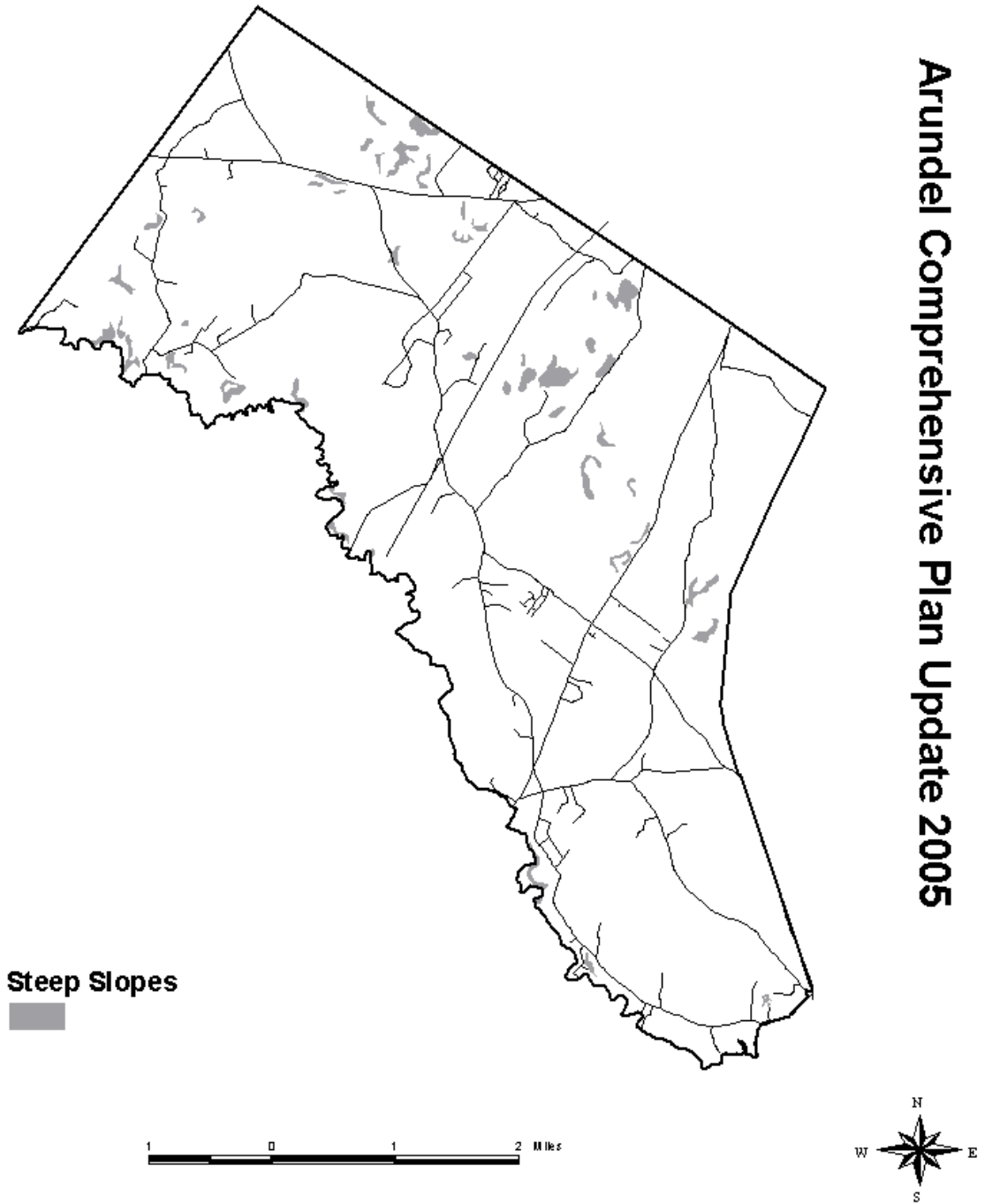


Figure 7-2 - Slopes Exceeding 15%



**Arundel Comprehensive Plan Update 2005**



## CHAPTER 8. SURFICIAL GEOLOGY AND SOILS

### PART I. SURFICIAL GEOLOGY

Like all of New England, Arundel's surficial geology and soils are the result of the last glaciation and were formed since the Pleistocene period. Virtually all of Arundel's surficial deposits can be classified into five different groups. Figure 8-1 shows the surficial deposits and is based on the York County Soil Survey. These groups differ in how they were deposited in relation to the advance and retreat of the glaciers. As glaciers advanced across the landscape two processes occurred. The weight of the glacier crushed and compacted the material under it and the glacier picked up and pushed around material. Secondly, as the glaciers melted, the melt waters carried large amounts of material. These materials were then deposited either as the melt waters slowed down or as it entered ancient lakes and the ocean.

#### **Glacial Outwash Deposits**

As the ancient streams and rivers, carrying a heavy sediment load entered the ocean, the sediment was released. The coarse sands were dropped first, forming large fan-shaped deltas and plains. Grain size is generally coarser near the ice-contact deposits and becomes finer seaward. The thickness of the deposit may be as much as 100 feet. Ground water yield depends upon thickness and grain size of deposits. In areas with coarse-grained material, outwash may yield several hundred gallons per minute to properly constructed wells. Seaward, where deposits are finer grained and thinner, they may yield enough water to dug or driven wells for domestic use. Many springs occur at the contact between outwash and underlying marine clay. Water is generally soft and of good quality. About one quarter of Arundel is derived from outwash material: an area along the Lyman town line, and a long band of material throughout the center of town.

#### **Glacial Marine Deposits**

The finer sediments were released in ancient lakes and the ocean in calmer deeper waters. These predominantly black, dark-blue, or gray silts and clays may contain layers of medium sand a few inches to several feet thick. The thickness of these deposits may be as much a 190 feet and occur in coastal lowlands and the lower parts of stream valleys. They generally underlie outwash deposits and may crop out in stream valleys where the overlying material has been removed by erosion. Marine deposits may be saturated with water, but because of the fine grain size, yield water slowly and do not constitute an important aquifer although they supply small quantities of water to dug wells from sandy zones. Approximately one third of Arundel, the areas around the Kennebunk River and other streams as well as the area around Route 111, is in Glacial Marine deposits.

#### **Glacial Till Deposits**

Till is a mixture of various particle sizes (ranging from clay to boulders) that generally covers the upland in a relatively thin layer. It is material that was under the glaciers or within the ice itself and was dropped as the ice melted. In places, till deposits may be very sandy. Thickness may be as much as 10 feet. Till deposits are widespread throughout York County, but are predominantly found more in inland areas than coastal areas. Dug wells in till are likely to go dry during dry periods. There is a band of till material in Arundel extending southerly from the Biddeford town line.

#### **Swamp Deposits**

Swamp deposits are chiefly organic material (partly decayed leaves, roots, moss, ferns, wood, and heath plants and grasses) and some silt, clay, sand or gravel. Thickness may be as much as twenty feet, occurring in low-lying and poorly drained areas. Not a good source of ground water resources. Water may be acidic, highly colored, or high in nitrate or other organic matter. One large swamp deposit has been mapped in Arundel, near the Brimstone Road. There are other smaller swamp deposits.

#### **Alluvial Deposits**

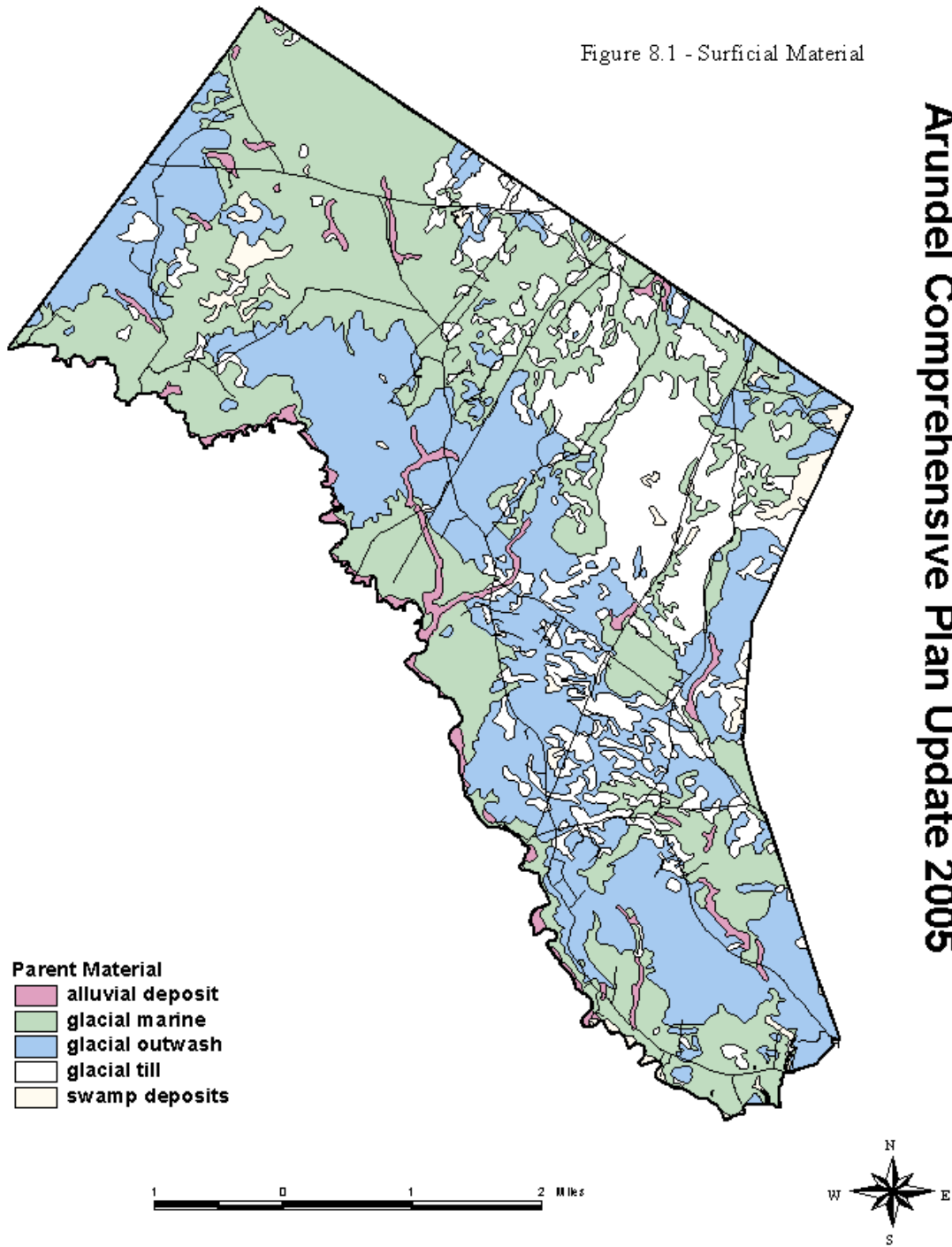
These are materials deposited along the streams since the time ocean waters receded approximately 10,000 years ago. Most of areas of alluvial deposit are subject to regular flooding.

### PART II. SOILS

#### **GENERAL SOILS FORMATIONS**

Part I described the origin of the surficial material. That material is the basis for the various soil types that make up Arundel. A general soils map of York County reveals four soil "associations" found in Arundel. Typically, an association consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up an association can occur in other associations but in a different pattern. The general soils map can be used to compare the suitability of large areas for general land uses, but is not useful for site specific interpretations.

Figure 8.1 - Surficial Material



### **Naumburg-Croghan Association**

The Naumburg-Croghan Association is made up of deep, nearly level and gently sloping, poorly drained to moderately well drained soils in glacial outwash. These soils have rapid permeability, with a generally sandy texture. Seasonal high water table and rapid or very rapid permeability are the main limitations for most non-farm uses. Wetness in the spring and fall and droughtiness in the summer are the limitation for agricultural uses.

Areas in the Naumburg-Croghan Association are found around the Thompson Road and Alfred Road intersection; The north end of Portland Road and Proctor Road, Portland Road, south of Campground/Log Cabin Roads; Log Cabin Road; Sinnott Road; and River Road.

### **Hermon-Lyman Association**

The Hermon-Lyman Association is composed of shallow and deep, gently sloping to very steep, well drained to somewhat excessively drained soils in friable glacial till, located on plains, hills and ridges. The Lyman soils are shallow to bedrock. The Hermon soils are sandy loam over coarse materials. The main limitations for most non-farm uses are slope, rapid permeability and the shallow depth to bedrock. Droughtiness, rocks and stones on the surface, and the shallow depth to bedrock are limitations for agricultural uses.

The Hermon Lyman Association is found along the southern end of Alfred Road.

### **Scantic-Raynham-Buxton Association**

Deep nearly level to moderately steep and hilly, poorly drained to moderately well-drained soils formed in sediments -- marine and lake plains -- make up the Scantic-Raynham-Buxton Association. These are the remains of ancient lakebeds and the ocean bottom. High water table and poor workability are the major limitations of the association for farming. Slope, high water table and slow permeability are the main limitations for non-farm uses.

Areas in the Scantic-Raynham-Buxton Association are found along the upper parts of the Kennebunk River; Downing Road; Curtis Road; Limerick Road; Alfred Road and Hill Road and an area between the River Road and Sinnott Road.

### **Lyman-Rock Outcrop-Scantic Association**

Shallow gently sloping to very steep, somewhat excessively drained to poorly drained soils formed in glacial till compose the Lyman-Rock Outcrop-Scantic Association. There are areas of exposed bedrock and deep level poorly drained soils in sediments. Bedrock exposure, droughtiness and high water table present limitations for both farm and non-farm uses.

These soils are found along the north end of the Portland Road, Old Post Road; and New Road.

## **SOIL SUITABILITY**

### **Suitability for Development**

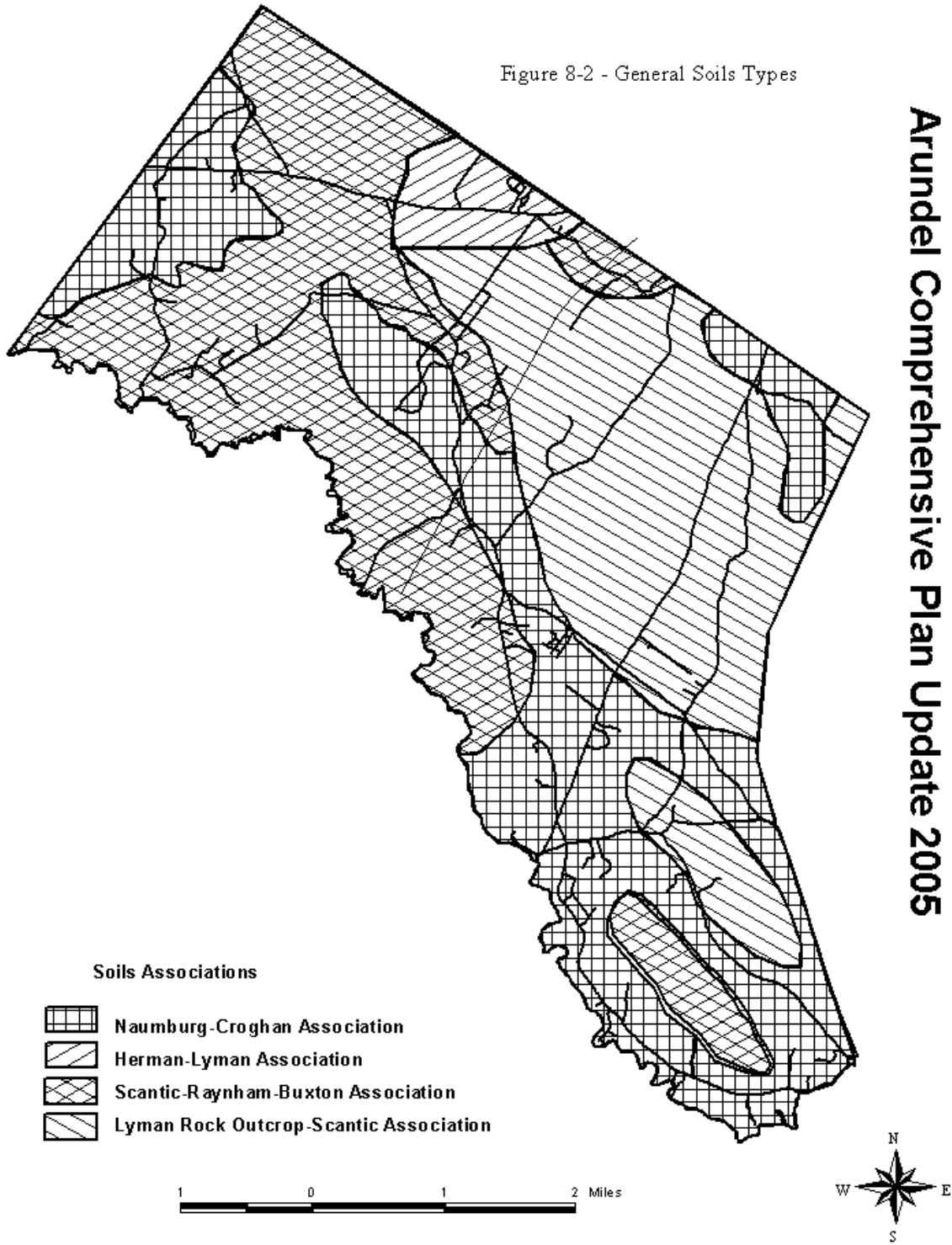
The York County Soil Survey also presents "medium intensity" soils maps. These maps can be used to determine the suitability and potential of soil for specific uses. Each map unit on the maps represents an area on the landscape and consists of one or more soils for which the mapping unit is named. The soil survey maps are published at a scale of 1:20,000. This allows the mapping units to differentiate areas as small as three acres in size. Digitized versions of the soils maps have been obtained for the town's Geographic Information System.

The York County Soil and Water Conservation District and the Threshold to Maine Resource Conservation and Development District have produced a report which rates the potentials for low density development of the soils in York County (Soil Potential Ratings for Low Density Development in York County, Maine, 1990). This rating system is based on local conditions, local experience and expertise and the laws, codes, and rules governing the use of soils for various purposes. They reflect the potential of use rather than the limitation of use are designed to meet local needs and conditions. Preparation of the soil potential ratings considered the feasibility of using certain technology and practices to overcome limiting factors and the relative cost of implementing these practices and the adverse effects and costs of any continuing limitation during the projected lifetime of the use.

Factors that were considered in developing the potential ratings were: texture, permeability, slope, surface stones, water table, flooding, depth to bedrock, restrictive layer, and drainage class. The soils were rated for low-density development of single family residences with basements and comparable buildings with subsurface wastewater disposal systems, with or without an on-site source of water.

The rating produced a numerical index between 0 and 100 which reflects the costs involved of taking corrective measures to overcome the limitations of the soil. The numerical ratings have been separated into Soil Potential Rating

Figure 8-2 - General Soils Types



Classes, which are based on the expected performance of a soil if feasible measures are taken to overcome its limitations, the cost of such measures, and the magnitude of the limitations that remain after measures have been applied. There are five Soil Potential Rating Classes as illustrated in Table 8-1.

Table 8-1. Soil Potential Ratings for Residential Development

Soil Potential Index	Ratings Class
100	Very High
85-99	High
60-84	Medium
40-59	Low
0-39	Very Low

Figure 8-3 indicates the ratings class. Areas with soils that are in the high and very high ratings classes are shown as having the most potential for development. Areas with soils that are in the low and very low ratings classes are shown as having the least potential for development.

Figure 8-3 one can see that only a very small portion of the town has soils that rate high or very high potential for development. The area with the largest concentration of soils that are best suited for development is along Route 111 near the Biddeford City line. Most of the town has soils that have only low or very low potential for low-density residential development. High water table, shallow bedrock, and low permeability are the most common limiting factors. These characteristics greatly restrict the ability to install subsurface wastewater disposal systems and foundations.

### **Suitability for Agriculture**

The Natural Resource Conservation Service has published a list of soils and their importance for agriculture on a national and statewide basis. Figure 8-4 shows those soils that are most valuable for agricultural use. The soils series that are included as being most valuable for agriculture are shown in Table 8-2.

Table 8-2. Soils in Arundel Most Valuable for Agriculture

Allagash very fine sandy loam	Madawaska fine sandy loam
Buxton silt loam	Marlow fine sandy loam
Elmwood fine sandy loam	Skerry fine sandy loam

There appears to be two areas of concentrations of valuable agricultural soils. These are an area along the northwestern portion of town, excepting the wetland around Brimstone Pond, and an area between Portland Road and the Maine Turnpike along the Limerick and Campground Roads. It is primarily the northern portion of the town where agricultural activity is currently taking place.

### **Suitability for Forestry**

The York County Soil Survey, in table 7, presents data on the potential productivity of soils for forest management and tree growth. This table presents a woodland suitability symbol for each soil that was rated. The symbol consists of two parts, the first being a numerical rating of potential productivity of the soils for commercially important tree species. The number ranges from 3 to 5, with 3 indicating good productivity and 5, poor. The second part of the symbol, a letter, indicates the major kind of soil limitation. Table 8-3 indicates the soils that received a productivity potential rating of 3.

Table 8-3. Soils in Arundel Best Suited for Forest Production

Elmwood	Podunk
Madawaska	Scio
Marlow	

Figure 8-5 shows the location of soils that are best suited for forest production within the town. Again, two major concentrations of areas of found. The two lists of soils that are best for agriculture and for forestry share many of the same soils series. Therefore it is the same portions of town which show a concentration of areas best for forest production that are best for agriculture.

### **Hydric Soils**

As discussed in the chapter on wetlands, term “hydric soils” has been used to define wetlands. The Natural Resources Conservation Service has defined hydric soils as soils which are “saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.” In other words, they areas which, during the period of time that plant would normally grow, are so wet that plant roots are not exposed to any air. The Natural Resources Conservation Service has identified the hydric soils likely to be found in York County. These soils are listed in Table 8-4.

Table 8-4. Hydric Soils Found in Arundel

Biddeford	Brayton and Westbury
Chocorua	Naumburg
Raynham	Rumney
Saco	Scantic
Sebago	Sulfhemists
Vassalboro	Waskish

The hydric soils in Arundel are shown on Figure 8-6. As is shown on Figure 8-6, a majority of the land area in Arundel is mapped as hydric soils. While not all of these areas are necessarily wetlands and therefore in need of regulatory protection by the town, these are areas which present limitations for development. Hydric soils were rated very low in the development potential ratings referred to at the beginning of this chapter. There is further discussion regarding hydric soils in the chapter on wetlands.

Figure 8-3 - Soil Potential Ratings for Residential Development

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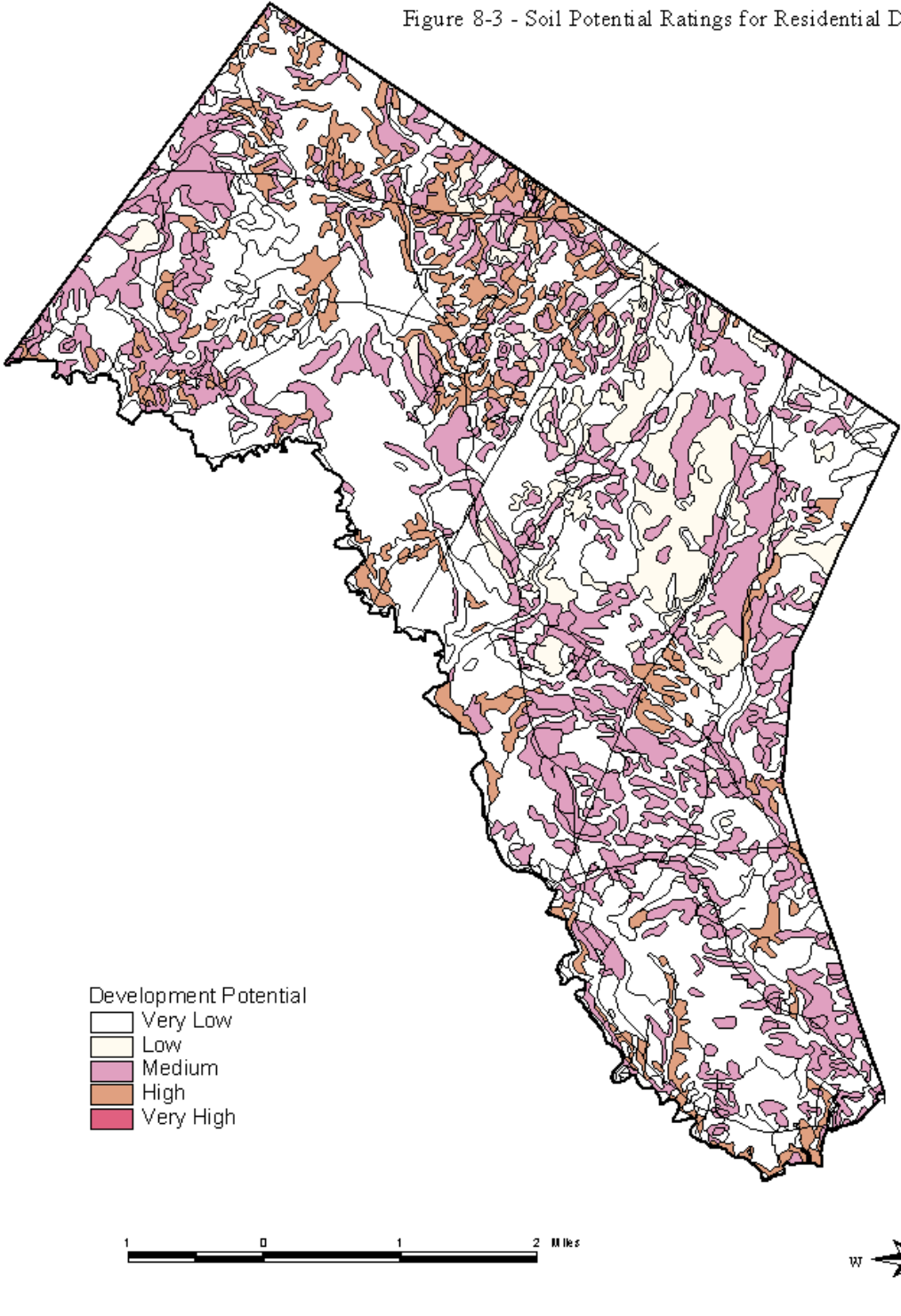


Figure 8.4 High Value Soils for Agriculture

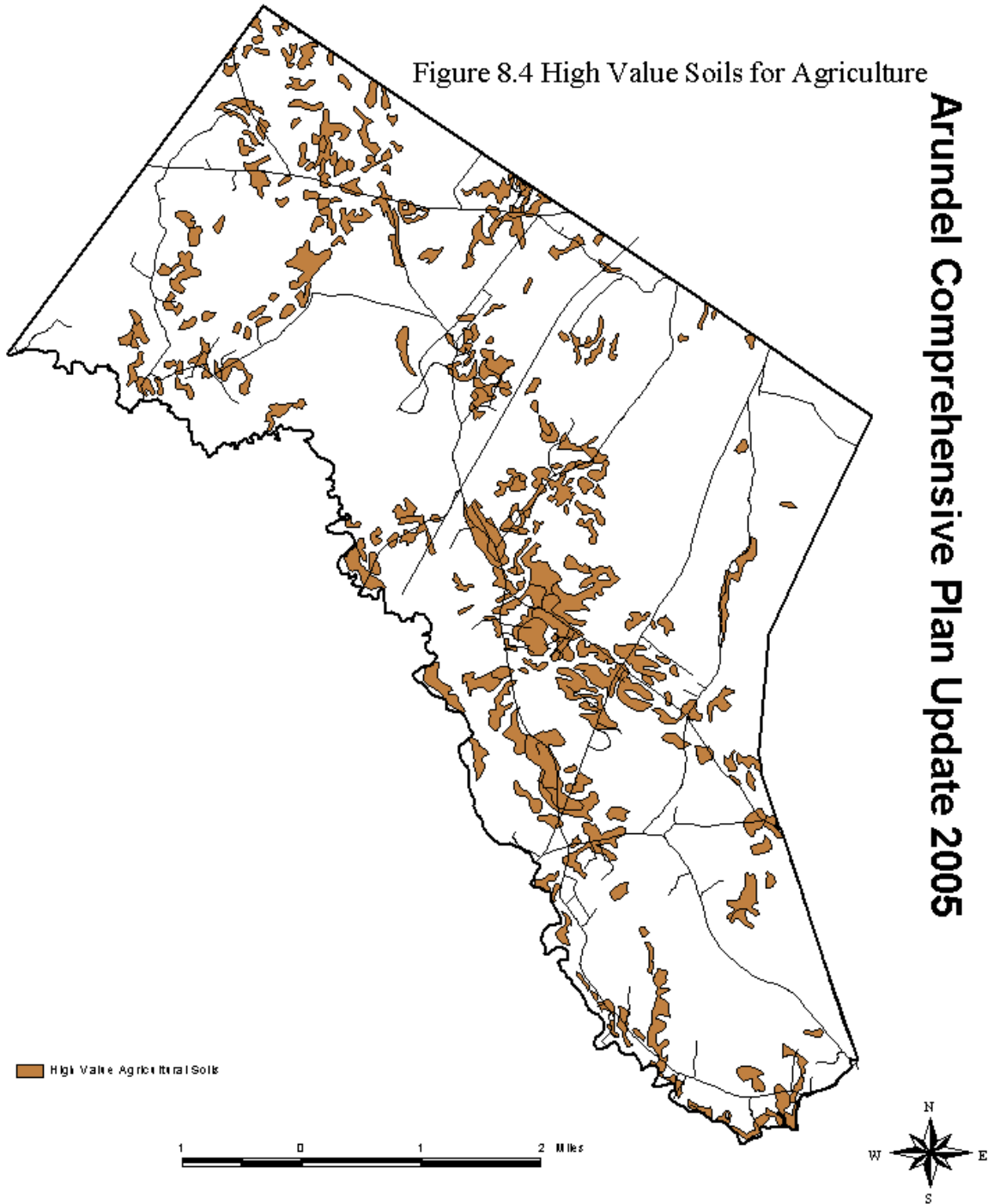


Figure 8.5 High Value Soils for Forestry

Arundel Comprehensive Plan Update 2005

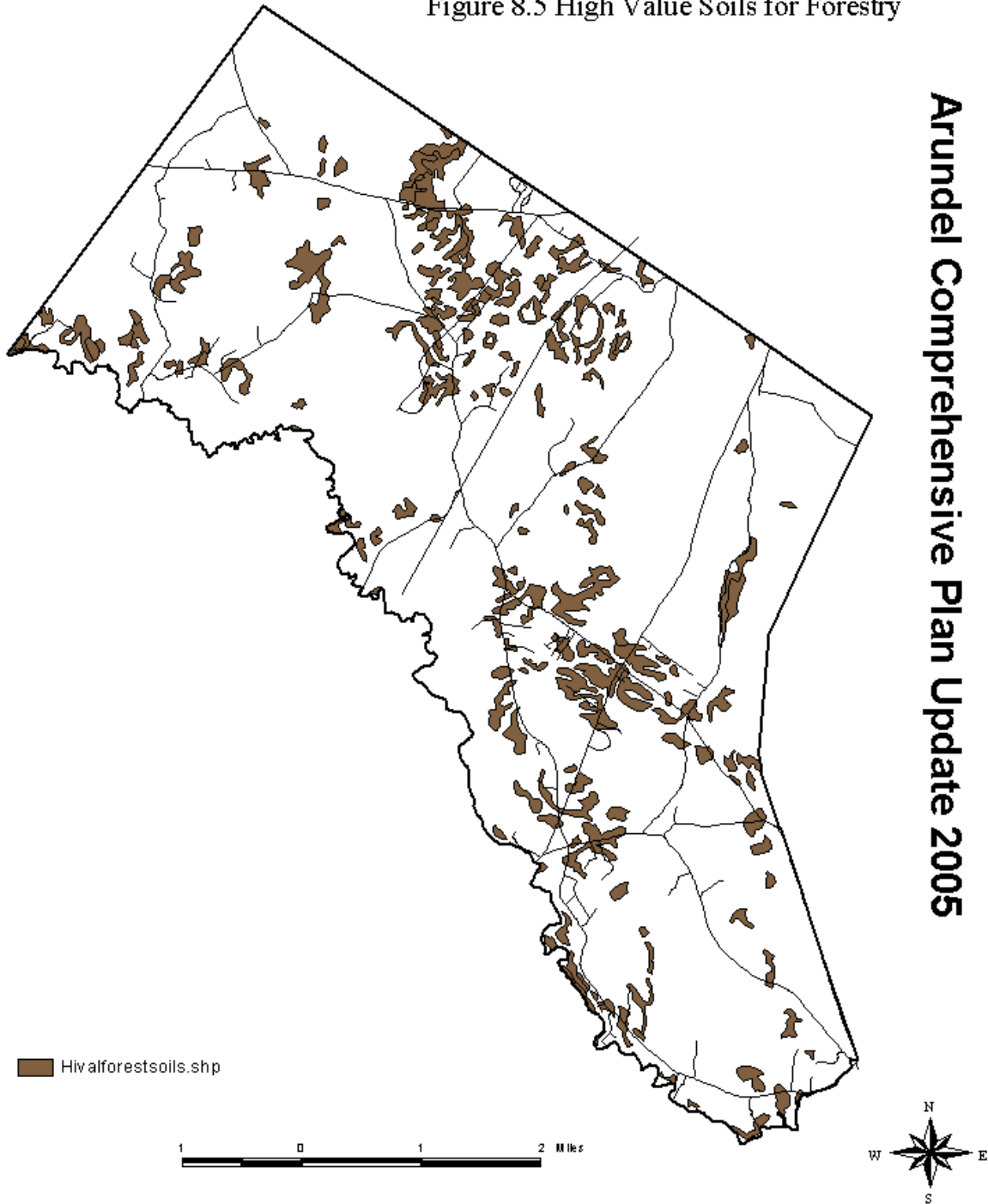
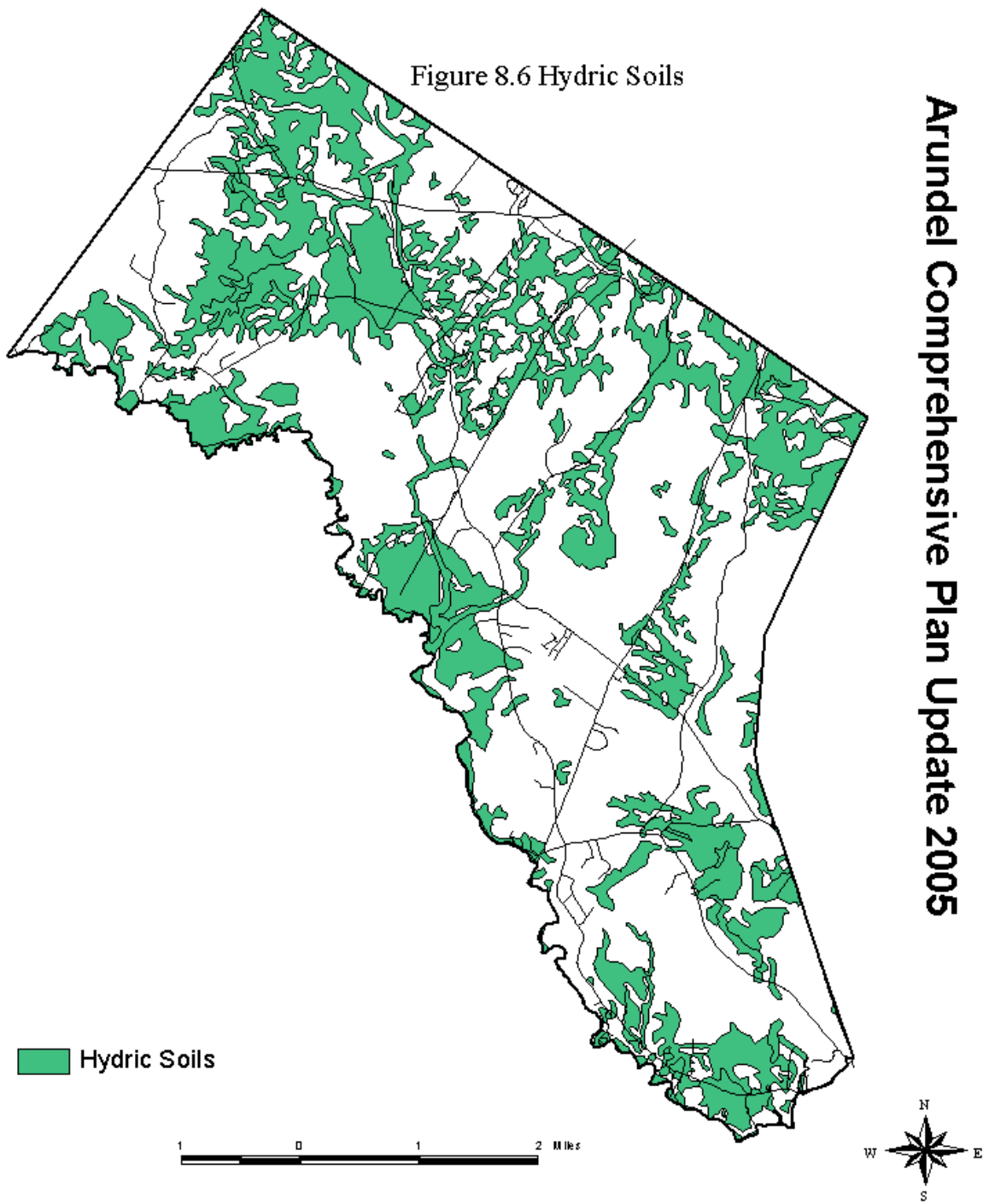


Figure 8.6 Hydric Soils



## CHAPTER 9. SURFACE WATER RESOURCES

The major surface water bodies in the Town of Arundel are the Kennebunk River, Goffs Mill Brook, and Brimstone Pond.

The town can be divided into two major surface watersheds, the Kennebunk River watershed and the Saco River watershed. The watershed of a river is that area in which all of the surface runoff or rainfall will end up in that river. The divide between two watersheds is the high point either side of which rainfall will run in opposite directions. Figure 9-1 shows the major watershed divides in Arundel. Approximately the southerly two-thirds of the town is in the watershed of the Kennebunk River, the remainder in the Saco River watershed.

### KENNEBUNK RIVER AND TRIBUTARIES

The Kennebunk River makes up Arundel's southwesterly boundary. The river and its watershed were the subject of a study conducted jointly by the Towns of Arundel, Kennebunk and Kennebunkport in 1986. During the summer of 2000, another study of the potential non-point sources of pollution in the watershed was conducted.

The watershed of the river drains portions of the towns of Lyman, Arundel, Kennebunk and Kennebunkport. The total area of the watershed is approximately 53 square miles. Of this area, approximately 15 square miles are in Lyman, 16 are in Arundel, 17 are in Kennebunk, and 5 are in Kennebunkport. The length of the main stem of river is 13 miles, from its mouth to the point it splits into Carlisle Brook and Lords Brook in Lyman.

Kennebunk Pond is the origin of the river. The pond is unique in that it has two outlets, which form Carlisle and Lords Brooks, which later join each other to form the River.

The river is tidal to a point approximately 5.2 miles from its mouth in the Atlantic Ocean and 0.2 miles upstream from the B & M Railroad bridge.

The Maine Legislature has classified the rivers of the state for purposes of regulating water quality. The classification of the and all its tributaries is currently Class B. The classification is an indication of the lowest water quality the Department of Environmental Protection (DEP) may allow. It is not an indication of current water quality.

Water quality testing of the Kennebunk River had been done by the DEP until 1983. In 1985 and 1986 a private group, Friends of the Kennebunk River performed some testing. Since the early 1990s, water quality testing has been accomplished by volunteers associated with the Kennebunk High School and the Conservation Commissions of Arundel, Kennebunk and Kennebunkport.

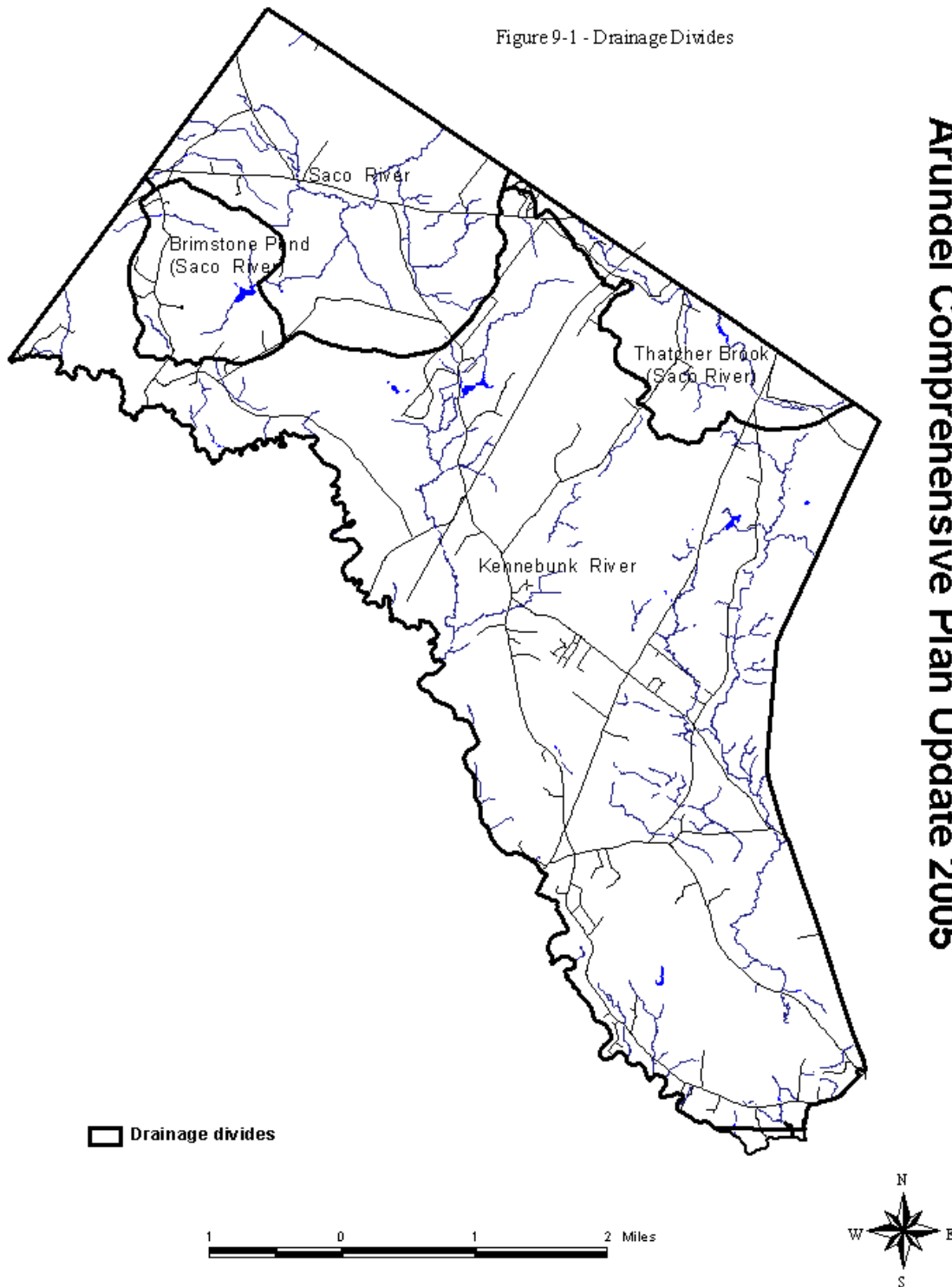
Between 1996 and 2001, there were four stations for the water quality testing: Government Wharf; Durrell's Bridge; Route One; and Downing Road. In general, the water quality testing done since 1996 indicates the river attains the standards for a Class B water body. Tests for dissolved oxygen and are in the normal range. Tests for bacteria show that contamination is a problem. Only about half of the tests at Route One and Downing Road are acceptable. Tests at Durrell's Bridge are unacceptable.

A 1982 study by the Maine Department of Conservation and the National Park Service indicated the Kennebunk River has a composite of natural and recreational resource values with statewide significance. The Maine Department of Environmental Protection has placed the Kennebunk River on its nonpoint source pollution priority list. This means that the river is showing degradation in the area of sedimentation, nutrient loading and bacterial contamination. Sedimentation is known to be a problem due to the frequency with which anchorages in the harbor need to be dredged. Ongoing bacterial contamination results in otherwise productive shellfish beds being closed to harvesting.

Due to the listing of the River as a nonpoint source priority watershed, The towns of Arundel, Kennebunk, and Kennebunkport received a grant to conduct a survey of nonpoint sources of pollution throughout the watershed. Though unable to cover the entire watershed, the survey found 88 sites with potential sources of runoff or other contamination. The major need identified by the study is for the establishment of more effective vegetated buffer strips along the river and its tributaries.

The major tributary of the Kennebunk River, in Arundel, is Goffs Mill Brook. A small portion of the brook makes up the boundary between Arundel and Kennebunkport. The 1986 study of the river stated that of all the tributaries to the river Goffs Mill Brook has the greatest scenic attractiveness and the most scenic diversity. The brook is approximately eight miles in length and contributes the greatest water volume into the Kennebunk. No information on its water quality is available.

Figure 9-1 - Drainage Divides



Duck Brook is the second largest tributary in Arundel. Duck Brook begins from what used to be Davis Pond, flowing 3.2 miles, entering the Kennebunk River between the Maine Turnpike and Route One. It is estimated that Duck Brook contributes approximately half the flow rate as Goffs Mill Brook. No information on its water quality is available.

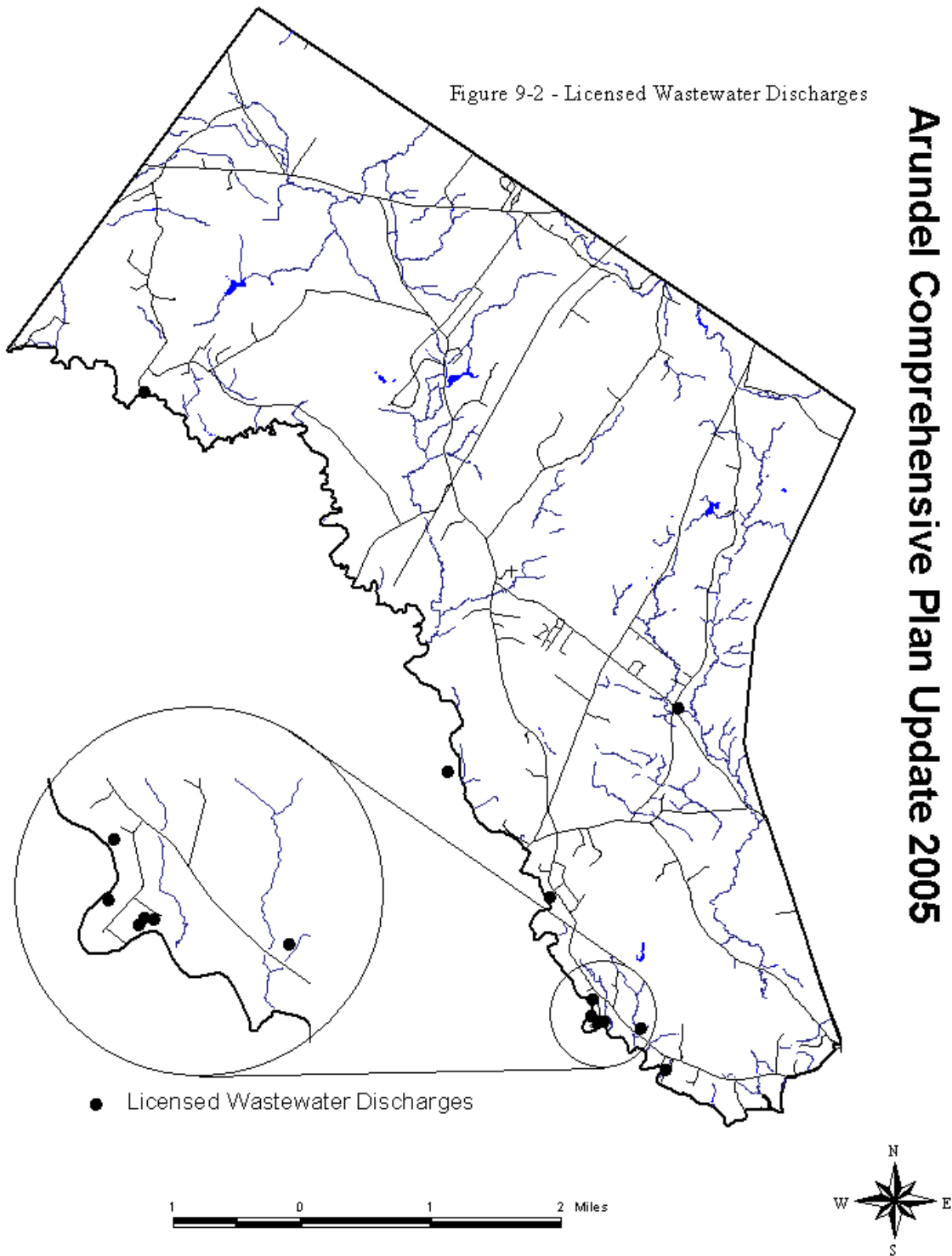
Arundel Swamp Brook splits off the Kennebunk River 500 feet upstream from Goffs Mill Brook. The Brook is the outlet for the “Arundel Swamp,” a wooded freshwater wetland, approximately one mile from the river.

The DEP has licensed ten wastewater discharges from private residences in Arundel into the Kennebunk River. The location of these properties is shown on Figure 9-2. Typically, these systems consist of a treatment tank such as that used for a subsurface wastewater disposal (septic) system. The effluent from the treatment tank passes through a bed of sand to filter it, is chlorinated and then discharged into the river. There are also three licensed residential waste water discharges into the river in Kennebunk which could impact water quality in Arundel.

#### BRIMSTONE POND

Brimstone Pond is a shallow, warm water pond, 12 acres in surface area, located in the Saco River watershed. The outlet of the pond is a tributary stream to Thatcher Brook. The pond is very shallow, with a maximum depth of 7 feet. The pond has watershed area of only 1.5 square miles, which is shown on Figure 9-1. The shoreline of the pond is completely undeveloped. There is no public access to Brimstone Pond. No water quality data is available for Brimstone Pond. Since adoption of the 1992 Comprehensive Plan, controls have been put in place in the Land Use Ordinance and the subdivision regulations to protect Brimstone Pond from phosphorus contamination.

Figure 9-2 - Licensed Wastewater Discharges



## CHAPTER 10. GROUNDWATER RESOURCES

Most residents of Arundel rely on groundwater resources for their everyday water supply. Public water is available only along Route One and for a short section of the River Road. The quality of Arundel residents' life is directly tied to the availability and quality of the groundwater. In general, groundwater quality is satisfactory throughout the town. However, there are many potential sources of contamination within the town or near enough to the town to pose a potential threat to Arundel's groundwater resources.

In general, the soils and surficial geology of Arundel, (see related discussion in Chapter 8) are favorable to the development of surficial wells to supply single family homes. Limited areas could be developed for higher yield surficial wells.

Areas that will yield economically usable amounts of groundwater are known as "aquifers." Geologists have defined two types of aquifers: surficial aquifers and bedrock aquifers. In surficial aquifers, the groundwater is found in the unconsolidated material overlying the bedrock. In a bedrock aquifer, the groundwater is found in cracks and fissures in the bedrock. Because the state is generally underlain with fractured bedrock material, the entire state of Maine can be considered a bedrock aquifer. Because the bedrock is generally hidden beneath the soil and surficial material, performing reconnaissance to gather information about bedrock groundwater resources is very expensive and is economical only in special circumstances. It therefore has not been done on an extensive basis. No data is generally available on bedrock aquifers in Arundel.

Surficial groundwater resources vary in the quantity and natural quality throughout the state based on the depth and nature of the surficial deposits. In deep coarse grained deposits such as ice contact deposits, large amounts of high quality groundwater can be found because the sands and gravel in the deposits allow precipitation to infiltrate the soil and the large spaces between soil particles provides significant storage space. The areas where large amounts of groundwater can be expected to be found are known as "high yield sand and gravel aquifers."

The Maine Geologic Survey has produced maps of the State that provide data on the surficial groundwater resources available. Map Number 4 of that series includes Arundel and shows three high yield sand and gravel aquifers within the town. These are areas where yields of between ten and fifty gallons per minute can be expected. Figure 10-1, High Yield Sand and Gravel Aquifers, shows these aquifers as shaded areas on the map. High yield sand and gravel aquifers are important because they are good potential locations for future public or community water supplies.

While protection of high yield sources of groundwater is important as potential locations of future public water supplies, we must also take care to maintain high quality groundwater for individual homes throughout the community.

### POTENTIAL SOURCES OF GROUNDWATER CONTAMINATION

There are many potential sources of contamination of Arundel's groundwater resources. Some of these are shown in Figure 10-2. Although most of the potential sources of contamination of Arundel's groundwater are man made, also natural contamination sources can render groundwater not potable, or otherwise hazardous for use.

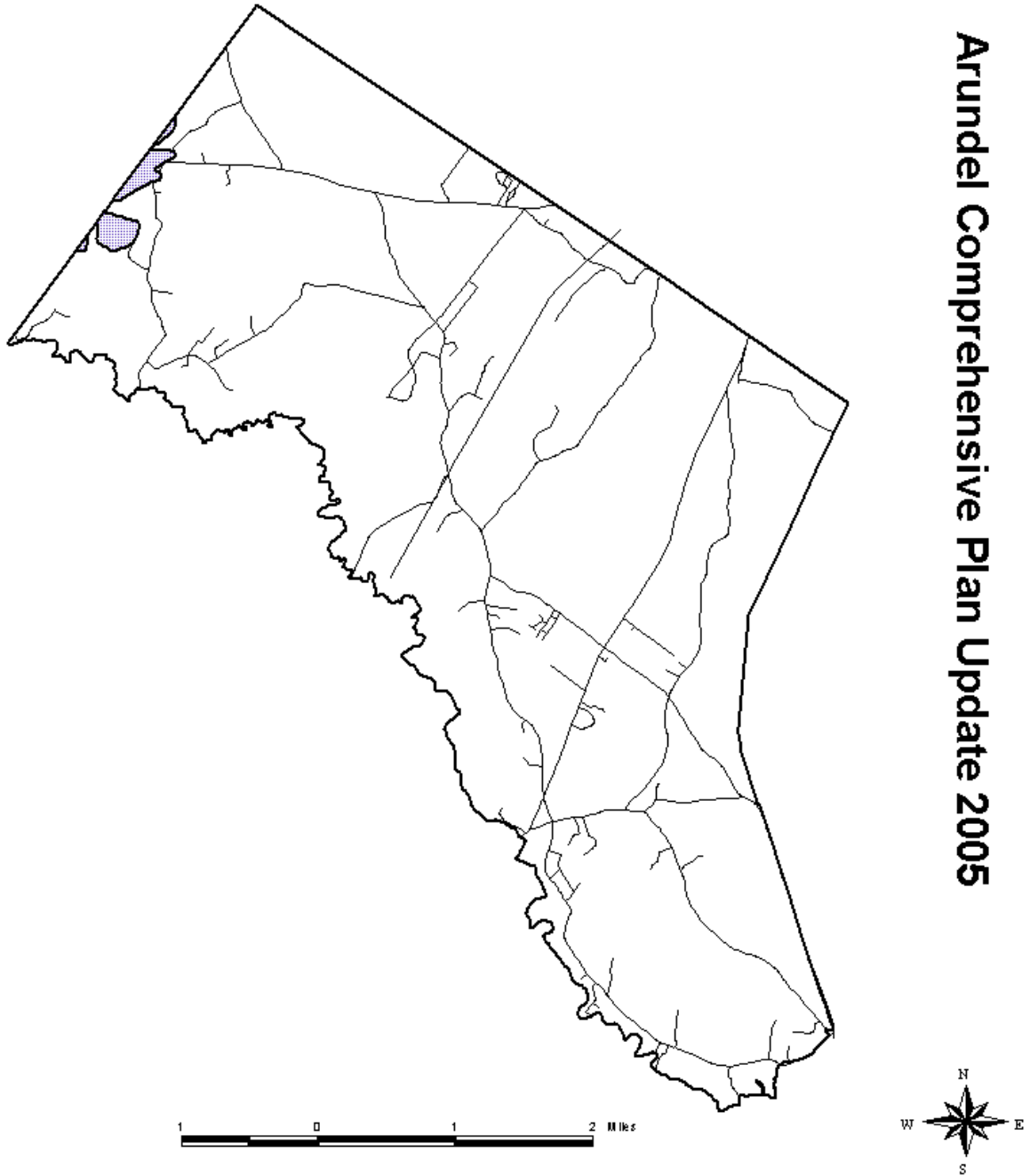
As mentioned in the discussion of surficial geology, following the retreat of the glaciers, sea level rose. There are several areas in Arundel, indicated on Figure 10-3 in which the groundwater has a high chlorine content, and is thought to have resulted from ancient seawater being trapped within the bedrock aquifer, according to a 1980 study. The areas indicated on Figure 10-3 are taken from an unpublished masters thesis by Dorothy Tepper, a student at the University of Maine. There have been wells drilled nearby, but outside of, the shaded areas that have high chlorine concentrations as well. It has been recommended that wells within this area either be surficial wells or be drilled into bedrock the minimum possible depth to avoid seawater.

Another natural source of groundwater problems is radioactive radon gas that is released from volcanic bedrock. The large scale bedrock geology maps produced by the United States Geologic Survey indicate that the predominant bedrock types underlying Arundel are not the intrusive granites which present the most risk of radon contamination.

A third naturally occurring source of groundwater contamination has been arsenic. Arsenic mineral are found in some of the locally occurring bedrock in southern Maine, however there have not been any reports of groundwater in Arundel with arsenic contamination exceeding the Drinking Water Standards. It should be noted that the federal Environmental Protection Agency has been working for a number years to determine whether the existing health standard should be lowered. In October 2001, the Agency decided it will lower the standard from 50 parts per billion (PPB) to 10 ppb.

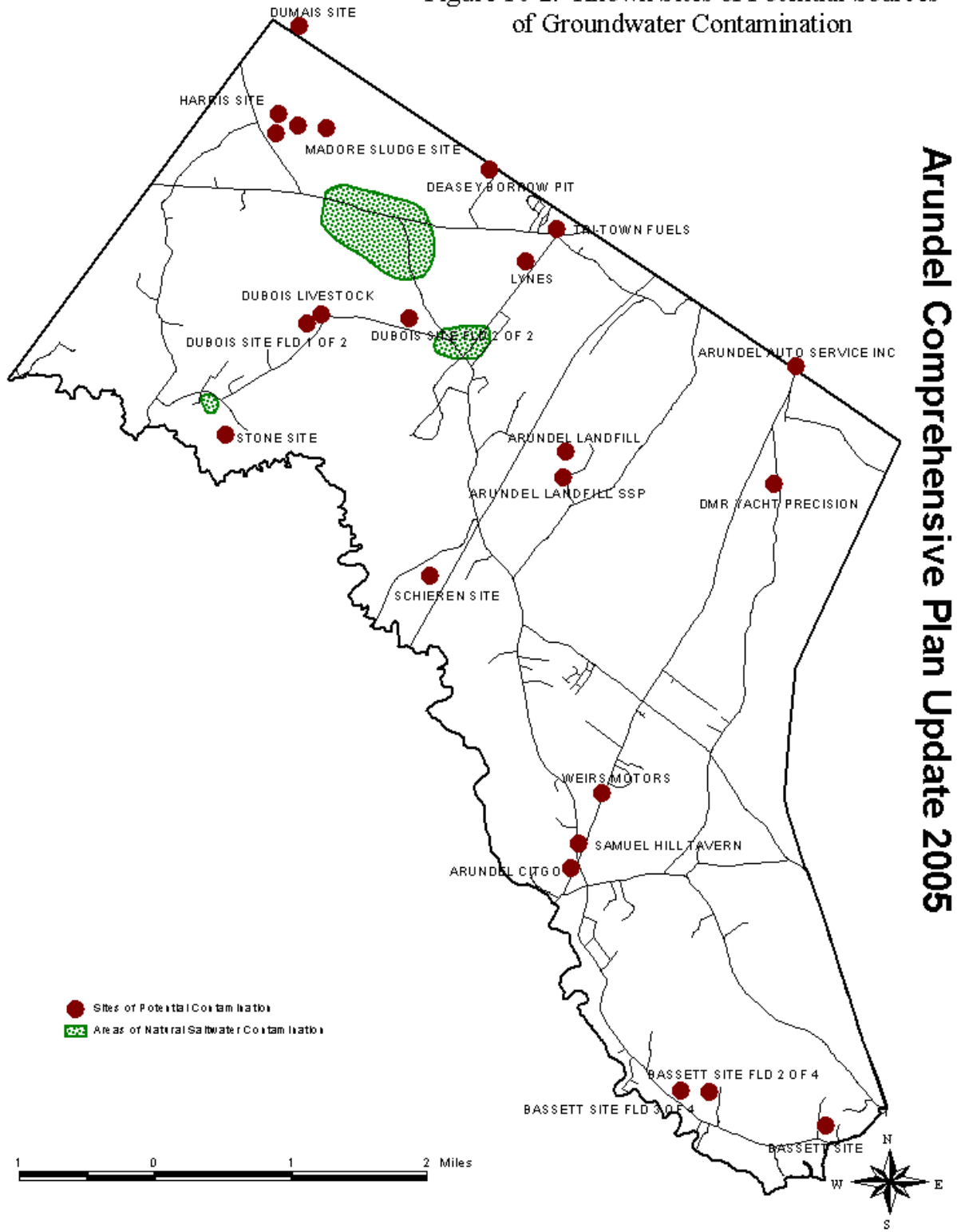
Underground petroleum storage tanks present a threat to groundwater supplies if they leak. All underground petroleum storage tanks must now be licensed by the Maine Department of Environmental Protection. Data provided by the Department from October, 1989 indicate there are eighteen underground tanks in Arundel. The tanks range from 1,000-

**Figure 10-1. High Yield Sand and Gravel Aquifers**



**Arundel Comprehensive Plan Update 2005**

Figure 10-2. Known Sites of Potential Sources of Groundwater Contamination



gallon tanks used for gasoline at private residences to a 20,000-gallon tank used for wholesale distribution of gasoline. In the October, 1989 inventory, two tanks were scheduled for removal, one at the Mildred Day School and one at Tri-Town Fuels on Route 111. Weir's Motor sales, on Route One is the only licensed tank used for storage of used or waste material; all others are used for storage of diesel, kerosene, gasoline or heating oil. There may be an abandoned underground tank at the former gasoline station on Route 111.

Dumps and landfills present a threat to groundwater resources because rainwater will pick up contaminants as it percolates through the layers of refuse. The former Arundel landfill is located on the Mountain Road. The site was in operation since before 1972 until 1991. The landfill was closed in accordance with the requirements of the Maine Department of Environmental Protection and replaced by a transfer station. The site is underlain by shallow, very sandy soils, with the water table very near the ground surface. A 1985 report by the Maine Geological Survey indicates that the landfill and an adjacent salt-sand pile were causing contamination of the groundwater in an area south and southwest of the site. The report recommended that the water quality of the wells within 1,000 feet of the landfill be monitored regularly.

The Maine Department of Environmental Protection has contracted with Weston Geophysical, Inc. consultants to perform an evaluation of the Arundel landfill to determine the extent of current and projected groundwater contamination. The town currently has groundwater quality monitoring program in place.

The former Biddeford landfill is located very near the Arundel-Biddeford boundary, off Route 111. The landfill was operated between the early 1970s and the late 1980s, having been closed when the resource recovery facility in Biddeford was opened. The landfill was capped as part of its permanent closure plan in the early 1990s. The Biddeford landfill has been the subject of several groundwater contamination studies and is subject to ongoing monitoring. The surficial deposits in the area consist of thin coarse sand and gravel contained in a trough in the bedrock. Groundwater is present from 0 to 15 feet below the ground surface. The area is not considered a sand and gravel aquifer. Groundwater in both the surficial and bedrock aquifers south of the site has been contaminated.

Groundwater contamination from the Biddeford landfill was spreading to the south. In May 1990, the Maine Department of Human Services required the Charter Oaks Mobile Home Park to increase the parameters for which its well is tested and the frequency of its testing due to increased contamination of the monitoring wells surrounding the landfill. In 1997, a post-closure analysis of the landfill was conducted by the a private geotechnical consultant under contract with the Maine Department of Environmental Protection to study the groundwater contamination. That study indicated that it appears that the contamination plume as stagnated since the landfill was capped. The study recommended the installation of a monitoring well between the landfill and neighboring wells . The city has installed that "sentry well" and continues to monitoring of both ground water and surface water.

There is one licensed handler or generator of waste oil or hazardous materials in Arundel: Weir's Motor Sales on Route One.

Junkyards and automobile graveyards also pose potential threats to groundwater resources. Improper handling of fuel, lubricating, and cooling fluids, as well as battery electrolyte present a hazard to groundwater from automobile graveyards. There are four licensed automobile graveyards and junkyards in Arundel, which are also shown on Figure 10-2. There are most likely a number of unlicensed junkyards and automobile graveyards spread throughout the town. In 1995, the Land Use Ordinance was amended to prohibit these uses from locating on top of high yield sand and gravel aquifers and also to be operated in a manner that would reduce the risk of ground water contamination. However, these new requirements apply only to new facilities, not to the four that have been in existence prior to that.

Other potential contamination sources in Arundel include poor agricultural practices from the storage and spreading of manure, fertilizers, pesticides, and residual materials such as sludge.

#### EXISTING COMMUNITY WATER SUPPLY SYSTEMS

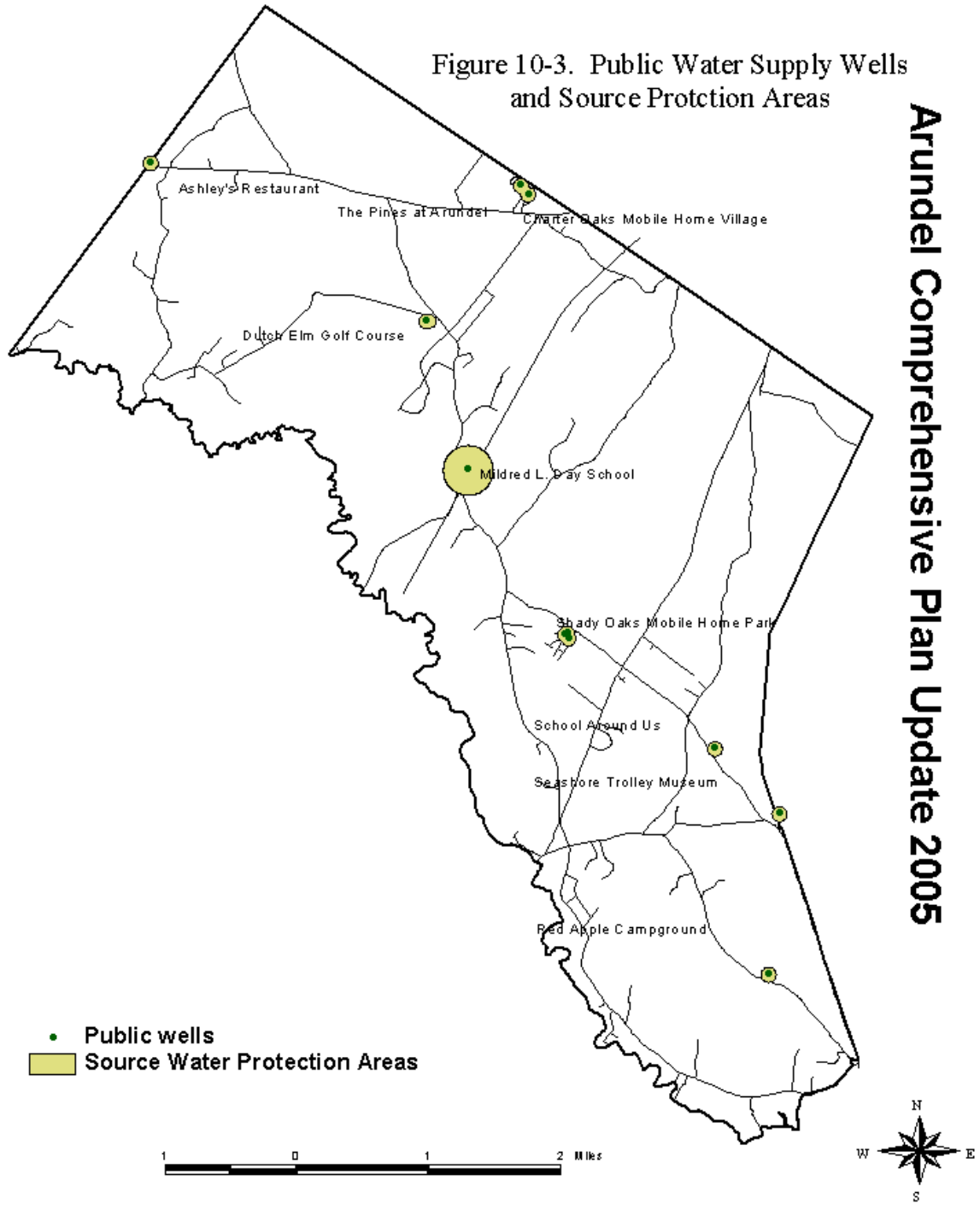
Any water system that has fifteen or more connections or serves an average of more than 25 people during a ninety-day period must be licensed by the Maine Department of Human Services as a "community water system." Table 10-1 below lists the community water systems licensed by the state. The locations of these systems are also shown on Figure 10-3.

Figure 10-3 also shows the source protection areas around each public water supply in the town. The protection area is a radius of 300 feet around each well, except at the Mildred L. Day School where the radius is 1,000 feet. Figure 10-3 also shows the location of one of the wells at the Seashore Trolley Museum. Though the well itself is located in Kennebunkport, the protection area is partially in Arundel. Under state law new underground petroleum storage tanks are prohibited within the source water protection area of public water supplies.

Table 10-1. Licensed Community Water Systems.

Ashley's Restaurant	Route 111
Charter Oak Mobile Home Village	Route 111
Dutch Elm Golf Course	Limerick Road
Mildred L. Day School	Limerick Road
Red Apple Campground	Sinnott Road
School Around Us	Log Cabin Road
Shady Oaks Mobile Court	Campground Road
The Pines at Arundel	Route 111

Figure 10-3. Public Water Supply Wells and Source Protection Areas



## CHAPTER 11. WETLANDS

### WHAT ARE WETLANDS?

Most plants can not live in conditions in which their roots are surrounded by water and cannot get access to air for long periods of time. However, some plants can grow in these conditions, which are found in generally flat areas where surface or ground water accumulates. These areas are known as wetlands. There are, in general, two basic types of wetlands found in Arundel: coastal wetlands and freshwater wetlands. Coastal wetlands are found along the tidal portions of the Kennebunk River and its tributaries, where the tides cover the wetlands regularly and the vegetation is tolerant to salt water. Freshwater wetlands are associated with rivers, streams and ponds or are isolated wetlands.

### HOW IS A WETLAND DEFINED?

Coastal wetlands are easily defined by the extent of the monthly high tide and presence of salt tolerant vegetation. In Arundel, there is little differentiation among the coastal wetlands.

The United States Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers (ACE), and the state of Maine define freshwater wetlands as

“freshwater swamps, marshes, bogs and similar areas which are inundated or saturated by surface or ground water at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils.”

There are other definitions of freshwater wetlands used by other agencies. The U.S. Fish and Wildlife Service defines wetlands

“as transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes, (2) the substrate is predominantly undrained hydric soil, and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.”

The U.S. Department of Agriculture defines wetlands as

“areas that have a predominance of hydric soils and that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.”

“Hydric Soils’ are defined by the Natural Resource Conservation Service as ones which are “saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.”

People often talk of wetlands as if all wetlands were alike. In fact, there is a great diversity of wetland types and individual wetland areas can serve very different functions, depending upon location, topography, sub-surface geology, hydrology, and vegetative type. The four types of freshwater wetlands identified in Arundel by the National Wetlands Inventory are listed below.

**Palustrine Open Water Wetland** - Open water wetlands are characterized by standing water to a depth of greater than 3 feet. The dominant forms of vegetation include submergent and surface vegetation. No emergent vegetation is present.

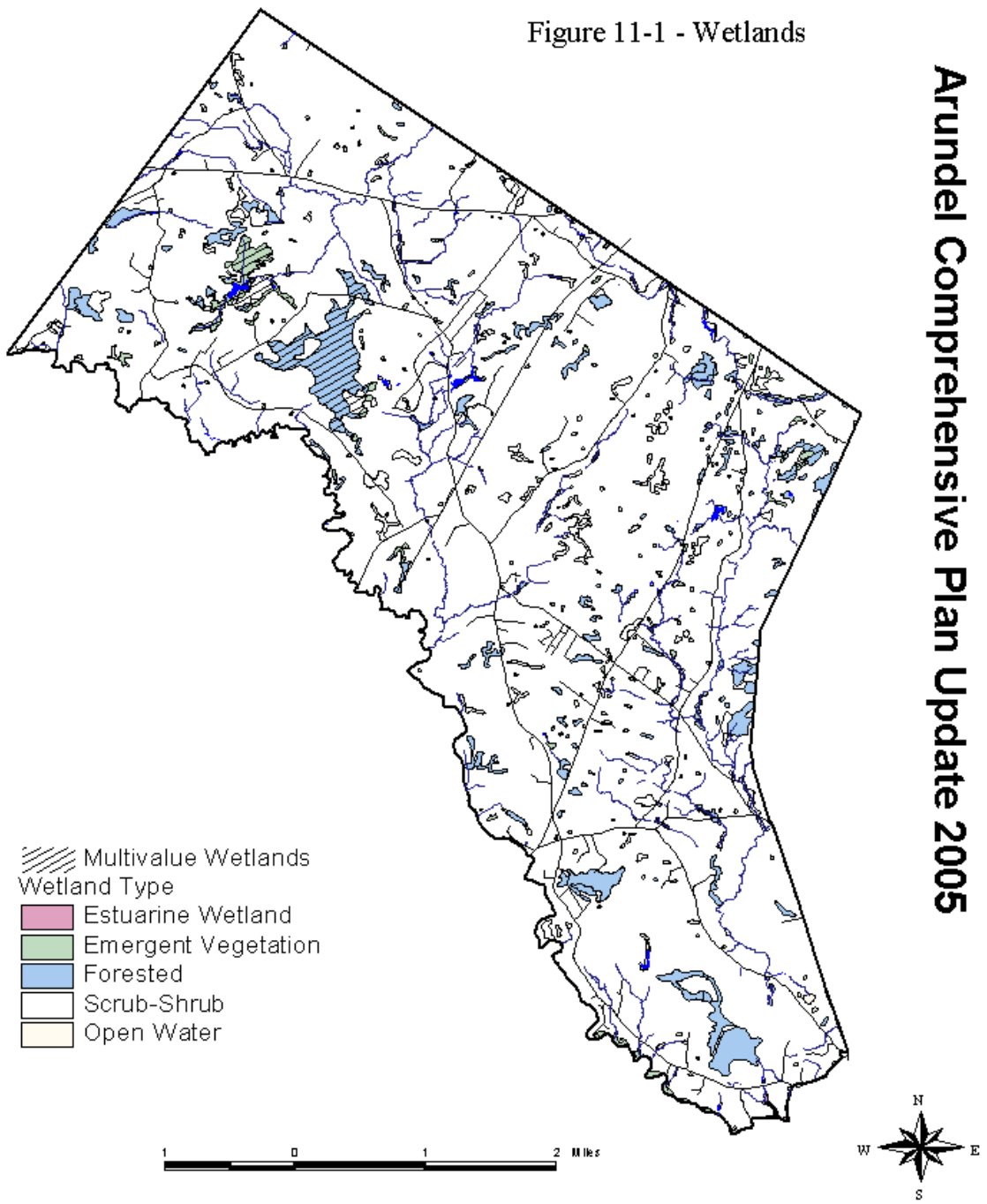
**Palustrine Scrub-Shrub** - A deep marsh is a body of water with an average depth of between six inches and three feet. Emergent herbaceous vegetation is dominant in this wetland. Surface and submergent vegetation may also be present. Aquatic shrubs, such as species of willows, dogwoods, and alders, may be present but do not cover more than 50 percent of the area.

**Palustrine Emergent** - A shallow marsh has a water depth of less than six inches. Water is present above the ground surface throughout the year or may be absent during very dry periods. Marsh herbaceous emergents form the principal vegetative cover in this wetland. Plants common to this area may include cattails and sedges.

**Palustrine Forested** - The wooded swamp has an average water depth of up to 12 inches. The vegetation here is dominated by tree species. Common trees present may include red maple, American elm, swamp white oak, yellow birch and hemlock. Shrubby species, such as alders, are commonly present. Species of ferns are also common.

The U.S. Fish and Wildlife Service has conducted the National Wetland Inventory. As part of the nationwide effort, maps have produced at a scale of 1 inch equals 2,000 feet. The town has obtained the national wetlands Inventory in a digital format. The wetlands identified as part of the National Wetland Inventory are shown on figure 11-1.

Figure 11-1 - Wetlands



## **WHAT IS THE VALUE OF A WETLAND?**

Wetlands serve many different valuable functions. Some of these are extremely important economically; other functions have non-economic values.

### **Flood Storage**

Wetlands are natural valley flood storage areas, holding water during periods of heavy rain (spring rainy season) and snowmelt, and slowly releasing it during drier times. When this function is impaired by filling or channeling, downstream flooding may result due to the faster release of runoff from the wetland.

### **Wildlife Habitat**

Wetlands are important to wildlife in the areas surrounding them because they offer a stable and seldom-disturbed habitat. Wetlands also represent a “transition zone” between aquatic habitat and terrestrial habitat which is naturally more productive than one or the other. In times of drought, surface water may generally be obtained by animals in wetlands. In times of excessive heat, wetlands are cool: in times of blustery winter cold, wetlands, normally in pockets, are windless and, in addition, produce seeds and fruits that may be consumed as food.

Wetland plant communities provide a broad base for the food webs that support many species of wildlife. These are further discussed on the value of wetlands to wildlife in Chapter 14, Significant Wildlife Habitat. Chapter 14 identifies wetlands in Arundel that have been rated for their value to wildlife by the Maine Department of Inland Fisheries and Wildlife.

### **Water Quality**

Wetlands act as a filter in protecting water quality. Plants in a wetland absorb various inorganic substances found in the water and then transform these materials into organic substances that are stored in the plants. By this process, nutrient levels in the water are controlled. These same plants also slow the flow of the water, allowing a settling of silty materials transported by the water.

### **Ground Water Discharge**

In Maine, wetlands usually act as ground water discharge areas, gradually releasing ground water to streams, lakes and rivers. Wetlands often serve as indicators of springs and other discharge areas.

## **HOW ARE WETLANDS THREATENED?**

A wetland can be destroyed either by physical alteration or by disrupting its natural processes. The most common form of physical alteration is filling. This activity destroys the wetland's ability to perform most of its vital functions.

While physical alteration is the most visible danger to wetlands, the alteration of its natural processes poses an equal threat. Here, the danger results from a speed up of the natural processes by excessive siltation or nutrient loads. If runoff entering a wetland is overloaded with silt, often resulting from poor land use practices upstream, the wetland may become choked by that silt. Continuously high siltation results in rapid destruction of a wetland.

Another danger is excessive loading of nutrients in upstream runoff. These nutrients are absorbed by the wetland and accelerate its natural eutrophication or aging process. As nutrient levels increase, the wetland supports increasingly more plant life. In advanced stages, algae blooms and dense weeds deplete oxygen levels in the water, resulting in fish kills. This process of eutrophication can be accelerated to 100 times its normal rate because of nutrient rich runoff.

An important concept in protection of wetlands is the “critical edge” or the transition zone between upland areas and the wetland. Damage in these areas, through clearing of vegetation and construction can have a serious impact on the functions of a wetland. Conversion of land use around a wetland can also alter or destroy the natural values or integrity of a wetland.

Currently, wetland losses are greatest in smaller wetlands in rapidly developing areas of the state. While the values of individual small wetlands may not be great, they are extremely important within a larger context and when aggregated. The cumulative loss of many small wetlands via development activities may be just as severe as the loss of a smaller number of large wetlands when habitat and cultural values are considered.

The primary threat to wetlands in Arundel is from filling for construction. Much of the frontage along Route One and other roads in town is wetland. The demand for additional commercial usage along Route One, and for residential construction throughout the town has resulted in the filling of tens of acres of wetlands in the past decade. Before 1995, the Arundel Land Use attempted to protect small wetlands from being filled. However, these provisions were removed with the adoption of the current ordinance. There are no provisions in the current ordinance for protection of wetlands smaller than 10 acres in size or for wooded wetlands.

## **WHAT HAPPENS WHEN A WETLAND IS DESTROYED?**

Increased risk of flooding is the most direct consequence of wetland destruction. If the watershed's ability to store water is reduced, when rains or spring melting occurs there is a substantial increase in the speed of runoff, and thus the flooding danger.

An increase in the turbidity of water bodies caused by suspended silt can result from the destruction of neighboring wetlands. Excess turbidity reduces the amount of light penetrating the water and changes the balance of plant and animal life. In such situations for example, game fish are often replaced by scavenger fish.

Fluctuations in the water table are another result of the destruction of wetlands. Since wetlands store large volumes of water that are often released during dry periods, their destruction results in the loss of this reserve. Without this reserve to draw upon, small streams may dry up and the water table may be critically lowered during extended dry periods.

Disruption of the plant and animal community is another possible impact. Significant feeding and breeding grounds would be lost resulting in drastic reductions of numbers and diversity of plant and animal life.

## **WETLANDS IN ARUNDEL**

Figure 11-1 shows the locations of wetlands in Arundel. This map shows wetlands identified on the National Wetlands Inventory Map produced by the U.S. Fish and Wildlife Service.

While there are scattered isolated wetlands throughout Arundel, there are several larger wetland systems in the town. There is a wetland complex situated between the River Road and Sinnott Road that encompasses approximately 100 acres. This is a forested wetland with a strip of scrub-shrub wetland through it. This area is known as Arundel Swamp and drains into the Arundel Swamp Brook that flows to the Kennebunk River.

There is a 47-acre wetland complex behind Pine Street, off River Road. This too is mapped as forested wetland.

North of the back end of the Clearview Development, there is a wetland complex of approximately 230 acres in size. This is a mix of forested wetlands, emergent wetlands and scrub-shrub wetlands. Over 200 acres are forested. The nonforested portions of this wetland complex and the forested wetland within 250 feet of these areas are currently in the Resource Protection District.

There is a wetlands complex surrounding Brimstone Pond. This area encompasses about 110 acres including the pond. This wetlands complex includes forested wetlands, emergent wetlands, and scrub-shrub wetlands. This wetland complex is also in the Resource Protection District, as it has been rated a high value wetland for waterfowl and wading birds by the Maine Department of Inland Fisheries and Wildlife (DIFW). Portions of this wetland have also been mapped by DIFW as a high value deer wintering area.

Very nearby is another wetland area of about 48 acres. About half of this area is forested and the remainder is scrub-shrub. This wetland is also in the Resource Protection District as it has been identified as part of the high value deer wintering area mentioned above.

The Maine State Planning Office (SPO) as conducted a wetlands characterization that looked at six different functions of wetlands. For each wetland identified as part of the National Wetlands Inventory, the SPO estimated its ability to perform each of these six functions. The six functions were freshwater fish habitat, flood flow control, wildlife habitat, marine habitat, sediment retention and education and research. A map has been prepared that shows the number of different values each wetland has been deemed to have. Of the 421 wetlands identified in Arundel, 270 were deemed to not have any of the six values and 101 were deemed to have only one value. There are 44 wetlands deemed to have either two or three values and 6 wetlands with four or five values. The 6 wetlands with a score of four or five are shown with cross-hatching on Figure 11-1. Some are so small the cross-hatching is not apparent. The six wetlands are around Brimstone Pond, around the former Davis Pond, behind the Dutch Elm Golf Course, south of Proctor Road, the pond on Arundel Swamp Brook at River Road and the estuarine wetland along the Kennebunk River and Arundel Swamp Brook.

## CHAPTER 12. COASTAL RESOURCES

Although it has no oceanfront, Arundel is considered a coastal community. This designation is due to its frontage on tidal portions of the Kennebunk River.

There are no deep water anchorages or shallow water moorings, no harbor, nor shellfish or marine worming areas along the river. A high value estuarine wetland at the mouth of Goffs Mill Brook, mentioned in the wildlife chapter, and the potential for anadromous fishery are Arundel's significant coastal resources. The tidal portion of the Kennebunk River is used by recreational boaters.

In southern Maine, the Kennebunk River is the only watershed that has no dams on a significant portion of the main stem of the river. The river supports spawning populations of alewives, blueback herring, American shad, sea lampreys, and rainbow smelt. In addition, the American eel utilizes the freshwater and tidal portions of the river as a feeding area, along with striped bass that are seasonally present in the estuary. The alewife and the blueback herring, together known as "river herring," are commercially important species harvested for use as bait for area lobster fishermen.

The towns of Arundel, Kennebunk and Kennebunkport have entered into an interlocal agreement by which the river herring fishery is managed by the Town of Kennebunk in cooperation with the Department of Marine Resources (DMR). There has not been a request for a license to harvest alewives since 1988. If the dam at Route 35 were breached, providing access to Kennebunk Pond, in Lyman, DMR has estimated the fishery could be increased from 4,000 to 70,000 pounds annually. The American eel and sea lamprey are commercially valuable as food fish and are harvested by commercial fishermen licensed by DMR. Striped bass, American shad, and rainbow smelt are also species of major importance to recreational fishermen. Rainbow smelt dip net fisheries typically occur in early spring during the spawning runs (April and May). Rod and reel fisheries for American shad occur in May and June, while striped bass sport fisheries occur from May through October.

The anadromous fishery depends upon high quality water and free access from the sea to freshwater for reproduction and or growth. Land use measures to prevent erosion and sedimentation, control of other nonpoint and point source discharges, and protective buffer strips along the river and tributary streams are important activities to maintain water quality/habitat for these resources.

Most of the tidal portion of the river is lined with coastal wetlands, but significant portions of the banks are steep enough that there are no wetlands nor expanses of mud flats.

The town does participate in the management of the tidal portion of the river through representation on the River Committee with Kennebunkport and Kennebunk. The Committee is involved in harbor management and access issues from the river's mouth to the head of tide.

Public access to the river can be divided into access to the river for boating, water skiing and other water-oriented recreation, and into access to shore-side property for picnicking, hiking, and fishing. There is no public access to the river for boating in Arundel.

There formerly was an informal access point to the river at Durrell's Bridge, where canoes and other small craft could be carried across private property and the marsh for launching. The 1986 Kennebunk River study indicated that the owner of the property no longer allowed access to the river due to abuse of private property by the public.

The town owns three adjacent riverfront lots in the Riverwynde Subdivision off the River Road. These lots have a total area of three acres and have not been developed to provide formal access to the river but are occasionally used informally for picnicking and recreational purposes.

The Kennebunk Land Trust owns a 181-acre parcel known as the Marshall Preserve. This lot is located on both sides of the River Road. The terms of the deed restrict the parcel from recreational use and picnicking. The parcel does have frontage on the river.

Two possible sites for low-use access of small craft to the river include the River Road crossing of Goff Mill Brook and the old location of Durrells Bridge.

In the early 1980s a privately owned fish hatchery was constructed on the River, upstream of Durrell's Bridge. The hatchery produced rainbow trout on an experimental basis and was closed during the 1990s.



## CHAPTER 13. FOREST RESOURCES

Most of Arundel is forested. A 1989 analysis of satellite imagery done by the James Sewall Co. of Old Town, Maine as part of the comprehensive plan for Biddeford, indicates that approximately 80% of the land area of Arundel is forested. Of that, approximately 5% is in softwood (pine, hemlock, spruce) stands, approximately 10% is in hardwood (oak, maple, poplar) stands, and the remainder is in mixed hardwood and softwood.

A substantial portion of that section of Arundel east of the Maine Turnpike was burned in the forest fires of 1947, and now, 55 years later, is starting to contain merchantable lumber. A small portion near Day's Mill was also burned. Figure 13-1 shows the approximate boundaries of the areas that were burned in October 1947.

Though 80% of the town is forested, little of the forest is actively managed. As of April 1, 2002 there were 31 parcels, accounting for 2,200 acres of woodland filed with the Assessors under the Tree Growth Tax Law. These parcels are shown on Figure 13-2. This an increase of about 50% since the time the 1992 plan was drafted. This law places a low property tax valuation on wood lots larger than 10 acres if there is a commercial forest management plan.

Commercial forestry plays a very small roll in the town's economy. While there were two saw mills located in Arundel when the 1992 plan was drafted, but one has since closed. The remaining sawmill in operation in town is located on the Alfred Road. There is no land owned by commercial forest products companies. If one assumes a minimum woodlot size of one hundred acres is necessary for commercial forest products management, there very little land currently available for potential management as commercial woodland. There are only eighteen parcels in the town larger than one hundred acres, for a total land area of 2,722 acres. Only eight of these large parcels are enrolled in the tree growth tax program.

Prior to any commercial timber harvest, notification must be given to the Maine Forest Service. The Forest Service has reported to the town that between 1991 and 2000, there were 56 notifications filed for harvest of a total 1,635 acres. Of this amount 1,461 acres were selectively harvested, 90 acres were harvest under the shelter-wood method and 80 acres were clear cut. Of this amount, a change of use from woodlot to some other use was reported for 90 acres.

In response to a highly visible clear cut in 2000, the Town has adopted town-wide timber harvest standards that now limit the area that can be clearcut in a timber harvesting operation. The timber harvesting standards that had been applicable only in the shoreland zone have been made applicable town-wide. Under these standards, no opening in the forest canopy may be larger than 10,000 square feet.

The York County Soil Survey presents information on the suitability of the soils for forest growth. A discussion of this information and an associated map can be found in the Soils and Surficial Geology chapter. Very little of Arundel's soils are rated as superior for forest growth.

Figure 13.1 - Areas Burned in the 1947 Fires

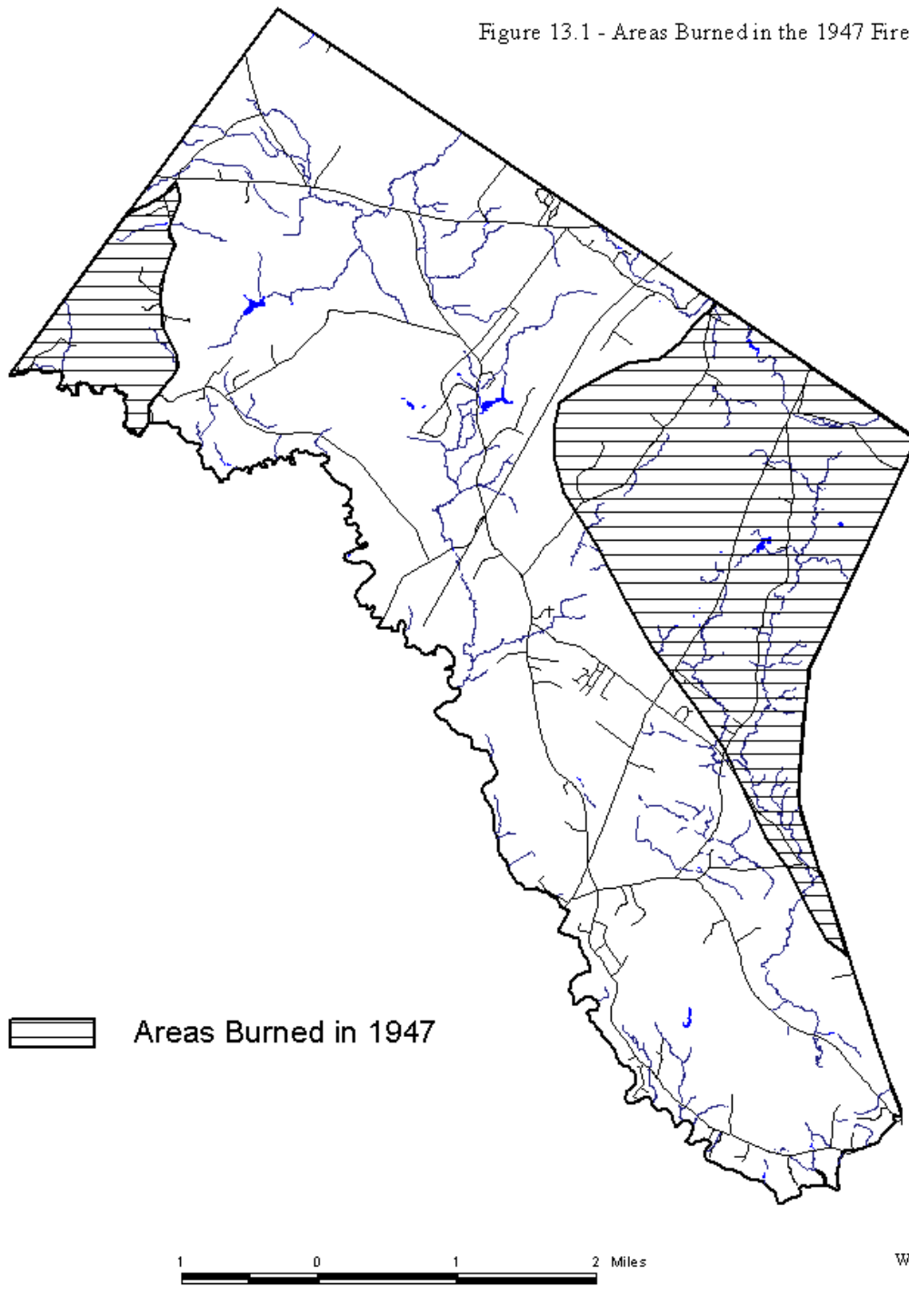
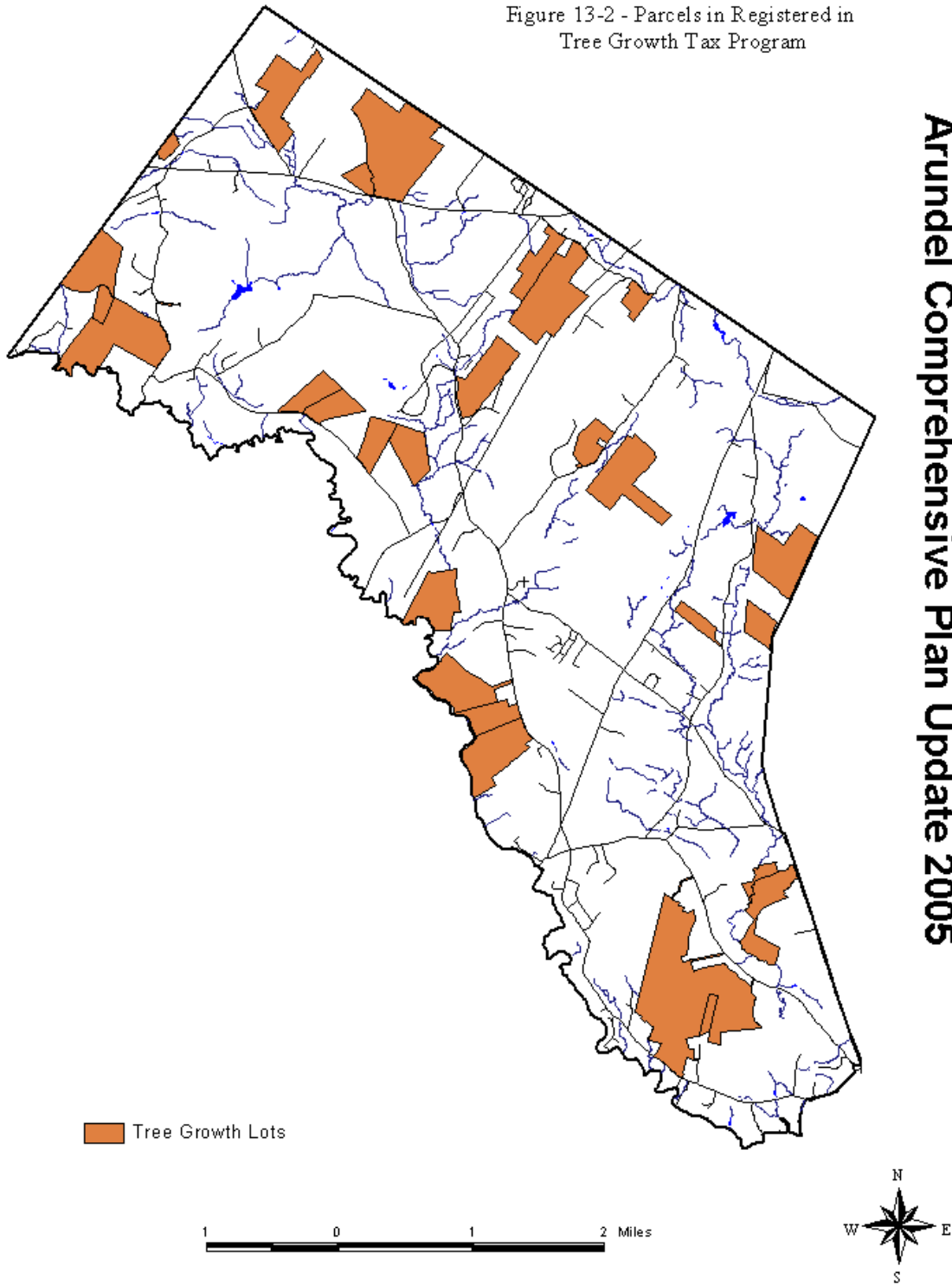


Figure 13-2 - Parcels in Registered in Tree Growth Tax Program





## CHAPTER 14. SIGNIFICANT WILDLIFE HABITAT

The Maine Department of Inland Fisheries and Wildlife (DIF&W) has provided information to the comprehensive plan update committee on important wildlife resources in the community. The areas identified by the Department are shown on Figure 14-1 and are described below. The DIF&W study rated the habitat according to its value. Four ratings were listed: high, medium, low and unknown.

### Deer Wintering Areas

Survival of White-tailed Deer in New England is often dependent on their ability to make it through the winter. During winter, deer subsist on a somewhat limited quantity of low quality food and must cope with the stress of low temperatures, chilling winds and higher energy requirements. In order to conserve energy during winter, deer concentrate their range into areas that are only 20-30% of their summer range. These “deer wintering areas” are typically characterized by a dense canopy of softwood cover. These areas provide deer with shelter from radiant heat loss as well as improved mobility in winters with deep snow. The availability of wintering areas is important to the survival of the species.

Deer wintering areas were identified by DIF&W using aerial and ground surveys during the winter by observing deer tracks in snow cover. Ground surveys allowed the collection of information regarding the dominant overstory type, approximate height of overstory, crown closure, available browse species, and evidence of deer tracks, trails, pellets, beds or browse. The information collected during the surveys was used to evaluate each DWA according to seven criteria: access, shelter quality, browse availability, relationship to other DWAs, size, deer population and potential for proper forest management.

Only one DWA has been identified in Arundel. This area is within the area bounded by Alfred Road, Limerick Road, Irving Road and Perkins Road, and is north of Brimstone Pond. The area is roughly 350 acres in size and has been rated as high value by DIF&W.

New development is generally not compatible with the maintenance of DWAs. The DIF&W recommends that development not be permitted within areas of moderate or high value. Timber harvesting is important to the maintenance of proper overstory and canopy conditions and should be permitted under certain guidelines. DIF&W recommends a goal of maintaining approximately 50% of the area in mature conifer forest types, permitting harvest of no more than 20% of the total timber volume in any 15-year period, and limiting canopy openings to no more than 14,000 square feet.

### Fisheries habitat

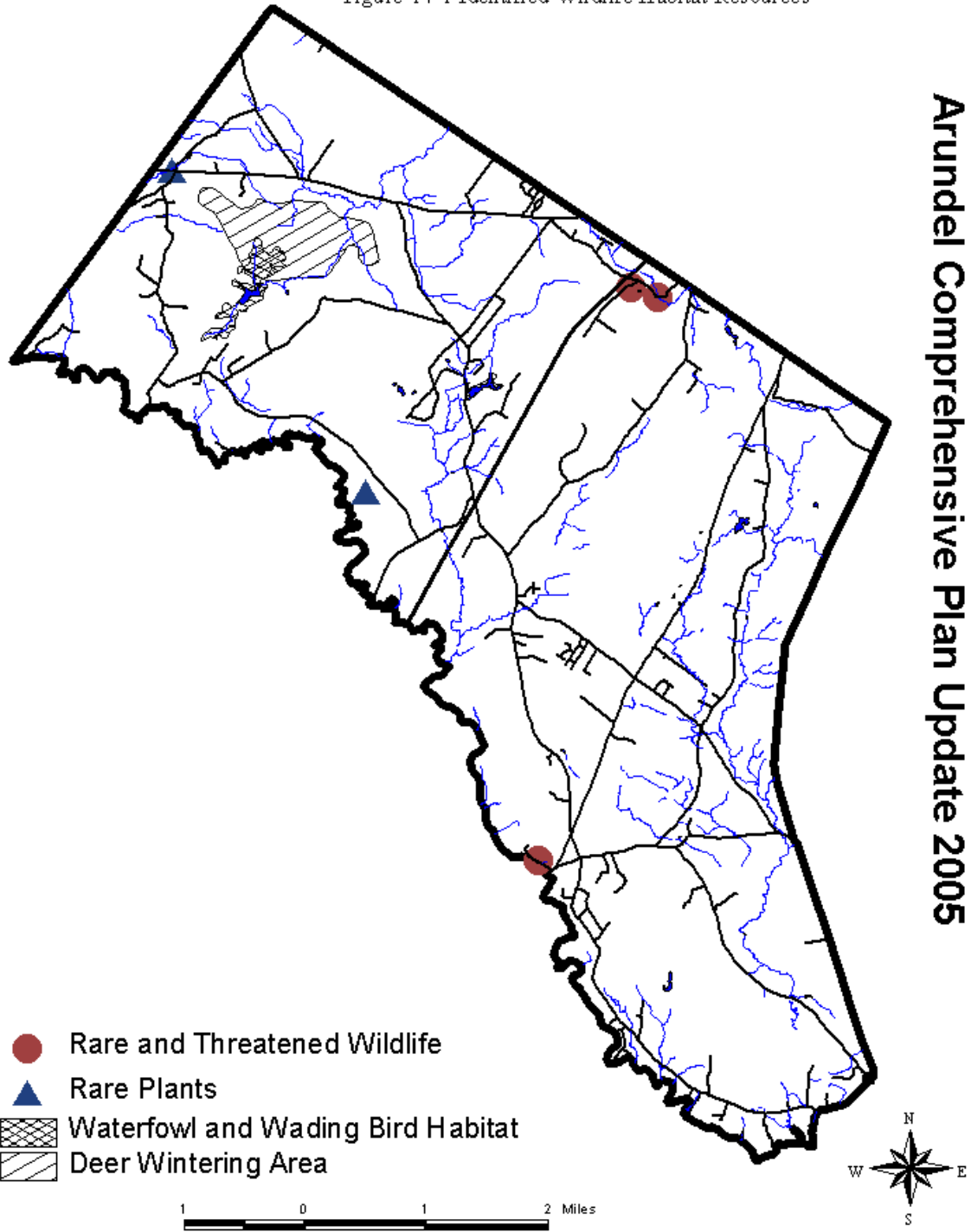
Fisheries habitats are associated with streams and lakes. The data collected in the assessment of these habitats include fish species present, water quality, habitat description, drainage area of the water body, length width and areas of streams and ponds, surficial geology and the presence of mapped aquifers. The DIF&W completed a survey of streams and rivers in York County in 1999. The Kennebunk River, Duck Brook and Goffs Mill Brook were rated as high value fisheries because of the presence of salmonids – brook trout.

Aquatic habitats are some of the most sensitive and vulnerable to degradation. Land use activities that directly effect water quality can significantly alter or destroy the value of the areas for fish. Changes in the adjacent upland habitat, or “riparian zone”, can also degrade a fishery. Riparian habitat functions to protect water quality and fisheries values by filtering out excessive nutrients, sediments or other pollutants leaching in from upland areas, maintaining water temperatures suitable for aquatic life and contributing vegetation and invertebrates to the food base. Riparian habitat is also important as cover for many species of wildlife attracted to aquatic systems and serves as a protective travel corridor for movement between undeveloped tracts of land for upland habitat.

DIF&W recommends that the existing riparian habitat be maintained within 250 feet of the seasonal high water mark in moderate and high value streams and ponds. The recommendation also includes preclusion of any human disturbance within the first 100 feet. Within the remaining 150 feet, timber harvesting should not remove more than 20% of the volume of six inch trees or larger per acre in any ten year period. Single canopy openings of over 14,000 square feet should not be permitted.

Around water bodies rated as low value fisheries habitat, existing riparian habitat should be maintained within 100 feet and new development or vegetation manipulation should not occur.

Figure 14-1 Identified Wildlife Habitat Resources



**Wetlands**

Wetlands are aquatic habitats such as marshes, bogs, wet meadows, seasonal pools, shallow lakes and ponds, wooded swamps and tidal flats. Many species of birds, mammals, reptiles, amphibians, fishes, and invertebrates spend a part or all of their life cycles in or about wetlands.

Wetlands were identified and rated by DIF&W for their value to waterfowl and wading birds. Wetlands have other values as are discussed elsewhere in the Comprehensive Plan, but this assessment concerned itself only with waterfowl and wading bird habitat. The assessment looked at existing or potential value as feeding, nesting, or shelter habitat for ducks and geese and wading birds such as herons. Those wetlands with high value provided excellent waterfowl habitat, with heavy use by ducks, geese, or wading birds. Moderate value wetlands lacked one or more aspects of prime habitat, had significant use by ducks, geese, or wading birds and would respond favorably to management.

Figure 14-1 indicates three wetland areas that have been designated by DIF&W as high or moderate value to waterfowl and wading birds. Brimstone Pond and its surrounding wetlands were rated as high value habitat. The wetlands surrounding the remains of the former Davis Pond were rated as moderate value. An area along the Kennebunk River near the mouths of Goffs Mill Brook and Arundel Swamp Brook was rated high value as tidal habitat.

DIF&W recommendations concerning wetlands are similar to those above for fisheries. In addition, filling of wetlands should be considered unacceptable. The tidal wetlands and the wetlands around Brimstone Pond are currently protected by a 250 wide Resource Protection district around them. The wetland around the former Davis Pond currently has a 100-foot wide shoreland overlay district adjacent to it.

### **Rare and Threatened Wildlife Species**

According to information provided by the Maine Natural Areas Program, there have been two rare and threatened wildlife species sited in Arundel in recent years. These two species include the Brown Snake (*storeria dekayi*) and the Wood Turtle (*clermys insculpta*). The Natural Areas Program (MNAP) maintains records of documented sightings or rare, threatened and endangered species. Failure to include a species as being located in a municipality does not mean that that species is not present, but merely that there have been reported credible sightings. Both of the species identified in Arundel are “species of special concern.” This means that they have not been officially or listed as threatened or endangered species, with the attendant protection. However, they are rare enough that their condition is being watched by state resource managers, and a listing would be forthcoming if further declines are documented.

Wood turtles are often found on land in open woodlands, meadows and floodplains along gravel-bottomed streams. During summer months, they become increasingly terrestrial and frequent adjacent riparian areas. In the winter, they hibernate in gravel bottomed rivers and in muskrat burrows. Like several of Maine’s reptile species, growth of the wood turtle population is constrained by the cold winters and short growing season. Unfortunately, when human disturbances to the animals and their habitats are combined with climatic restrictions, the viability of local wood turtle populations is severely jeopardized. One of the greatest threats to Maine’s wood turtles is illegal collection for the pet trade. Confirmed wood turtle sightings were on Walkers Lane in 1989 and Old Alfred Road at Thachers Brook in 1992.

Brown snakes are non-venomous species measuring 13-18 inches long. The ground color on the back is a varying shade of brown or gray, with a light stripe that runs down the back. A row of black spots borders the stripe on both sides. These snakes are mostly found around water; bogs, marshes, streams, ponds, and lakes although they are usually found quite some distance from the waters edge. Open grasslands with woodland borders are favored. A brown snake was seen off the Old Alfred Road just east of the Turnpike in 1989.

### **USFWS Priority Trust Species**

The U.S. Fish and Wildlife Service, part of the federal Department of Interior, has identified 64 species of wildlife for which it has responsibility for the protection and management of habitat. These species include all migratory birds, anadromous, catadromous, and coastal fishes, and federally listed endangered and threatened species. Anadromous fishes are those that are spend their adult lives in the ocean but breed in fresh water. Catadromous fishes live in fresh water and breed in the ocean. The Service has identified the habitat needs of each of the species and for the entire Gulf of Maine watershed, mapped the more important habitat in each of four general land cover categories. These categories are grasslands, upland forest, estuarine, and freshwater wetlands. In each of these general categories, the areas of 5 acres or more that scored in the upper 25% of all areas were mapped as the high value habitat for the wildlife species of concern.

There are extensive high value grasslands in Arundel. These areas are along the Curtis Road and Thompson Road, along Alfred Road, Hill Road, and Trout Brook Road, and along Limerick Road and Brimstone Road. There are also smaller areas of high value grassland along the Downing Road and the eastern end of Mountain Road.

High value forest habitat in Arundel is mostly located along streams. There are no large blocks of high value forest habitat identified in the town. High value forest habitat is found along Brimstone Pond Outlet Brook, Duck Brook, the

unnamed tributary to Duck Brook that flows east of Mountain Road, Goff Mill Brook and its tributaries, and the Kennebunk River.

High value freshwater wetland habitat is scattered throughout the town. The largest high value freshwater wetland habitat is located around Brimstone Pond.

The coastal wetlands along the Kennebunk River at the mouths of Goff Mill Brook and Arundel Swamp brook have been included by USFWS among the high value estuarine wetland habitats.

### **Rare Plants**

There have been two rare plant species identified in Arundel. As part of the environmental impact assessment for the construction of the natural gas pipeline, a stand of Small Reed-Grass was found along its right of way in 1998. Its habitat has been mapped between the Kennebunk River and the discontinued section of Curtis Road. Small Reed-grass is found in open area such as bogs, peaty meadows and wet rocks and shores. Mountain Laurel has been found off the Thompson Road, near Alfred Road. Mountain Laurel is a moderate-sized branched evergreen shrub. Southern Maine is the northern extreme of its range and it therefore rare in the state. Mountain Laurel is found in rocky or gravelly woods and clearings.

### **Undeveloped Habitat Blocks**

Some species of wildlife require large, unbroken blocks of habitat in order to survive. As our landscape is converted from farms and forests to residential properties with streets in new subdivisions, blocks of habitat are divided, losing their ability to support these species. Species that require blocks of undeveloped habitat of 500 acres or more include moose, black bear, and some raptors such as goshawks and red-tail hawks. Blocks of habitat of 2,500 acres and larger are important for species such as bobcat, black bear, and fisher. The DIF&W has developed maps showing undeveloped habitat blocks. These maps were created by establishing a "buffer" of 500 feet around the existing roads and buildings. The map for Arundel shows there are six undeveloped blocks between 500 and 2,500 acres in size. There are two blocks larger than 2,500 acres in size that are partially in Arundel. One of these larger blocks is mostly in Kennebunkport, northwest of Goose Rocks Road and Guinea Road and extends into Arundel southeast of Old Post Road. The other block is mostly in Biddeford, between Alfred Road and South Street and extends into Arundel east of Hill Road.

## **CHAPTER 15. HISTORIC AND CULTURAL RESOURCES**

### **Prehistoric Resources**

Prior to the arrival of Europeans, the southern Maine area had been inhabited by native Americans and their predecessors. The Maine Historic Preservation Commission has identified three known prehistoric archaeological sites in Arundel. Two of these sites are located on sandy outwash deposits near small streams. The third site is on the shore of the Kennebunk River. The Commission notes that there has been little prehistoric archaeological survey in Arundel. The only professional survey has been along the Maine Turnpike and the CMP/natural gas pipeline corridors. The commission points out that the Kennebunk River valley, pond and stream shores, and sandy outwash soils are in need of survey.

The Commission has provided the Comprehensive Plan Update Committee with maps showing the locations in the town with high potential for containing archaeological resources. These areas are shown on Figure 15-1. Due to the sensitivity of known archaeological resources to plunder, the location of the known sites has not been given to the Committee. The Commission recommends that a professional survey be conducted prior to the development of land in an area with high potential for containing prehistoric resources.

At a large flat interval, at the head of tide on the Kennebunk River is an area known as the Indian Planting Ground. This site, as the name implies, is believed to have been an area cultivated by native Americans, having both the advantage of fresh water for irrigation and access to tidal waters to reach the ocean.

### **Historic Resources**

Arundel's early history centered around the Kennebunk River and its development cannot be separated from neighboring Kennebunkport and Kennebunk. In fact, Arundel and Kennebunkport were part of the same municipality until 1916.

During the colonial period (until the mid-1700s), a variety of gristmills and sawmills were built along the Kennebunk River or its tributaries. Although no standing mills are left in Arundel, the remains of mill foundations can still be seen.

On Goffs Mill Brook, the rock foundations of the original Goffs Mill is located approximately 1,000 feet upstream of the Kennebunk River and the Downing Mill is just upstream of Sinnott Road. The Bartlett mills covered both sides of the Kennebunk River just upstream from Route One.

The only compiled inventory of historic resources in the town is the 1986 study of the Kennebunk River area conducted for the towns of Kennebunk, Kennebunkport and Arundel by the Friends of the Kennebunk River. This study included a map of Historic Site on the Kennebunk River. The sites from that map in Arundel are shown in Figure 15-2.

### **Cultural Resources**

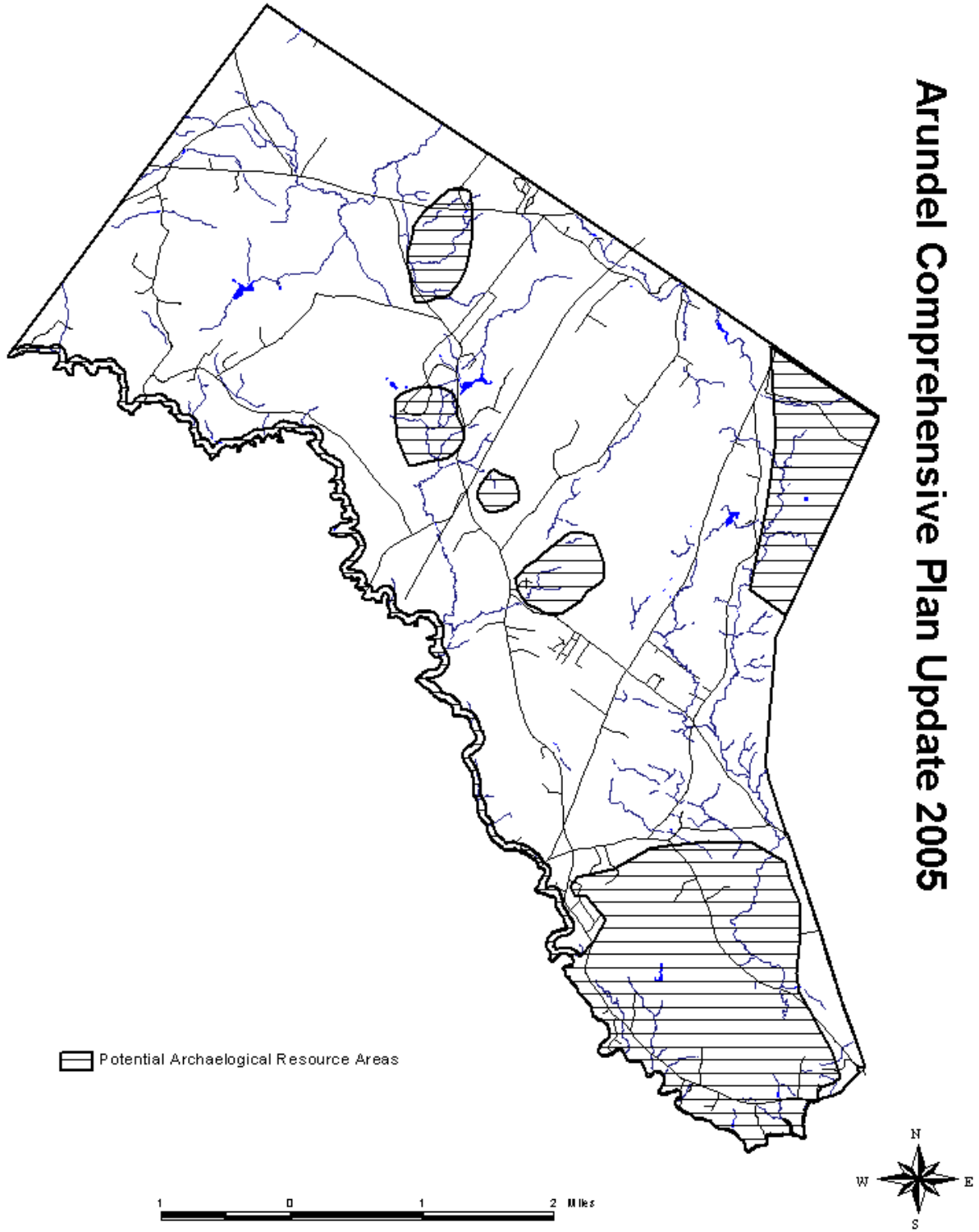
Located within the town is the Seashore Trolley Museum. The museum is a private non-profit organization dedicated to collecting, restoring, and exhibiting artifacts from urban and interurban railways. The museum operates a visitors center and several miles of track on which visitors may ride a number of restored electric rail cars.

The town has no public library. Residents of Arundel have borrowing privileges at the Kennebunk, Kennebunkport and Biddeford municipal libraries.

In 1996, the Arundel Barn Theater opened at the intersection of River Road and Old Post Road. The theater presents summer shows.

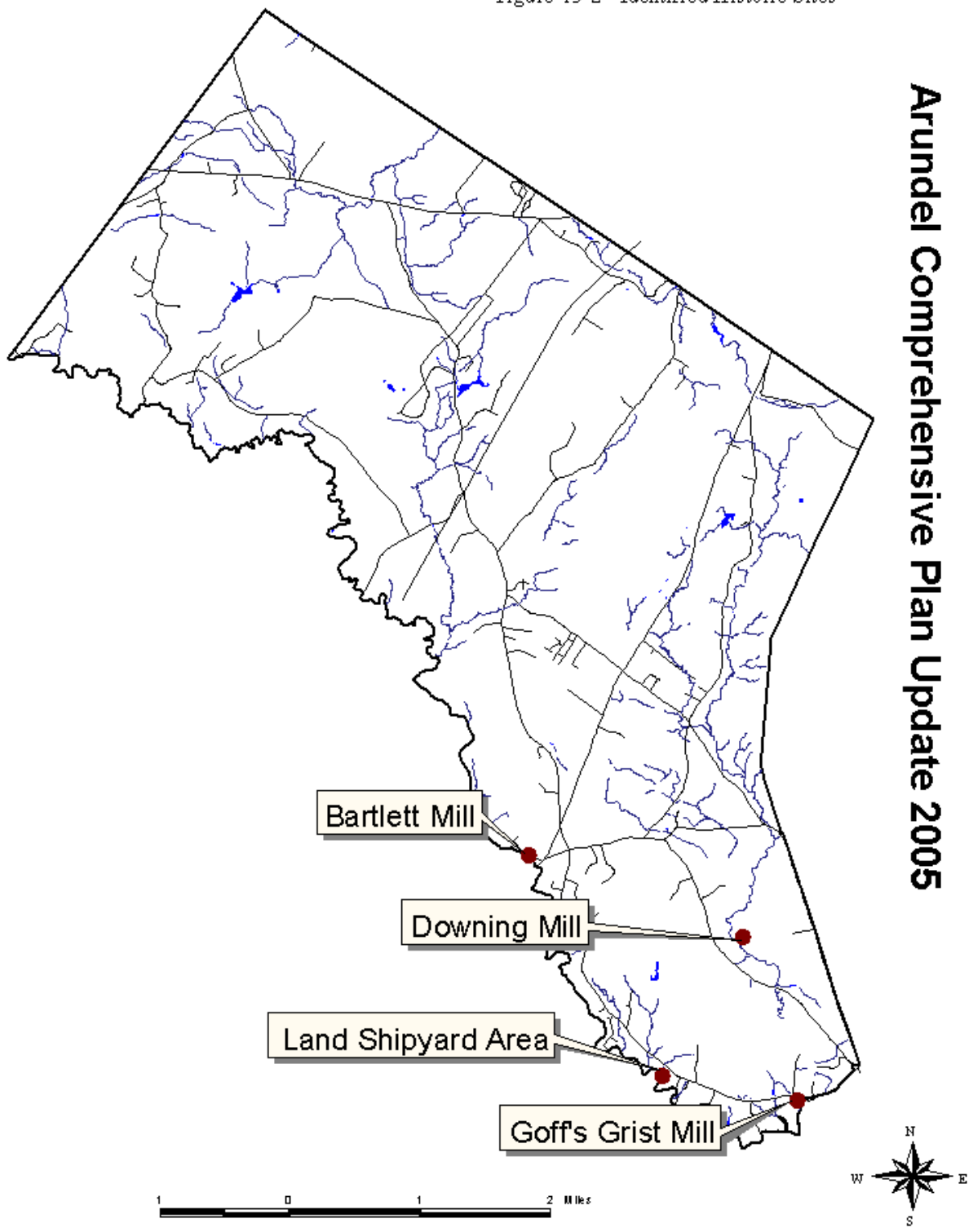
Having been formed by the rural residents seceding from Kennebunkport, Arundel has no cultural center or village and historically has been dependent on Kennebunkport, Kennebunk, and Biddeford for facilities and services.

Figure 15-1 - Potential Archaeological Resource Areas



**Arundel Comprehensive Plan Update 2005**

Figure 15-2 - Identified Historic Sites



**Arundel Comprehensive Plan Update 2005**



## CHAPTER 16. LAND USE

A discussion on land use is really a compilation of the all the preceding discussions. A municipality's land uses and land use patterns are determined by its demographics, economy, housing, and natural resources.

Arundel's historic land use pattern was dominated by two features: Route One and a strong agricultural base. Arundel's separation from Kennebunkport in the 1916 was fueled primarily by the split between those in the rural part of the town (now Arundel) and those in the built up portion (still Kennebunkport). The population, 85 years ago mainly farmers, was resentful of the taxes they paid to support services perceived as only delivered to a small portion of the town. During the past forty years, substantial changes have taken place in both these features.

The town has a land area of approximately 24 square miles. In 1960, there was a population of 907 or an average density of 38 people per square mile. There were 307 housing units, or an average density of one dwelling unit per 50 acres. In 1990, there were 2,669 people, or 111 people per square mile, and 1,036 housing units or one dwelling per 15 acres. By 2000, the population had grown to 3,571, or just about 150 people per square mile, living in 1,415 housing units, an average of 11 acres per housing unit. Changes in average densities, of and by themselves, are neither good nor bad. Arundel's growth has been spread, however, over a wide area, threatening the rural character that was responsible for the formation of the town and attracting many of its current residents.

The number of working farms and full time farmers has plummeted due to a variety of reasons, over most of which the town has no control. The dairy industry in Maine, and York County in particular, has practically vanished due to changing markets and national and international agricultural policies. The 1976 plan indicated that were nine active commercial dairy farms in the town. Today, there are only three, though it should be noted that is among the highest of any municipality in York County.

Route One, an arterial highway through the county and the state, was lightly scattered by individual residences and shops, with some tourist accommodations. In the late 1970s the Kennebunk, Kennebunkport and Wells Water District expanded their water supply by constructing a pipe along Route One, connecting with the Biddeford-Saco Water Company in Biddeford. The availability of public water has partly been responsible for the increase in commercial activity along Route One. In addition, as the Biddeford and Kennebunk areas grew, demand has been created for additional service businesses. Lower land prices in Arundel have attracted "land extensive" businesses such as self-storage facilities, automobile repair and marinas. Significant portions of Route One are flanked by either wetlands or shallow to bedrock soils.

### Current Land Use Patterns and Analysis

If viewed from the air, the majority of the town is wooded. The next largest land use or cover type, is open field. Property lines are not apparent from the air, therefore it appears very little of the town is developed. This results from only a small percentage of many residential properties looking "residential." Many residential lots in Arundel have a portion of woods or field that is not maintained as lawn.

There are approximately 1,700 parcels in the assessor's records. Forty percent of the parcels in the town are two acres or less in area. The high density residential areas, or other areas of smaller lots, are located mostly in subdivisions created before 1977, along Route One or in subdivisions that allow smaller lots in exchange for the permanent protection of undeveloped open space. There is no concentration of these denser developments within any particular area of the town.

Table 16-1. Distribution of Parcels by Parcel Size, 2002

Size of Parcel	Number of Parcels	Total Acreage in Size Class
<1 acre	290	197
1 – 2 acres	325	478
2– 5 acres	580	1,669
5 – 10 acres	168	1,173
10 - 20 acres	123	1,674
20 - 50 acres	140	4,485
50 - 100 acres	38	2,509
over 100 acres	18	2,722
Total	1,682	14,907

Of these parcels about 1,200, or 75% are classified as residential. These parcels account for 48% of the land area in Arundel. Covering 7,178 acres, the average size of a residential parcel is 6.1 acres. The category of land use with the next

largest number of parcels is vacant land. There were 400 parcels, accounting for 6,229 acres, with an average size of 15.6 acres. Land classified as commercial or industrial covers 800 acres on 83 parcels.

### **Agriculture**

As mentioned above, the importance of agriculture as an economic force and a land use in Arundel has decreased greatly. The Planning Committee identified only three commercial dairy farmers in 2003. There were 4 mentioned in the 1992 plan and 1976 Plan identified nine commercial dairy operations in the Town. The current dairy farms within the town are operated by Arthur Hill Jr., on the Perkins Road; Fred Stone, on the Curtis Road; and Bill Harrison on the Hill Road.

The 1992 Plan also identified six beef farms. Now there are only 2 commercial beef operations remaining: Charles Bassett on the River Road; and Ben Madore on Route 111. There is also now only one hog raising operation compared to the three mentioned in the previous plan, Carl Hill on the Thompson Road. In addition to these there are commercial operations raising vegetables and flowers within the town. There are five commercial horse stables: High Stepping Equestrian Center on River Road, Dream Acres on Irving Road, Merri-Mae Farm on Limerick Road, Castner Farm on Arundel Road, and Wild iris Farm on Downing Road. The locations of the known commercial farming operations are shown on the General Land Use Map.

In addition to the commercial farms, there are an uncounted number of individuals with large gardens or small poultry or livestock operations, who while primarily growing for their own consumption also have some hay, produce, poultry, eggs or meat for sale.

There are now 12 parcels enrolled within the Farm and Open Space Tax program, compared with 6 at the time the 1992 plan was written. This program is designed to provide lower valuations, based on the value as farmland rather than its market value. These parcels together account for 393 acres, some of which may include woods. An estimate from the land use map yields approximately 350 acres of non-wooded land being used for agriculture, as either pasture, meadow, or cropland.

### **Public Lands**

Except for the street or highway rights of way, the only public lands within Arundel are owned by the Town itself. The state or federal governments own no land within the town. The majority of the town's land holding is the 61 acres previously used for the landfill on the Mountain Road. The town owns the parcels on which the Mildred Day School, the town offices, and the two fire stations sit. The school campus is approximately 27 acres in size. The existing school, parking areas and ball fields take up the majority of the land. The Town office and fire station property is only 1.3 acres in size. The Old Post Road fire station lot is 0.9 acres in size.

In addition to these parcels that are currently used for municipal purposes, the town owns three adjacent lots within the Riverwynde subdivision with frontage on the Kennebunk River. The total size of the three lots is about three acres. This site has not been used by the town, but has been used by some as an informal access to the Kennebunk River. The location is not a choice one for a formal public access to the river because of the expanse of salt marsh.

The Maine Turnpike Authority, in addition to the turnpike right-of-way, owns an additional 63 acres of land on the eastern side of the highway just north of Limerick Road. The property is used for storage of materials by the Authority. The northern end of the Authority's land is adjacent to the town's landfill property.

There are also several institutionally owned properties within the town. The two that are most apparent from the Current Land Use Map due to their size, are the Dutch Elm golf course, and the Marshall Preserve. The Dutch Elm golf course is located on the Irving Road and consists of 322 acres. The course provides eighteen holes and is open to the public. The Marshall Preserve, located on the River Road, has been described in Chapter 12.

The other institutional uses include a museum, two churches, and two private schools. Churches include the Jehovah's Witness Congregation and the Bethel Tabernacle Church on the Alfred Road. The Landing School of Boat Building and Design is located on the River Road, across from Durrell's Bridge Road, and teaches boat design and construction skills to adults. The School Around Us on the Log Cabin Road next to the B&M Railroad, is a private K-8 school. Finally, the Seashore Trolley Museum owns several adjoining parcels along the Kennebunkport and Biddeford lines.

The Current Land Use Map also shows the locations of cemeteries. All the cemeteries shown on the map are small family plots. There are no "public" cemeteries in the town.

### **Residential Land Use**

As mentioned in other Chapters, the 2000 Census reports 1,415 housing units in the town. If this number is correct, the residential density of the town is one dwelling per 11 acres.

The 1976 plan indicated that residential development “is not concentrated in any one area of the town, but has instead been scattered.” Figure 16-1, showing the location of subdivisions approved by the Planning Board since 1995, indicates that the lack of any pattern of development is apparent. Few of the subdivisions have included the construction of new roads. The Current Land Use Map shows residential areas as strung along existing roads. This trend has substantially resulted in the loss of Arundel’s rural nature and if continued will even more so.

Table 16-2. Approved Subdivisions, 1990-2002

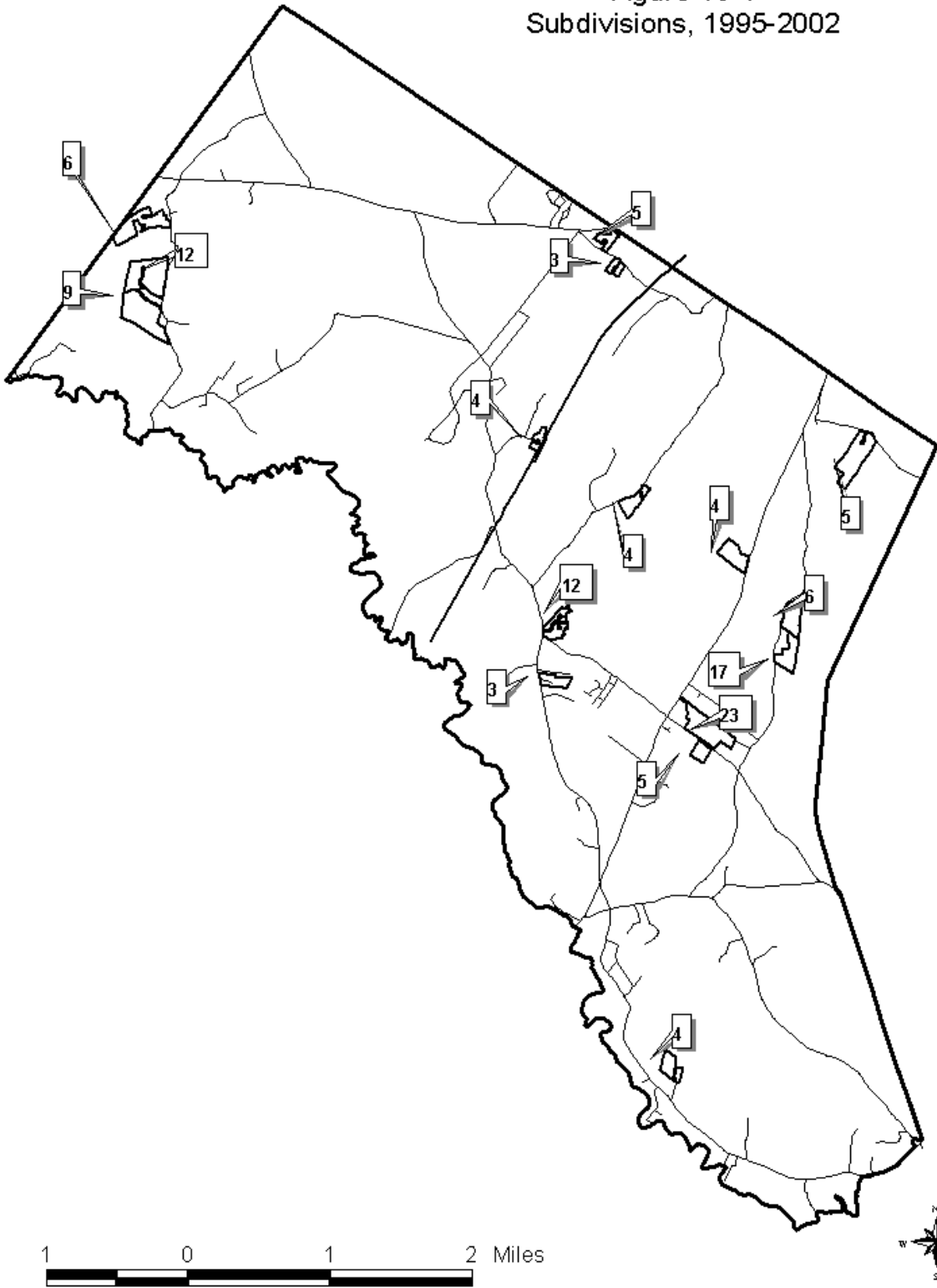
Subdivision Name	Street Location	Year	# of Lots	Total Acreage	Avg. Lot Size
Durrell's Woods	River Road	1990	9	18	2.0
Indian Acres	Limerick Road	1990	4	24	6.0
Merri-Dot Mob. Home Pk	Route 111	1990	42	19.5	0.5
Maple Knoll Subdivision	Old Post Road	1991	4	10	2.5
Timber Ridge Subdivision	Thompson Road	1992	12	39	3.2**
Foxcroft Subdivision	Thompson Road	1992	11	42	4.0**
Harris Subdivision	Trout Brook Road	1992	3	7	2.3
White Pine Lane	Old Post Road	1992	12	34	2.4***
Rose Terrace Condominiums	Log Cabin Road	1993	24****	34	
Tremblay Subdivision	South Skillings Road	1995	3	9	3.0
Talbot Woods Subdivision	Limerick Road	1997	12	18	1.5*
Mary Fitanides Subdivision	Mountain Road	1997	5	17	3.4
Paddle Lane	River Road	1998	4	15	3.7
Tall Pines	Thompson Road	1998	6	22	1.3**
Theriault Subdivision	Log Cabin Road	2000	3	8	2.6
Chenevert Subdivision	Portland Road	2001	4	6.5	1.7*
Ruck Subdivision	Proctor Road	2001	5	35	7.0
Roaring Brook Estates	Old Post Road	2001	4	18	4.2
Goff Mill Brook Estates	Old Post Road	2002	17****	16	
Bartlett Farms	Old Alfred Road	2002	3	7	1.0**
Roaring Brook Estates II	Old Post Road	2002	5	12.5	1.0**
Erin Dell	Thompson Road	2002	9	33.5	0.9**
Total			201	445	2.2

- \* non-residential subdivision
- \*\* cluster design
- \*\*\* not built as of January, 2003
- \*\*\*\* multifamily development, 24 dwelling units

Both the 1976 and 1992 plans noted the scattered nature of development in the town. Even with the implementation of the land use policies from the 1992 plan, little has changed. While the 1976 plan did not indicate the amount of land used for residential purposes, close to half of the town currently is. The 1992 plan called for the division of the town into different land use district with differing residential densities, in an effort to direct development into the designated growth area. A new Land Use Ordinance was adopted in 1995, attempted to direct new residential development into the designated growth area by reducing the minimum lot size from two acres to one while increasing it to three acres in 45% of the town. Figure 16-2 shows the location of new housing units authorized by building permit between the time the new ordinance was enacted and the end of 2002. During this time period, there were 271 permits issued for new dwellings. These permits represented 296 new dwelling units, with a number of duplexes and one multifamily structure. Of these, 60 (22%) were in the designated the growth area – the Urban Residential and Highway Commercial Districts. Of the permits in the rural area, 82 (30%) permits were issued for units in the Rural Residential District and 125 (46%) in the Suburban Residential District.

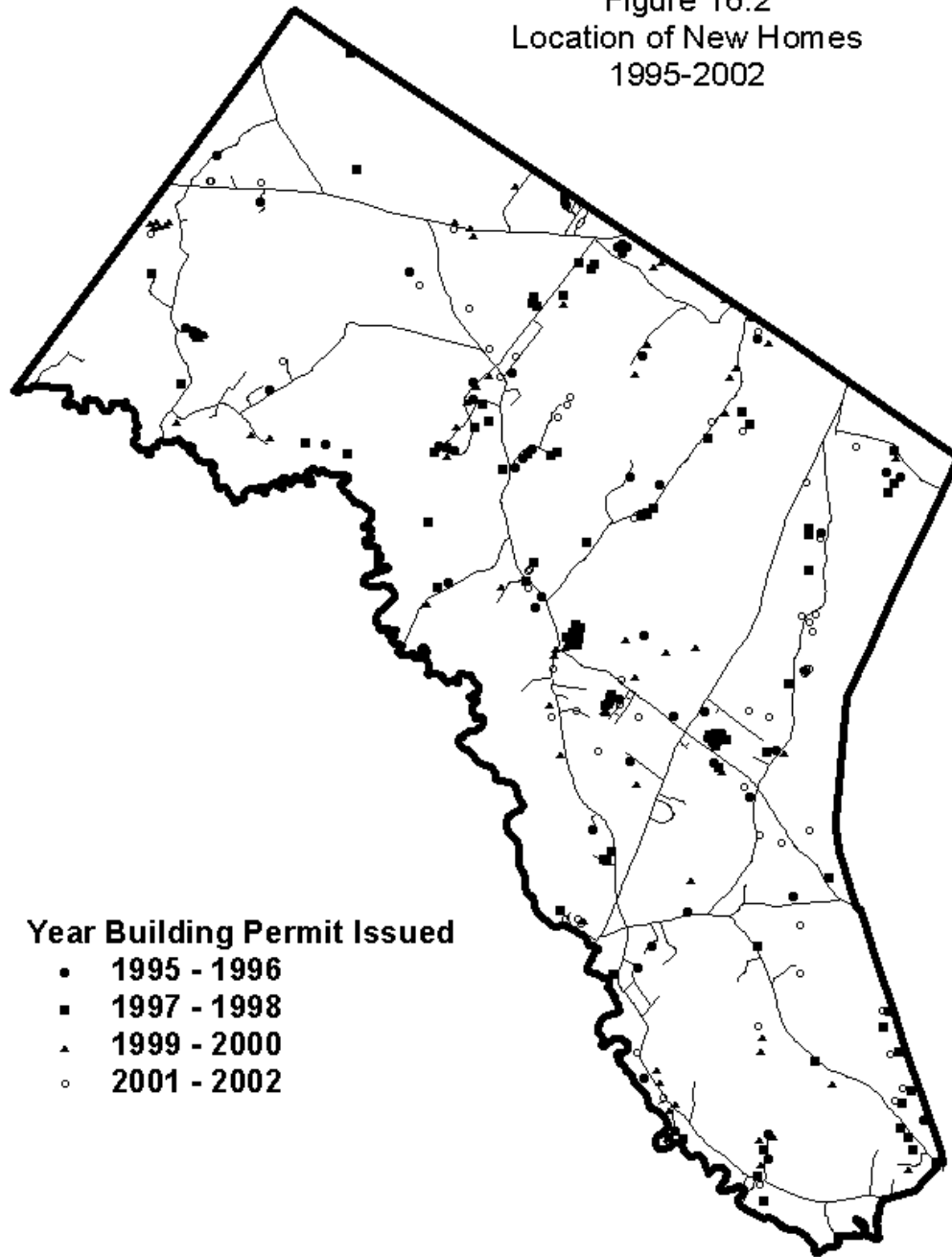
There has been only one residential subdivision in the Urban Residential District since its enactment. Part of the reason that there has been as little new development in the growth area is that of the total of approximately 1,300 acres in

Figure 16-1  
Subdivisions, 1995-2002



**Arundel Comprehensive Plan Update 2005**

Figure 16.2  
Location of New Homes  
1995-2002



**Year Building Permit Issued**

- 1995 - 1996
- 1997 - 1998
- ▲ 1999 - 2000
- 2001 - 2002

1 0 1 2 Miles



the R-1 district, more than one third of it (460 acres) is in the six lots that are 50 acres in area or larger. These parcels have not been placed on the market for sale in the past eight years. Three of these larger lots are in the tree growth tax program, and therefore not likely to be available for development in the near future.

## **Commercial Land**

Arundel lacks a village center or downtown that would provide a nucleus of commercial activity. Instead, similar to its residential development, commercial development is spread throughout the town. The 1992 plan noted two concentrations of commercial activity in town: the southwesterly end of Route One and the easterly end of Route 111. In the past ten years, there has been more development along Route One.

In response to the 1992 Plan, the 1995 Land Use Ordinance established two business zones, the Highway Commercial and the Residential Transition Districts. The Highway Commercial District lies 1,000 feet both sides of the entire length of Route One. The Residential Transition District surrounds the intersection of Alfred Road and New Road. In 2000, the Highway Commercial District was split into two districts. In the southern portion, land uses are limited to smaller scale retail and manufacturing is prohibited. Larger scale commercial uses and manufacturing are permitted in the northern section, but residential uses are prohibited.

In addition to these business districts, the Land Use Ordinance allows some business activity throughout the town. However, the higher traffic counts and availability of public water have resulted in most Arundel businesses locating on Route One.

From the assessors records an approximation of the extent of development on Route One has been made. Just less than half of the frontage of Route One is in commercial usage, up from 40% noted in the 1992 Comprehensive Plan. About one third is undeveloped, little change from the 1992 Plan, and one sixth is residential, down from one quarter. Assuming that both sets of statistics are accurate, it appears that little undeveloped land along Route One has been developed in the past decade. Instead, the town has seen the conversion of residential property into commercial uses and the redevelopment of commercial property into new uses.

The 1992 Plan indicated that much of the commercial activity was concentrated around or south of the Log Cabin Road/Campground Road intersection. This remains true today, though that has been new business development on the northern end of Route One. The Land Use Ordinance now directs those businesses that require a larger lot size for display or storage of materials outside to this area. The nature of the soils and landscape on the northern end of Route One poses a constraint to development.

A small cluster of commercial activity has also developed at the eastern end of Route 111 around its intersection with New Road and Old Alfred Road. As a result of the policies in the 1992 Plan, the 1995 Land Use Ordinance established a Community Commercial North district in this area. That has not been any new business activity in this area as a result of the change in zoning.

In addition to these clusters of commercial land uses, other commercial uses are scattered about the town. The current land use ordinance permits most types of commercial activities that do not involve wholesale or retail trade throughout the town. Based on the response of the 2002 survey, it appears roughly one out of every six residences has a home occupation. However, the 2000 Census identified only 43 individuals working at home.

From the assessment records, roughly 800 acres or 6% of the town's area is in parcels with a commercial use.

## **Recreational Uses**

There are several recreational uses located within the town, which though few, account for significant impact on land use. Already mentioned above there is the golf course. The Seashore Trolley Museum is a museum dedicated to urban mass transit. Its facilities include a visitors center, storage barns and repair and restoration shops. The Museum has restored several miles of track and rides on restored streetcars are provided visitors.

There are also two campgrounds or recreational vehicle parks in Arundel. The Red Apple Campground is on Sinnott Road and Hemlock Grove Campground is on Portland Road. Both facilities are about 15 acres in size.

## **Natural Resource Based Uses**

Natural resource based uses are uses which require a specific location due to the proximity of natural resource features or are dependent on natural resource products as their raw materials. Earlier in the chapter, agricultural land uses were discussed. There are a few other land uses in the town that are natural resources-based.

The most prominent of these uses is the removal of sand and gravel for use in the construction industry. Under the provisions of the Land Use Ordinance, mineral extraction operations must receive a permit from the Planning Board every three years. There are currently only two gravel pits with active permits: The H.E. Sargent pit on Alfred Road and the Fred Stone Pit on Curtis Road. The 1992 Plan identified eight gravel pits operating in the town. The surficial geology map, Figure 8-1, shows the locations of the ice contact deposits and the glacial outwash which are typically the sources for sand and gravel material. Most of the gravel extraction operations are located in these areas. Sand and gravel are economic necessities and provision must be made for their continued excavation. However, removal activities can have undesired

impacts on the surrounding natural resources, on neighboring properties and, in their transportation, on roads. As a result of suspected ground water table draw down from a gravel extraction operation in the late 1970s the town has enacted review procedures which attempt to minimize the impact of gravel extraction on ground water resources and water supplies of neighboring properties. The Land Use Ordinance now requires reclamation plans and posting of a bond or other guarantee to assure a gravel extraction operation is properly closed.

Chapter 13 describes Arundel's forest resources. It is estimated that three quarters of Arundel is forested, but little of it is managed for long term forestry. There are 31 parcels enrolled in the Tree Growth taxation program where land is assessed at a value set by the state that reflects its theoretical value in timber production. These parcels account for about 2,200 acres or 14% of the land area of the town.

### **Open Space**

With all the forest land and the remaining farms, the vast majority of Arundel is undeveloped open space. However as the changes which have occurred over the past twenty years indicate, we are not assured of the continued existence of this open space. Arundel's few remaining working farms face increasing economic pressure. With little of the forest land in long term management, its future existence can be questioned.

There are currently several parcels of land that will remain permanent open space. The Kennebunk Land Trust owns two parcels of land on the River Road. These parcels are 45 and 130 acres in size. Due to the nature of restrictions placed by the donor these lands, they are not open to use by the public. In addition, 11 other lots are dedicated open space within approved subdivisions. Some of these are lots for which passing sites for septic systems could not be found when the plan was approved, others are land that set aside as open space as part of a cluster design. There are five lots within the Clearview Estates Subdivision on the Limerick Road that are labeled "open space" on the subdivision plan. They are still owned by the developer of the subdivision, and except for the note on the plan, there is no permanent restriction on their future development. These lots range in size from 0.4 to 2.8 acres.

There are two lots surrounding the Talbot Woods Subdivision on the Limerick Road that are labeled dedicated open space. Similar to the Clearview Estates lots, these are still owned by the developer. The Hamden Place subdivision on the Old Alfred Road is similar as well.

Since 1995, the Land Use Ordinance has required that any subdivision with more than five lots be designed in accordance with the cluster standards. These standards allow for the development of smaller lots in exchange for the dedication of permanent open space. The ordinance requires the filing of a conservation easement to assure that the dedicated open space will remain permanently undeveloped. There are now seven subdivisions that have been approved under these provisions. They include Timber Ridge with 28 acres of open space, Tall Pines with 33 acres of open space, Foxcroft with 32 acres of open space and Erin Dell with 23 acres. All four of these subdivisions are located on the Thompson Road. The fifth subdivision with dedicated open space is Roaring Brook on the Old Post Road, with 9 acres of open space. Phase I of the Bartlett Farms subdivision, on the Old Alfred Road has dedicated 3 acres of open space in association with the three lots that have been approved there. The most recent cluster subdivision approved is Phase II of Talbot Woods, with 39 acres of open space.

Open space is an essential character of the rural nature of a location, and is most likely the most definitive measure of how rural an area is. If, as all surveys indicate, the citizens of Arundel desire to maintain the town's rural character, steps must be taken to maintain the open space that defines it. The open space noted above totals 361 acres. When land owned by the town that is not developed or used for municipal purposes is included, the total amount of open space or conservation land in the town is about 440 acres, or less than 3% of the total land area of the town.

### **Future Land Use Projections**

As noted at the beginning of this chapter, the 2000 Census reports a population of 3,571, or just about 150 people per square mile, living in 1,363 housing units, an average of 11 acres per housing unit. Using the lowest projection of population from Table 1-4, a future population of 4,470 is forecast for 2010 and 5,380 in 2020. These populations would result Arundel's population density increasing to 186 and 224 per square mile respectively.

Assuming the average household size from the 2000 Census of 2.61 individuals remains constant, an additional 300 housing units will have been built by 2010 and another 350 after that by 2020. The average amount of land per dwelling unit will have fallen to only 7 acres per dwelling in twenty years. If the average household size in Arundel continues to drop by the same rate as it has in the past twenty years, as many as 800 new housing units would be needed by 2020 to meet the needs of the projected population.

Today the average size of a lot with a residence on it is a little more than 6 acres, a decrease from 7 acres noted in the 1992 Plan. This includes large acreage parcels with a residence, such as the farms. However during the past ten years the average size of a new lot in a subdivision is only 2.2 acres.

If we assume that each new dwelling will continue to be on a lot of 2.2 acres, 1,400 to 1,700 acres of land will need to be converted to residential use by 2020. There is currently only 2,300 acres of land in lots less than five acres in size. Placing an additional 1,500 acres into lots of two to two and half acres will result in an increase of the “developed” portion of town by two thirds to house an increase in population of only one half. If lots are sized larger than the minimum now required or has historically been provided, additional land will be needed to support the projected population increases.

Concentrating development in areas of the town where public services can be provided more easily and where soil conditions can accept the waste water, will decrease the amount of land necessary to accommodate the increased population.

Commercial land uses in Arundel, without any conscious effort to change direction by the town, are likely continue to be in two categories. The town can expect to see an increase in the small “convenience” retail stores, meeting the spur of the moment needs of residents, such as small restaurants, video rental stores, and convenience package stores. Commercial operations which require a relatively large amount of land per sales volume, or due to extensive storage and display requirements, will continue to be attracted to Arundel’s Route One locations due to the lower land costs compared to neighboring towns. These operations serve more of a regional function than the convenience stores, and provide goods and services such as warehousing and other storage, automobile and recreational vehicle sales, and power equipment.

Predicting the demand or growth of commercial land uses is even riskier than predicting population growth. This is particularly true in Arundel. When compared to neighboring Biddeford and Kennebunk, Arundel plays a secondary role in the commercial marketplace. The growth in commercial activity in Arundel will depend on the activities in these areas as well as general economic trends.

It can be expected that agricultural land uses will not expand beyond those areas currently used. Commercial agriculture can be expected to continue to decline during the planning period. This decline can be slowed by decreasing the pressure of increased taxes on farm property, by providing a land use control system which would allow land owners to sell their development rights yet continue to own and farm their land, and by discouraging the development of uses incompatible to agriculture in the vicinity.

### **Current Land Use Regulations and Their Impacts on Future Land Use**

Arundel first enacted a town-wide zoning ordinance in the mid-1970s. This ordinance established a commercial district along Portland Road and the remainder of the town was in a Residential and General Purpose District.

Arundel currently has a rather comprehensive set of land use regulations, enacted pursuant to the 1992 Comprehensive Plan. The town has enacted a Land Use Ordinance, a Residential Growth Ordinance, Subdivision Regulations, and a Street Design and Construction Ordinance, all of which serve to guide and regulate development in the town.

The Land Use Ordinance was enacted in 1995 and has been amended almost annually since. The Ordinance divides the town into three “residential” districts, and three commercial districts. The minimum lot sizes of the residential districts do not comply with those specified in the 1992 Comprehensive Plan.

The Urban Residential (R-1) District is located in the area around Limerick Road and Campground Road. It is intended to be the primary residential growth area for the town, but as discussed above, has seen relatively little of the residential development since 1995. The 1995 ordinance reduced the minimum lot size requirement from 2 acres to 1 acre in this area. There are fewer commercial uses permitted in this district than in the other residential districts, but the ordinance does allow professional offices, service businesses, and personal service businesses among a few other commercial uses.

The Suburban Residential (R-2) District is located east of Portland Road, except for the area between River Road and Sinnott Road, and north of the Urban Residential District. The two-acre minimum lot size that Arundel had established with its 1970s’ Land Use Ordinance is in place in this district. There are a number of commercial uses permitted in the R-2 District. In addition to those mentioned in the R-1 district, the ordinance allows auto repair garages, garden centers, inns and light manufacturing in the R-2 district.

The Rural Residential (R-3) District is located in the northern portion of town and the area southwest of Sinnott Road. In 1995, the minimum lot size in this district was increased to 3 acres, in an attempt to direct growth to other parts of town. The same commercial uses that are permitted in the R-2 District are also permitted in the R-3 District.

The 1995 Ordinance continued the commercial district 1,000 feet either side of Portland Road that had existed since Arundel first enacted zoning. In 2000, the district was divided into two. The Highway Commercial 1 (HC-1) District extends from the Kennebunk town line to a point about 1,100 feet north of the Log Cabin Road intersection. From there to the Biddeford city line is the Highway Commercial 2 (HC-2) District.

## CHAPTER 17. GENERAL GOVERNMENT

Arundel is governed under the Town Meeting-Selectmen-Manager form of government under a charter adopted in November 1990. There are five Selectmen, who are responsible for the overall administration and management of the town.

In addition to the Board of Selectmen there are many other boards, committees, and individuals who are responsible for running Arundel's government. Most are discussed in further detail later in the plan, and are merely introduced here.

The five-member School Committee is elected by the townspeople to oversee the school department.

The Planning Board is made up of seven members appointed by the Town Manager and confirmed by the Board of Selectmen and is responsible for reviewing development proposals and preparation of the land use regulations of the town.

The Board of Appeals is also a seven-member board appointed by the Town Manager and confirmed by the Board of Selectmen. It is authorized to, provide relief from the terms of the Land Use Ordinance where applicants can show that enforcement of the ordinance results in no economic use of the property. The Board also may decide whether the Code Enforcement Officer made a proper decision.

A nine-member Budget Committee is responsible for reviewing and making recommendations concerning the budget to the annual town meeting. Six of the Budget Committee members are elected and three are appointed by the Selectmen.

There are three representatives from Arundel who serve on a multi-town Kennebunk River Committee. This committee, with additional representatives from Kennebunk and Kennebunkport is involved in the overall management of the tidal portions of the Kennebunk River.

The Recreation Committee, with the assistance of a part-time Recreation Director runs the town's recreation programs.

A three-member Cemetery Committee is responsible for delegating the duties of maintaining those cemeteries in Arundel that are not already maintained.

There is a large volunteer fire department, staffed by one full-time firefighter. The members of the fire department select the Fire Chief. The full-time firefighter is appointed by the Selectmen.

A five-member Solid Waste Committee is responsible for the development and review of the town's solid waste program.

In addition to those mentioned above, the staff of the town includes a Town Clerk/Tax Collector, Welfare Director, Town Planner, Code Enforcement Officer, Electrical Inspector, three town office staff, and a five-member highway department.

The town office is located in a two-story building at the intersection of the Limerick Road and the Mountain Road. The town offices are located in the former Parvo Hall, formerly used for classroom space and renovated in the early 1970s. This building has various problems including inadequate heating system, lack of space for the current operations, lack of handicapped accessibility to the second floor offices of the school department and the planning and code enforcement office. The town office is open five days a week.



## CHAPTER 18. PUBLIC SAFETY

Public safety includes police, fire protection and emergency medical or rescue services. Police protection is provided by the York County Sheriff's Department. Fire protection and rescue services are provided by a volunteer fire department.

### Police Services

The Town of Arundel is now part way through its first year of a contract with the York County Sheriffs Department to provide a patrol officer to the town. A deputy is provided to the town on a full-time basis. The deputy staggers his hours in the town so as not to establish a regular pattern. At times when the deputy is not in Arundel, service is provided by the Department under their regular rural patrol program or by the State Police.

Table 18-1 reports the activities of the Sheriffs Office in Arundel for 2000 and 2001. Of the 240 criminal investigations opened by the Office, 139 or 57% were "cleared." This means a suspect was identified, the case was dropped or some other resolution was reached which meant the investigation ended.

Table 18-1. Police Activities in Arundel, 2000 & 2001

Type of Activity	2000	2001
Criminal Investigations	299	354
Calls for Service	641	688
Accidents	155	170
Traffic Enforcement	547	847
Total	1,642	2,059

Source: York County Sheriff Office

With a population of 3,570, Arundel required 575 calls for police services per 1,000 population, and increase from 520 in 1990. Table 18-2 compares this figure with other towns of similar size. This is not compared to Arundel's neighboring towns because of the difference in type of communities.

Table 18-2. Police Activities per 1,000 Population, 2001

Community	Total Police Activities	2000 Population	Activities Per 1,000 Population
Arundel	2,059	3,571	577
Hollis	2,019	4,114	491
Lyman	1,450	3,795	382
Limington	874	3,403	257
Alfred	2,063	2,497	826
Shapleigh	790	2,326	340
Limerick	855	2,240	382

Source: York County Sheriff Office

### Fire Protection and Rescue Services

Arundel's fire department is organized as a private not-for-profit corporation. Because of the increase in the number of calls for medical assistance, the Arundel Fire Department decided to change its name to Arundel Fire-Rescue. There are approximately thirty active volunteers. The Department has one full time paid Firefighter/EMT-B who works Monday through Friday from 8:00 a.m. to 4:30 p.m.

The department operates out of the central fire station adjacent to the town office on the Limerick Road. The station was built in 1998 to house six vehicles. The station has an administrative office, a small meeting room and a large meeting room. The large meeting room is used for a variety of municipal purposes such as regular meetings of the Selectmen, Planning Board and other town boards and committees, and as the location of elections. The station should meet the needs of the department for minimum of 20 years. The department also uses a substation on the Old Post Road to house two vehicles and off season equipment and supplies.

The department operates with a fleet of eight vehicles for fire and rescue, an increase from six firefighting vehicles when the previous plan was drafted. The department maintains six firefighting vehicles. The town has purchased two vehicles in the past two years, a pumper truck and an ambulance. Table 18-4 lists the fire department vehicles and major equipment owned by the town, the date purchased, the expected useful life remaining and the replacement cost if the vehicle needed to be replaced today.

Table 18-4. Arundel Fire Department Vehicles

Vehicle/Equipment	Year obtained	Cost	Expected Remaining Life	Expected Replacement Cost 2002 \$
1977 Dodge Pickup w/ 200 gal tank	1980		2007	not to be replaced
1973 Ford 250 gpm pumper	1972		2007	not to be replaced
1980 Ford 1000 gpm pumper	1980	\$50,000	2012	\$150,000
1986 GMC 1800 gallon tank truck	1985	\$50,000	2005	\$160,000
1988 GMC Squad truck	1999	\$10,000		not to be replaced
1991 International 1250 gpm pumper	1991	\$135,782	2011	\$180,000
2001 International 1250 gpm pumper	2001	\$168,000	2021	\$180,000
2002 Ford Ambulance	2002	\$124,000	2022	\$124,000

Arundel not only answers fire calls, but now also offers ambulance service to the town from Monday through Friday, 6 A.M. to 6 P.M. On weekends and holidays it offers 24 hours service. To help staff the rescue, the Department now has 10 personnel with medical training, three of whom are licensed at the Intermediate level. The Department maintains a written agreement with the towns of Kennebunk, Kennebunkport, Goodwin Mills, and Biddeford to provide mutual aid rescue assistant during the times that Arundel is not fully staffed.

During 2001, Arundel answered a total of 299 calls. Of these, 92 calls were of a medical nature. This represents a 65% increase in the demand for service since 1989. The number of medical calls increased by 50% and the number of other calls doubled during that period of time.

The town continues to maintain written mutual aid agreements with the towns of Kennebunk and Kennebunkport, the City of Biddeford and the Goodwins Mills Fire Department. When Arundel has a fire call, West Kennebunk automatically sends a truck to our station for coverage. If needed, Arundel can divert that truck directly to the scene. For any confirmed fire calls on Route 111 or the western side of the town, Goodwins Mills automatically responds directly to the scene. Kennebunk does the same on the southeastern side of town, and Kennebunkport handles the eastern part of the town. The town of Arundel stills contracts with the town of Kennebunk for dispatch service. Arundel now has E-911 emergency phone system.

Only a small area of the town has public water, and therefore hydrants available for fire fighting purposes. Figure 23-1 shows the areas served by the Kennebunk, Kennebunk, & Wells Water District. Outside of that area, the fire department must rely on dry hydrants or surface water bodies without dry hydrants. A dry hydrant is pipe, to which a pumper hose may be connected which will draw water from a surface water body such as stream or pond. Figure 18-1 shows the locations of existing hydrants in the town.

In 1989, Arundel had few water sources west of the turnpike. Since the mid-1990s, with the help of the Planning Board, any new subdivision in the town must provide those houses with a water supply. The fire department will accept either a pressurized hydrant that is next to the development, or a pond with a dry hydrant. The size of the pond depends on the number of houses being built in a particular development. Arundel has added seven dry hydrants on the western side of town.

New issues facing the department which will have major impacts for training and equipment needs within the immediate future are the effects of the September 11, 2001, terrorist attacks in New York and Washington. Training and special equipment will be needed to prepare the department in event of terrorist attacks, bombs, mass casualties and security issues, as well as biohazards. In addition, the new Amtrak train poses the possibility of crossing accidents and derailments.

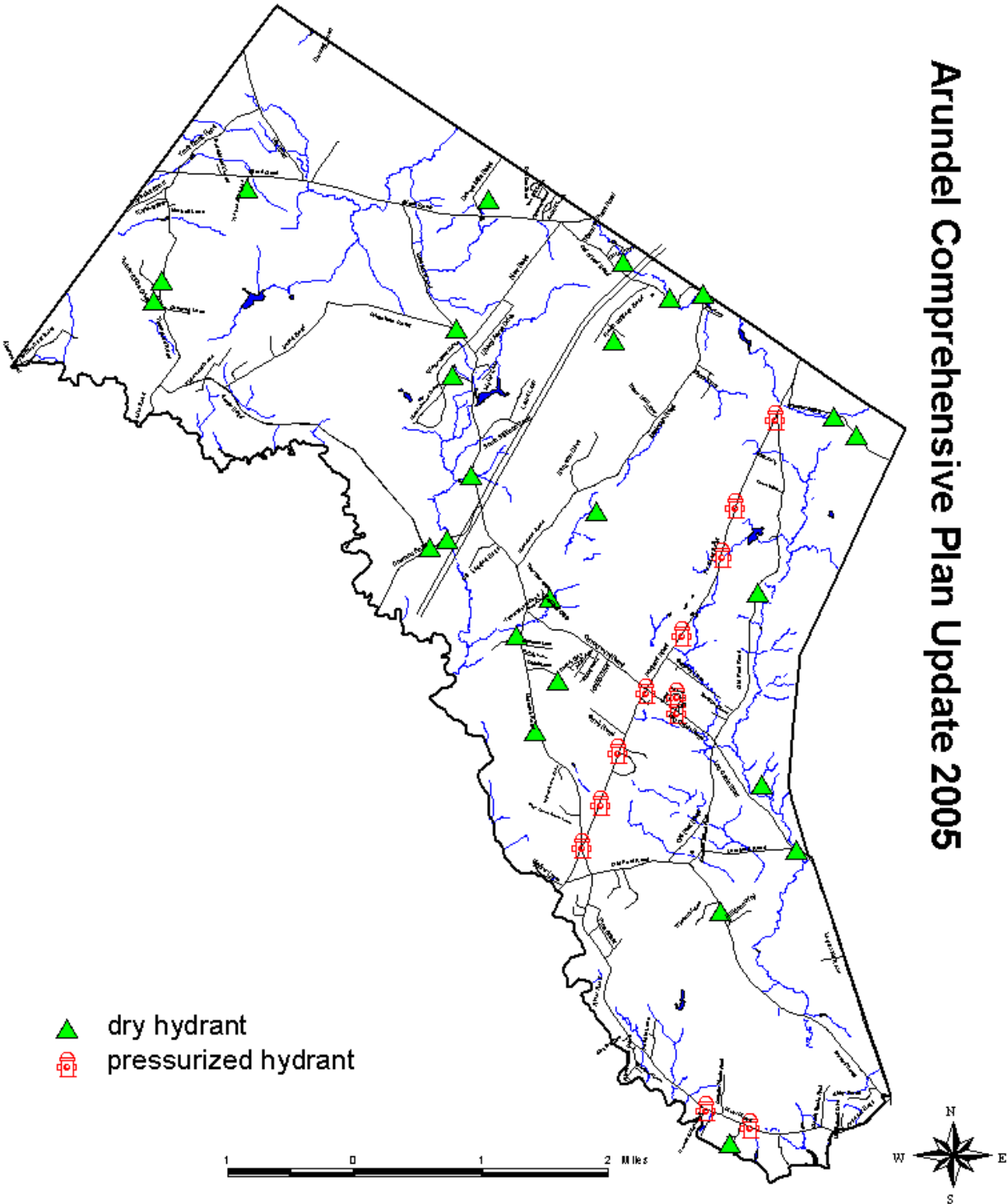
The major issues facing Arundel Fire-Rescue currently are the decline in volunteer membership and the changing nature of where their members are employed. As with all other organizations that rely on volunteers, AFR is seeing a decline based on the extensive time commitment required. As this is written, AFR is one of the last true volunteer departments in York County and will present the 2004 Town Meeting with a proposal to pay its members in an effort to attract new members. The alternative will be to increase the current paid staffing level. At present there are only one or two members who are employed within the Town and can possibly respond to daytime calls. It is not at all unusual for a daytime fire or accident call anywhere in Arundel, Dayton, Lyman, or Kennebunk to require mutual aid from 2 or 3 Towns to assemble enough manpower to operate safely within OSHA and NFPA guidelines.

Assuming the town will see growth in the next 10 years will be similar to that of the past ten years, the town's population would be about 4,500 with a total of 2,200 housing units, and there would be an additional 1½ to 2 miles of public street to maintain. Based on these assumptions, the fire department estimates that an additional pumper truck and improvements to the Old Post Road substation will be needed as listed in Table 18-5.

Table 18-5. Additional Fire Department Vehicles and Improvements Needed during Next 10 Years

Vehicle/Equipment	Estimated Cost 2002 \$
Class A pumper truck	\$200,000
Substation Improvements	\$100,000

Fig 18-1 Hydrant Locations



## CHAPTER 19. TRANSPORTATION

Transportation services in Arundel are primarily provided by private automobile. Only 12 of the 1,363 households in 2000 did not have an automobile available. Of the 1,919 workers identified in the Census, 10 reported traveling work by bus, 5 by bicycle and 36 walked. Municipal spending on highways and bridges is the second largest category of spending, after education. Therefore, the majority of this chapter deals with roads, road conditions and traffic. There are other transportation services available within Arundel or in neighboring municipalities which residents of Arundel may use. These are mentioned at the end of this chapter.

### Road Inventory

Arundel has approximately 54 miles of public roads, of which 4.5 miles (8%) are the Maine Turnpike, 7.5 miles (14%) are state highways, and 4 miles (7%) are state aid roads. The remainder are town ways. There is also about one mile of private roads in the town. State roads are totally maintained by the state. The state does the maintenance, and reconstruction, as well as snow removal. The town is responsible for snow removal on state aid roads but the state takes care of the maintenance and reconstruction needs. Table 19-1 indicates the ownership and maintenance responsibilities for each road in town.

### Highway Classification

Highways play different functions. Some highways, known as major arterials, play a primary function as carriers of traffic from one place to another, carrying high volumes of traffic. Other roads, known as local access streets primarily play the role of providing access to adjacent uses, carrying low volumes of traffic. The role of carrying through traffic and providing access usually are opposing forces in how well a road operates. It is difficult to carry high volumes of through traffic at the same time as providing unlimited access to adjacent land uses. The number of vehicles entering and exiting slows the through traffic and usually results in a large number of accidents, where the two are mixed.

The functional classification of a highway may vary depending on who is classifying the highway for which purposes. A road may serve one purpose on a regional or state level, but another purpose when viewed at a local level. For the purposes of the comprehensive plan, the roads in Arundel have been classified into five different “functional classifications.” These five different classifications are described below.

**Limited Access:** These roads are high speed, high volume highways that carry only through traffic and provide no access to adjacent land uses. Access to the highway is controlled and limited to certain locations only from other highways, not from adjacent properties. There is only one limited access highway in Arundel, the Maine Turnpike. No access to the turnpike is provided in Arundel.

**Major Arterial:** These roads are high volume highways that carry primarily through traffic and serve as routes from one community to another or through a community. To operate efficiently as carriers of through traffic, access to adjacent uses should be carefully controlled. The numbered state highways have been classified as major arterial streets.

**Minor Arterial:** These roads do not carry as high a volume of traffic but do serve as carriers of traffic through the town or from within the town to points out of town. Because traffic volumes are not as high, access controls need not be as stringent as major arterials, but should still be limited. Log Cabin Road, Limerick Road and River Road have been classified as minor arterial streets.

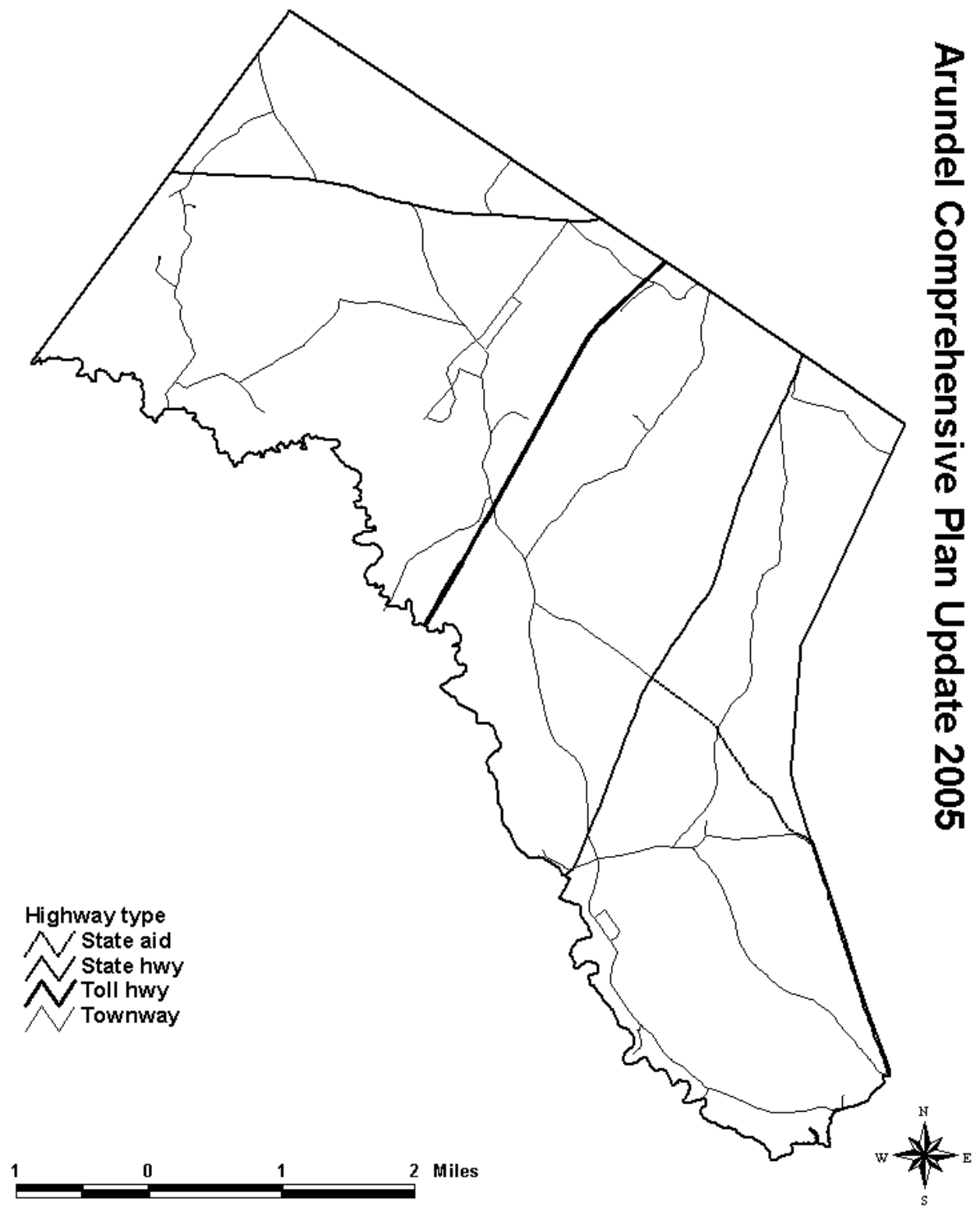
**Collector Streets:** These streets conduct and distribute traffic between local access streets and the higher order arterials. They are designed to carry higher traffic volumes and essentially connect neighborhoods and destination centers. Campground Road, Downing Road, Irving Road, Mountain Road, New Road, Perkins Road, Biddeford Road, Sinnott Road, and Thompson Road have been classified as collector streets.

**Local Access Streets:** These streets are the “lowest order” streets within the hierarchy. Local access streets provide frontage for access to lots, and carry traffic having a destination or origin on the street itself. They are designed to carry the least amount of traffic at the lowest speed.

Functional classification is among the data included in Table 19-1. The functional classification is also shown on Figure 19-1. The functional classification of a street should control its design and can be used by the town as provide a framework prioritization of maintenance and snow removal.

Figure 19-1 Functional Classification of Highways

Arundel Comprehensive Plan Update 2005



## Highway Conditions

The Arundel Highway department maintains a computerized database of street conditions. The database includes information on the type of pavement, pavement conditions, shoulder condition, and drainage structures such as culverts. A summary of road data is also shown on Table 19-1. These data show that 30% of the roads were in excellent condition, and 55% are in good condition. The survey also revealed that 7% of Arundel's roads are in deteriorating condition, and 8% in poor condition.

The questionnaire circulated by the Planning Committee asked about respondents' perceptions of the level of service given to roads. Just over 60% of the respondents indicated that winter maintenance was good or excellent. Thirty-five percent indicated it was poor or fair. Summer maintenance was rated slightly less well. Only 53% felt that summer maintenance was good or excellent, while 43% rated it fair or poor.

## Bridges

There are six bridges in town other than small culverts. The Boston and Maine Railroad bridge over Sinnott Road is owned and maintained by the railroad. This bridge was rebuilt in the mid-1990s and is currently in excellent condition.

The River Road bridge over Goffs Mill Brook is in good condition, having been replaced by the state in 1987. The Sinnott Road bridge over Goffs Mill is in need of improvement. The Maine Department of Transportation has scheduled improvements to the bridge in the coming years. The Route 35 bridge over the Kennebunk River has had minor repairs in the past several years and is maintained by the state. The Downing Road bridge over the Kennebunk River is a steel culvert and was replaced by the state in 1989. Durrells Bridge over Kennebunk River is in excellent condition.

The Route One bridge over the Kennebunk River is in need of maintenance. This bridge is maintained by the state and at one time had been scheduled to be replaced. Those plans were dropped about seven years ago.

## Traffic

Traffic data has been collected by the Maine Department of Transportation at a number of locations in Arundel. Table 19-3 shows average annual daily traffic counts for 1997 and 2000.

Table 19-3. Average Annual Daily Traffic Counts, Historical and Projected Counts

Location	1997	2000
Portland Road, @ Biddeford TL	14,080	13,980
Portland Road NE of Log Cabin Road		12,990
Portland Road SW of Log Cabin Road	11,110	10,950
Downing Road SW of Limerick Road	1,020	970
Mountain Road NE of Limerick Road	900	900
Log Cabin Road SE of Goose Rocks Road	4,160	
Log Cabin Road SE of Portland Road	4,570	4,380
Log Cabin Road SE of Old Post Road	4,490	4,900
Limerick Road SE of Mountain Road	2,810	2,920
Limerick Road NW of Mountain Road		2,750
Sinnott Road NW of Log Cabin Road	660	470
Old Alfred Road SE of Alfred Road	290	
Campground Road NW of Portland Road	1,650	1,770
Old Post Road S of Portland Road	1,020	
Old Post Road NE of Log Cabin Road	880	760
Old Post Road SW of Log Cabin Road	390	380
Alfred Road @ Biddeford TL	14,890	15,900
Alfred Road SW of Limerick Road	13,480	14,270

Source: Maine Dept. of Transportation

The quality of traffic flow on any part of the roadway system, whether at an intersection or a roadway segment, may be expressed as a level of service. The level is based on three criteria: traffic counts, road function, and the road's terrain. Traditionally the levels of service are rated from "A" to "F", "A" being the best conditions, and "F" the worst. A brief description of each level of service is provided below. In most areas of Maine, a level of service "D" is generally considered the lowest acceptable level of service on roadways.

Level of Service	Quality of Traffic Operation
A	Free flow, minimal delay due to random arrival on roadway, and lack of congestion.
B	Queues develop occasionally that may cause slight reductions in roadway speed, slight congestion.
C	Steady flow of traffic on roadway, queues developing often, reductions in roadway speed, slight congestion.
D	Steady, unstable flow of traffic on roadway, substantial delays reductions in speed of traffic.
E	Roadway is operating at capacity, substantial delays, significant congestion, substantial reductions in traffic speed.
F	Roadway is operating over capacity, constant traffic congestion, greatly reduced traffic speed. Traffic flow has broken down.

Table 19-4 indicates the Level of service in 1989 and projected levels of service in 2000 and 2010 for four locations studied, based on analysis done for the 1992 Comprehensive Plan. There has not been any more recent analyses made available to the town. According to the Wright-Pierce analysis, three of the four locations were then at adequate levels of service. Route One, at the Biddeford town line was at an unacceptable level of service. The level of service at this location was projected to decrease even further between the years 2000 and 2010, to level of service F, considered total roadway failure.

Table 19-4. Current and Projected Levels of Service

Location	1989	2000	2010
Route 1	E	E	F
Log Cabin Road	C	D	D
Route 35	B	C	C
Route 111	D	E	E

Source: Wright Pierce Engineering, 1990

The level of service on Route 111 was at the lowest generally acceptable level and was projected to decrease to unacceptable levels by the year 2000. There has been an increase in traffic levels one Route 111 in the past ten years and a corresponding increase in the number of crashes. The Maine Department of Transportation is undertaking another study of the needs for improvements along the Route 111 corridor between the Maine Turnpike and Route 202 in Alfred. In the winter of 2003 they are recommending a number of highway improvements on Route 111. The only improvement proposed in Arundel is the addition of a right turn lane on for westbound traffic turning onto Hill Road. The study will also investigate the feasibility of adding climbing or passing lanes on the hills.

In summary, major highways in Arundel appear to be approaching the threshold of unsatisfactory levels of service at the present time. Without improvements to the highway or the implementation of other transportation services to reduce the traffic, service on portions of Route One and on Route 111 can be expected to decline to levels of service generally considered unacceptable.

### **Safety**

The Maine Department of Transportation maintains an Accident Record System, in which data on all reportable traffic crashes are maintained. Traffic data for the three-year period from January 1997 to December 2000 was provided to the town by MDOT. This data has been analyzed and locations with significant numbers of crashes are discussed below.

Crash data is statistically manipulated to provide a figure called the "Critical Rate Factor." The critical rate factor is determined by comparing the actual frequency of crashes at a particular location with the expected frequency of crashes based on statewide data for similar types of locations. A critical rate factor of more than one indicates that a particular location is experiencing more than crashes than normally is expected.

Traffic engineers consider those locations that have a critical rate factor of more than one and have experienced eight or more accidents during a three-year period to be "high crash locations" and they receive priority for safety improvements. There are three high crash locations in Arundel.

Table 19-5. High Crash Locations

Location	Number of Crashes 1997-2000	Critical Rate Factor
Portland Road, between Old Post Road and River Road	11	1.01
Mountain Road, south of Biddeford town line	8	1.06
Alfred Road at the Biddeford town line	6	1.31

### **Planned and Needed Improvements**

Every two year the, the Maine Department of Transportation prepares a biennial plan for improvements to the state’s highways, bridges, airports and marine terminals, known as the Biennial Transportation Investment Program. The 2002-2003 plan, prepared in April 2000, contains only one improvement within Arundel. Route 35, Alewife Road, was paved in the summer of 2001.

The MDOT also prepares a six-year plan that identifies needed projects for inclusion in their BTIP. The Six-Year Plan for 2002-2007 identifies several projects in Arundel. These are:

- Reconstruction of Route 35
- Improvements to the Portland Road bridge over the Kennebunk River
- Maintenance painting of Durrells Bridge over the Kennebunk River

### **Highway Access Management**

In May 2002 the Maine Department of Transportation put into effect new rules for permits for driveways and entrances onto the state highway system. In Arundel, their rules affect Route One, Route 111, Route 35 and Log Cabin Road. All new or altered driveways must receive a permit from the department and the change of use that intensifies the amount of traffic using a driveway must also receive a permit. The new rules establish standards that were written in order to maintain traffic flow on these important arterial roads. The standards limit the number of driveways a property may have and also limit how close neighboring driveways may be. In some cases, the rules may require property owners to share a driveway with their neighbors. On Log Cabin Road these new rules have the potential to limit access. However, on Routes One and 111, the town’s existing land use standards are very similar to the MDOT rules and the impact of the new rules will be as noticeable.

### **Other transportation services**

There are several other transportation services aside from private automobiles which serve the town of Arundel and its residents.

The nonprofit York County Community Action Corporation (YCCAC) provides bus service within York County. YCCAC has established ten routes that serve primarily elderly, handicapped or low-income residents, although the service is open to the general public on a space available basis. All trips must be reserved at least twenty-four hours in advance and vehicles are scheduled to serve different parts of the county on different days. Service is provided to Arundel on Wednesdays, taking passengers to Biddeford/ Saco.

Taxi service is provided by several private operators. There are five taxi companies with advertisements in the yellow pages.

Bus Service to Portland is available from the Exit 4 Park and Ride Lot. The Biddeford-Saco-Old Orchard Beach Transit District operates the “Zoom” bus for express service to Portland. There are several buses during the morning and again in the afternoon. Inter-city bus service is available only from depots in Portland or Portsmouth.

The Portland International Jetport, Sanford, and Biddeford Airports are the three regional air facilities that serve York County. The Portland Jetport is the only of the three, which provides passenger service. The two local airports provide mostly general aviation services for private aircraft. The Manchester Airport in Manchester, NH has recently increased its service and attracts fliers from York County.

In December 2001, passenger rail service was re-established between North Station, Boston and Portland. Closest to Arundel, there are stations in Wells and Saco.

Both the Maine Turnpike and the Boston and Maine Railroad pass through Arundel but there are neither interchanges for the former nor sidings for the latter within the town.



## CHAPTER 20. HIGHWAY DEPARTMENT

The town's highway department is responsible for the maintenance of the streets throughout the town. This responsibility includes both snow removal and summer maintenance of pavement management and drainage. The highway department is run by the Road Commissioner who is appointed by the Board of Selectmen.

The highway department employs five full-time employees, including the Highway Foreman and operates out of the town garage, which is located on the Mountain Road. The town garage building is a 48 by 100 foot steel building built in 1988. The department also has a salt/sand shed built in 1993

Table 20-1 presents the major equipment and vehicles owned by the town, the date of purchase, their life expectancy and replacement cost.

Table 20-1. Major Highway Department Vehicles and Equipment

Vehicle/Equipment	Year obtained	Cost	Expected Remaining Life	Expected Replacement Cost 2002 \$
1978 John Deere Grader	1995	\$18,000	2018	\$50,000
1968 Ford F750 Truck	1968	\$17,500	2008	
1981 Centerville trailer	1982	\$5,500	2008	10,000
Mark Trackless	2000	\$8,500	2008	50,000
Boomford Flail mower	2001	\$7,500	2008	15,000
2001 Volvo Loader	2001	\$98,000	2013	105,000
1996 John Deer Loader	1996	\$62,200	2006	100,000
1998 Ford L8501	1997	\$45,000	2011	55,000
1996 Ford L8000	1995	\$41,000	2009	55,000
1994 Ford L8000	1993	\$37,500	2007	55,000
1997 Ford F350	1997	\$24,000	2008	30,000
1985 Chevrolet K20	1999	\$4,300	2007	10,000
1984 Chevrolet M-1008 Pickup	1995	\$3,900	2005	10,000
1992 Homemade Lowbed Trailer	1992	\$1,500	2013	5,000
1995 Homemade Utility Trailer	1995	\$1,000	2013	5,000
1988 BMC Brig	1988	\$56,000	2007	100,000
Sweepster	1996	\$8,000	2007	10,000
1994 Plow Wing for Dump Truck	1993	\$32,300	2007	40,000
1996 Plow Wing for Dump Truck	1995	\$34,000	2009	40,000
1998 Plow Wing for Dump Truck	1997	\$36,000	2011	40,000

In the past ten years, the town has accepted eight new town streets with a total length of 1.6 miles. Assuming the town will see growth in the next 10 years will be similar to that of the past ten years, the town's population would be about 4,500 with a total of 2,200 housing units, and there would be an additional 1½ to 2 miles of public street to maintain. Based on these assumptions, the highway department estimates that the additional vehicles will needed for street maintenance and snow removal as listed in Table 20-2.

Table 20-2. Additional Highway Department Vehicles Needed during Next 10 Years

Vehicle/Equipment	Estimated Cost 2002 \$
"Mid-size" truck with plow/sanding equipment	\$70,000
"Mid-size" truck with plow/sanding equipment	\$70,000
Street Sweeper	\$150,000



## Chapter 21. Recreation Facilities and Programs

The only publicly owned recreation facilities within the town are located at the Mildred Day School. The school has athletic fields that are currently laid out to accommodate a little league baseball diamond and a Babe Ruth baseball diamond.

The school athletic fields are located over filled freshwater wetlands, were evidently improperly constructed and are experiencing compaction and settling problems. The fields are used by the school for physical education programs and sports programs for the older grades. The town recreation program also uses the fields for some of their programs.

The Recreation Commission consists of a five-member committee that oversees the town’s recreation programs. The Commission sponsors various activities during the year. These programs, the age groups to which they are available and approximate number of participants in the past year are listed in Table 21-1.

Table 21-1. Current Recreation Programs and Participation

Program	Age Groups	Participants
T-ball/Baseball/softball	5-15	120
Tae Kwon Do	7-12	25
Cheerleading	8-11	20
Basketball (boys & girls)	9-12	50
Men’s Basketball	Adults	30
Co-ed Volleyball	Adults	15

The Recreation Commission also runs a summer recreation program for children, which serves approximately 60 to 70 youngsters for eight weeks during the school vacation. Other programs offered by the town include field trips during the February and April school vacations, holiday parties, and family trips to the theatre and professional sporting events.

Total expenditures for the recreation program, for the 2000-01 budget year were \$27,638, of which \$19,615 were collected in fees. In some recent past years the recreation commission has collected more in fees than has been expended, resulting in a “profit” for the town.

Although there are no set standards for providing recreational facilities in a community, several different organizations have published standards for outdoor recreation facilities based on the amount of population in a community. Table 21-1 indicates suggested facility development standards from the National Recreation and Parks Association, the average in Maine and the number in Arundel, per 1,000 population for six different types of recreational facilities. The table also give the additional number a facilities needed in the town to meet the average number provided in the state. The number in Arundel is based on an assumption of a population of 3,600 people.

Table 21-2. Existing Outdoor Recreation Facilities and Average Levels of Facilities

Facility	Current	Per 1,000	NRPA	State Average	Number Needed to Meet State Average	Number Needed in	
						2010	2020
Basketball courts	1	0.28	0.50	0.48	1	3	3
Tennis Courts	0		0.50	0.67	2	4	4
Baseball fields	2	0.56	0.17	0.46	0	1	1
Soccer/Multipurpose	1	0.28	0.22	0.41	1	1	1
Playground	1	0.28	0.50	0.60	1	2	3
Picnic Tables	6	1.67	2.00	4.94	12	21	26

There is one significant privately owned recreational facility in the town: the Dutch Elm Golf Course. The golf course is open to the public on a per-round fee basis. It is an eighteen-hole facility.

Arundel residents also have access to a number of recreational facilities that are not located within the town. The primary recreational facilities located outside of the town most likely are the beaches located in Kennebunkport and Kennebunk. There are also boating facilities on the Kennebunk River located in these two towns. The Northern York County YMCA, in Biddeford, offers a full aquatics program and fitness center. The “Y” also offers other recreation programs for juveniles and adults. There is also an indoor ice arena in Biddeford.

Finally, there are both an active Boy Scout and Girl Scout troops in the town. Both troops use the Mildred L. Day school as their meeting place.

Arundel residents also have the benefit of hundreds of acres of privately owned land available for outdoor recreation. In general, the woods and streams of the town are open for hiking, hunting, fishing and snowmobiling. There is access to the Kennebunk River and the major streams at road crossings. The Downing Road culvert are popular access points for fishing at both the Kennebunk River and Duck Brook.

Assuming the town will see growth in the next 10 years will be similar to that of the past ten years, the town's population would be about 4,500 with a total of 2,200 housing units. Based on these assumptions, the recreation department estimates that an additional recreation facilities will be needed as listed in Table 21-3.

Table 21-3. Additional Recreation Department Facilities Needed during Next 10 Years

Facility	Estimated Cost 2002 \$
Gym Space	\$150,000
Ball Fields (softball/baseball, soccer etc..)	\$80,000
Outdoor gathering place/gazebo.	\$45,000
Storage space for our equipment	\$30,000
Meeting rooms/space for after-school programs	\$100,000
Building space for teen programs	\$100,000
Playground not associated with the school	\$150,000
Open space for snowshoeing, cross-country skiing, general recreation etc.	
Hiking/walking/biking/skiing trail	
Outdoor ice-skating area	\$25,000
Skateboard area	\$85,000

## CHAPTER 22. UTILITIES

This chapter shall discuss private utility service in the town. Utility services provided are electricity, cable television, and telephone. There are also two natural gas transmission lines that run through the town, but no retail service is currently provided.

### **Electricity**

Electric service is provided by two different utilities within the town. Figure 22-1 shows the service areas of the Kennebunk Light and Power District (KLPD) and Central Maine Power Company (CMP). KLPD is a publicly owned district, headquartered in Kennebunk, and serves a small portion of the town adjacent to the Kennebunk River. The remainder of the town is serviced by CMP, a privately owned utility. Both systems report having adequate capacity to service residential and light commercial growth throughout the town.

Many industrial uses require three-phase service to power larger motors or other demands. Figure 22-2 shows the locations where three-phase power is currently available. In the spring 2003 Central Maine Power Company will be expanding three-phase service along Route One. The availability of three-phase service is one consideration in the designation of future areas for industrial development within the town.

### **Cable Television**

Cable television services are provided by Adelphia, which has its local operations headquartered in Kennebunk lower village. In addition to television service, Adelphia offers high-speed connection to the Internet. Service is provided throughout the town.

### **Telephone**

Local and in-state telephone service is provided by Verizon. Arundel is served by three separate exchanges, Kennebunk, Kennebunkport, and Biddeford-Saco. All three switching stations have electronic switching allowing a full array of modern telecommunications services.

Figure 22-1 Electric Utility Service Area

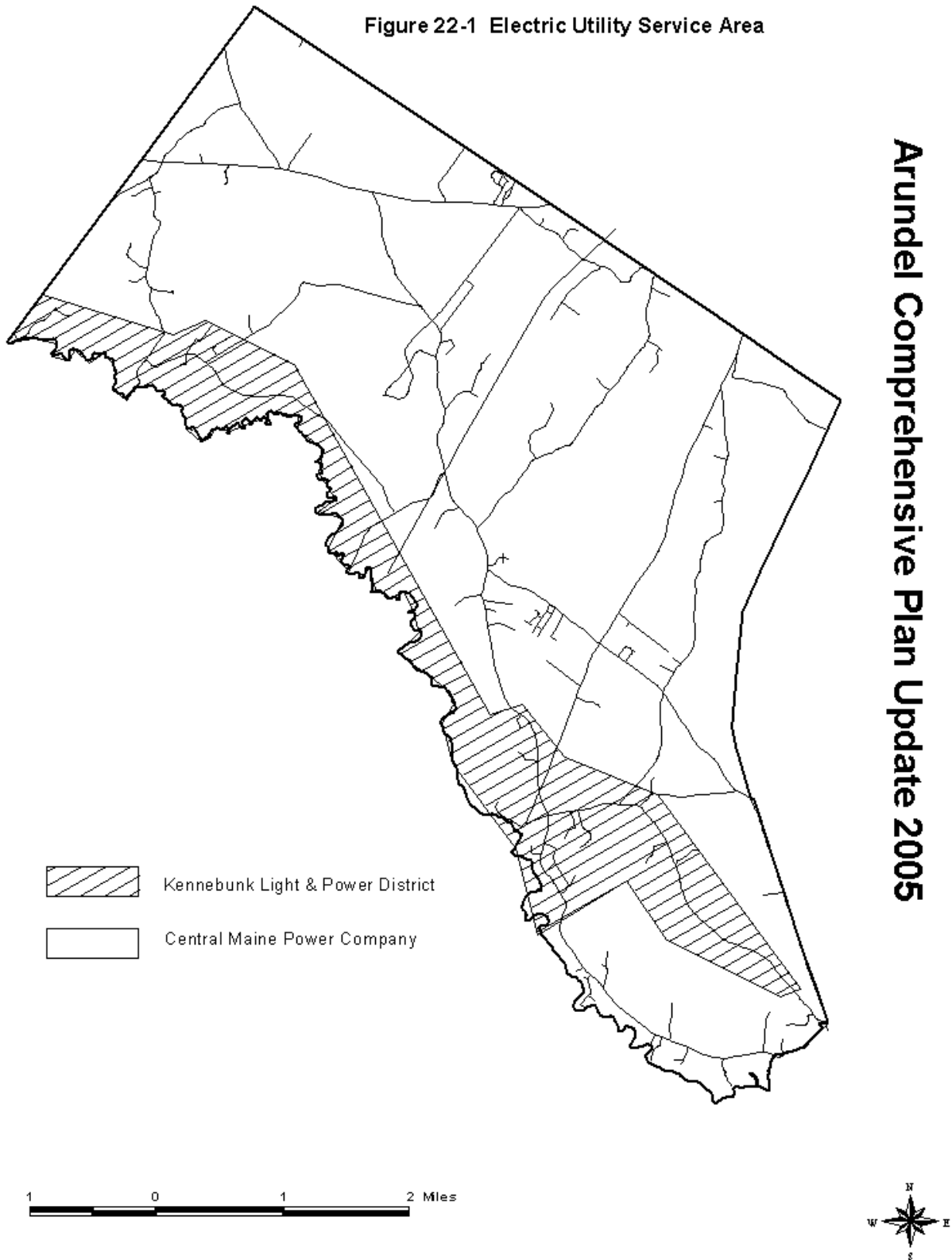
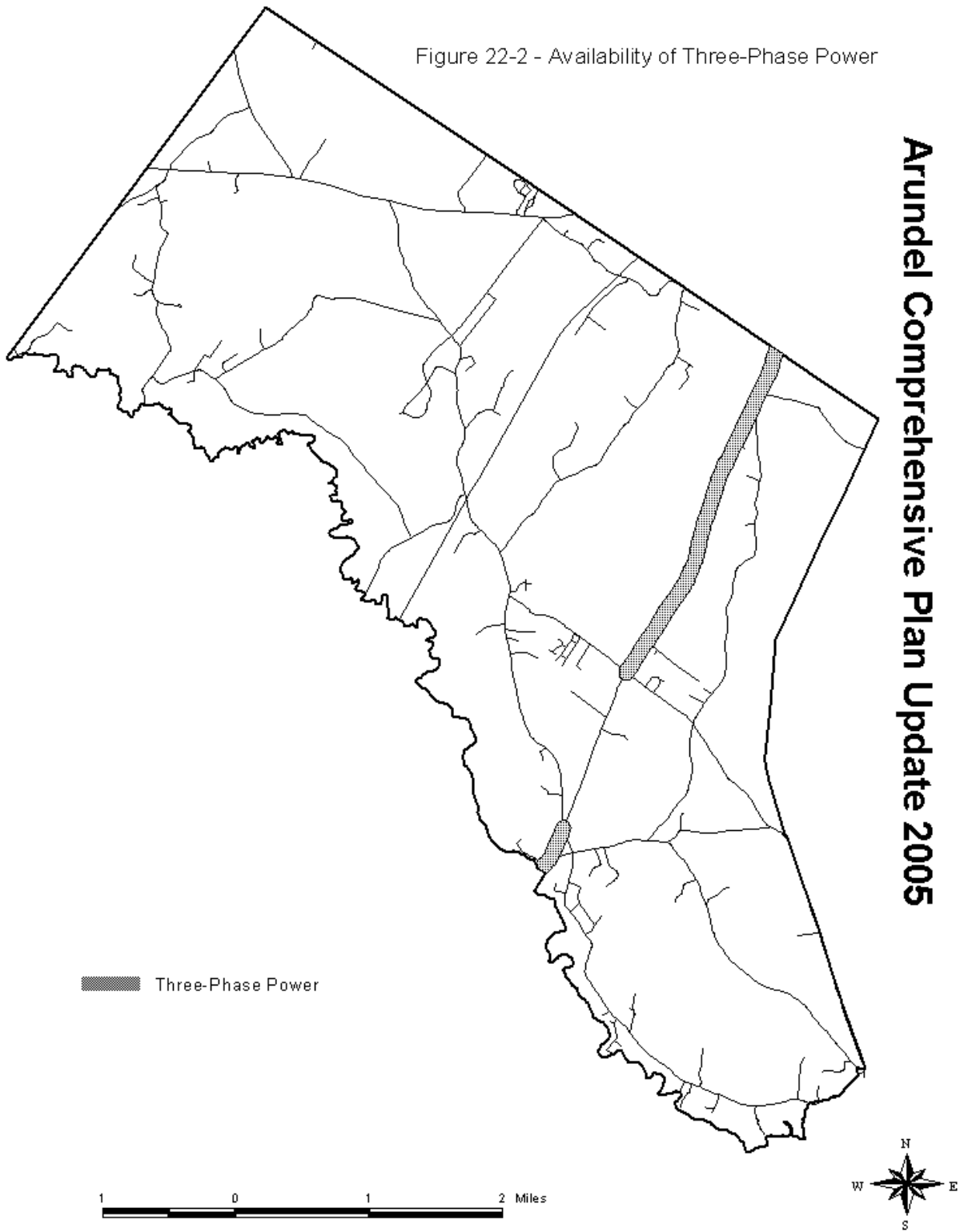


Figure 22-2 - Availability of Three-Phase Power





## CHAPTER 23. SOLID WASTE

The town operates a transfer station on the Mountain Road at the site of the former landfill. The town's refuse is currently transported to the Maine Energy Recovery Company incinerator in Biddeford. The town also operates a recycling center at the transfer station.

The transfer station and recycling center is located on a 61 acre parcel of land that also houses the town's highway department. The landfill was opened in the mid-1970s and covered an area of three to four acres on the parcel. The town has closed the landfill in compliance with state environmental requirements. Ground water monitoring continues to take place to assure there are no harmful impacts of the former landfill on the groundwater resources.

In the four years between 1995 and 1999, The Maine State Planning Office has estimated that the town produced an average of 2,174 tons of solid waste annually. This is equivalent to 5.9 tons per day, or an average of 3.5 pounds per person per day. The Town's contract with the Maine Energy Recovery Company allows for disposal of up to 600 tons annually.

The solid waste program is designed to offset the costs of waste disposal through user fees. Residents must purchase punch cards to be attached to their trash bags in order to be left at the station. The revenue raised through disposal fees is roughly equivalent to the cost of trash disposal.

The transfer station was construction in 1992 at a cost of \$146,700. The transfer station is equipped with two loading bays, and the capacity for two compactors. Only one compactor was installed. It is projected that, with the installation of the second compactor the transfer station should be able to handle the solid waste generated by a community of up to 5,000 people. Based on the population projections for the town presented in Chapter 1, the transfer station should therefore be adequate for fifteen years before a major addition is necessary. Should the time come when expansion is necessary, the estimated costs of a building expansion and second compactor total \$35,000 in 1990 dollars. Arundel's continuing to strongly embrace a goal of recycling will extend the time needed prior to a major capital expenditure at the transfer station.

The town operates a recycling program at the transfer station. In 1989, the Town initiated a recycling program using a donated building and volunteer labor. The program is now run by an employee of the public works department. Materials collected currently are newsprint, corrugated, glass, steel and aluminum. The recycling center also has a "reuse" room where usable materials are deposited and can be taken by anyone at no charge.

The Maine State Planning Office's Waste Management and Recycling program has provided data on Arundel's waste generation and recycling for the years 1995 through 1999. According to these data, in 1999 Arundel generated a total of 2,495 tons of solid waste. Of this, the Waste Management and Recycling Program estimates that 35% of the waste is recycled. When combined with a credit for returnable beverage containers and composting, the Program estimates that 46% of the towns waste is recycled. The Legislature has set a target of a 50% recycling rate.

Table 23-1 presents the major equipment used for the transfer station, the date of purchase, their life expectancy and replacement cost.

Table 23-1. Major Transfer Station Equipment

Vehicle/Equipment	Year obtained	Cost	Expected Remaining Life	Expected Replacement Cost 2002 \$
Philadelphia Tramrail 2000E	1991	\$9,510		
Forklift H45XM	2001	\$10,000		
1987 Bobcat 642B	1992	\$6,000		



## **CHAPTER 24. WATER SUPPLY**

Public water supply in Arundel is provided by the Kennebunk, Kennebunkport, & Wells Water District. The district serves an area from Biddeford Pool to portions of York. The District is a quasi-municipal utility district governed by a four member Board of Trustees, one elected from each of the towns of Kennebunk, Kennebunkport, Ogunquit and Wells. The district is regulated by the Maine Public Utilities Commission.

The main source of water for the district is Branch Brook, a sand and gravel aquifer-fed stream which forms the boundary of Wells and Kennebunk. The district must buy water from the Biddeford-Saco Water Company to meet increases in peak summer demand. The connection to the Biddeford-Saco system was made in 1979. At that time public water was made available to a portion of Arundel for the first time.

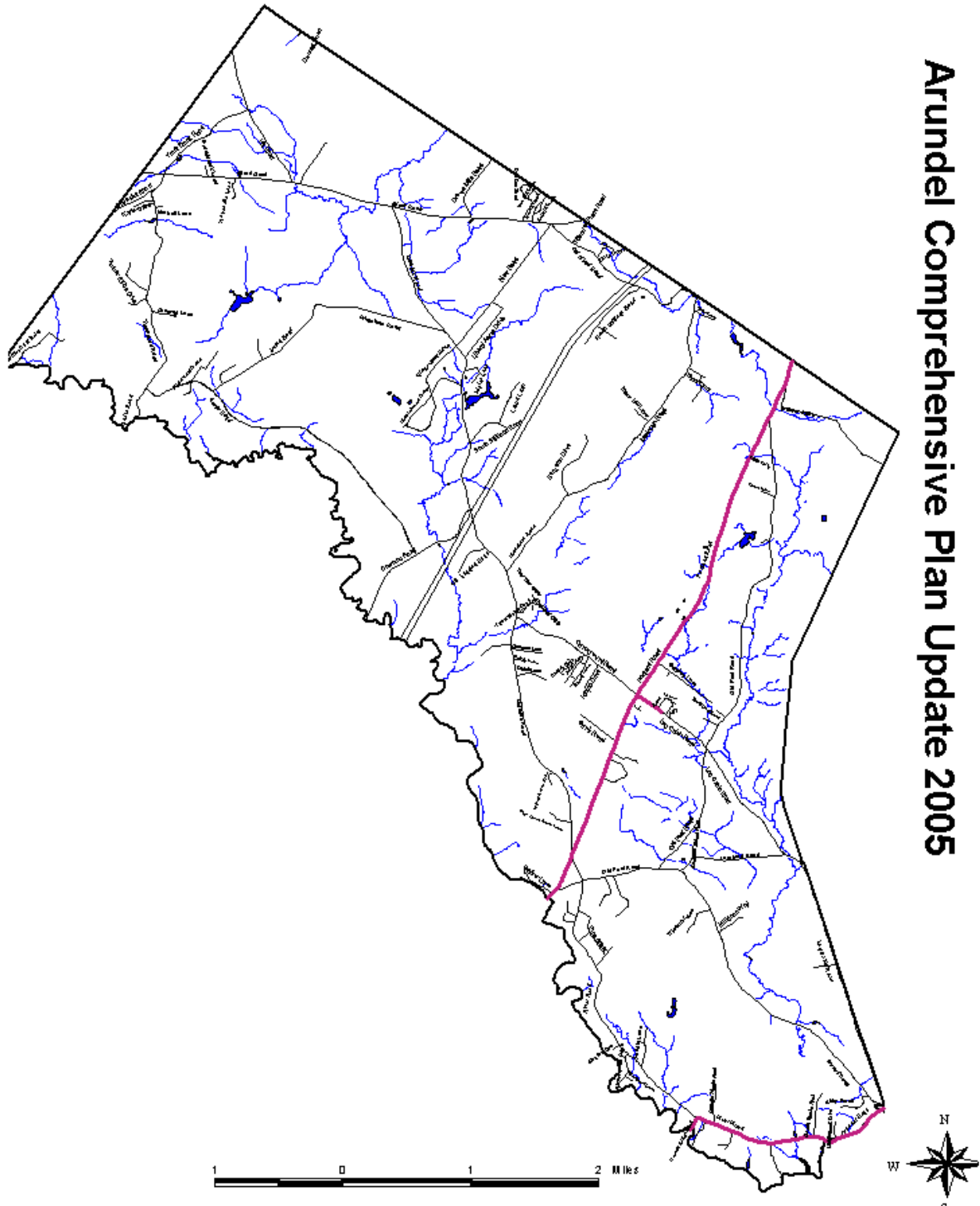
In 1979, a 20-inch line was installed along Portland and a 16-inch pipe along River Road, between Durrell's Bridge and Log Cabin Road. Whereas these pipes were designed as high volume mains to bring water from Biddeford to the district, there is adequate pressure and volume for conceivable uses in Arundel. Figure 24-1 shows the areas where public water service is available. In recent years a water main has been extended approximately 1,000 feet down Log Cabin Road from Portland Road

The District currently has no long-range improvements in Arundel planned as part of its overall system improvements plan. The District has purchased a 13-acre parcel on the west side of Portland Road for the possible construction of a new water storage reservoir. However, there are not plans at time for its construction.

There are 12 hydrants located in Arundel, nine on Portland Road, two on River Road and one on Log Cabin Road. The Fire Department has identified the need for additional hydrants on Portland Road.

In all probability, all further water main extensions in Arundel will be privately funded by residential and commercial parties, as needed.

Figure 24-1. Public Water Supply



## **CHAPTER 25. SEWAGE DISPOSAL**

All sewage disposal in Arundel is through private means. There are ten discharges of wastewater licensed to the Kennebunk River. All other buildings and uses in Arundel use subsurface wastewater disposal systems.

In order for a subsurface system to operate properly, the treatment tank, or septic tank, must be emptied periodically. This removes the accumulated solid material and grease which could cause the disposal area to fail. The material removed from the septic tank is known as septage. Although the septage is removed by a private contractor, state law requires each municipality to provide a facility or arrangements at a facility for the disposal of septage generated within the town. Currently all septage from Arundel is taken to the Sanford Sewer District wastewater treatment plant. The town has no formal agreement with the sewer district and there is no long-term commitment by the district to accept Arundel's septage.

The Sanford Sanitary District must expand its sewage treatment plant. Its current plans are to start construction on the expansion in the spring of 2003. Construction will last for between two and three years. During the time that construction is underway, the District will not be accepting septage waste from outside of Sanford. Arundel will need to find alternate disposal facilities for septage from its residents.



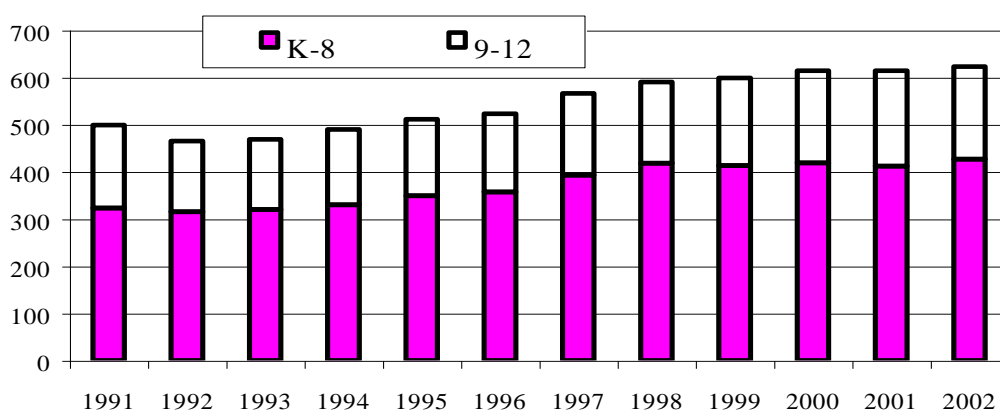
## Chapter 26. Education

Arundel has an independent school department that runs the education programs for Arundel residents from kindergarten to eighth grade. The town pays the maximum state tuition for Arundel high school students to attend any high school approved for tuition by the Maine Department of Education. The School Department is governed by a five-member school board, composed of town residents, elected at the annual town meeting in June. The school board has hired a superintendent to run the department.

### Enrollment Trends

Enrollment of Arundel students increased steadily through the 1970s, remained relatively constant during the 1980s at slightly more than 500 but increased during the 1990s. Fall 2001 saw the largest enrollment ever at 603. During the past decade, enrollment at both the elementary and high school levels have increased. Elementary enrollment has held relatively steady for the past five years. The current fifth and seventh grades have larger enrollment than the other grades and will cause a significant increase in high school enrollment in the coming years. Enrollment between the years 1991 and 2002 is shown in Figure 26-1.

Figure 26-1. April 1 School Enrollment, 1991-2002



Elementary enrollment at the Mildred Day School has increased from 323 students in 1990 to 427 in 2001. High School enrollment has increased from 176 in 1990 to 196 in 2001. During the 1990s, there was a shift in high schools chosen by Arundel students. At the beginning of the decade enrollment was evenly split between Kennebunk High and Biddeford High in the past five years enrollment has shifted to Thornton Academy in Saco. Currently, 42% of the high school students are enrolled at Thornton Academy, 28% at Kennebunk High, and 21% at Biddeford High. To date, these schools have indicated that they will be willing to accept Arundel students in to the near future.

### School Facilities

The school department has one school facility, the Mildred L. Day School, located on Limerick Road. The school was built in 1959 with seven classrooms. An addition was constructed in 1964, which added five classrooms. Due to increased enrollments, in 1976 a second addition added seven classrooms, a small kitchen, bathrooms, a multi-purpose cafeteria/gymnasium and library. In 1998, the school underwent a significant renovation to address air quality and structural problems.

There are currently 25 classrooms used on a continuing basis: two classrooms for each of grades 1 through 8 except grades 4, 5, and 7 which have 3 classrooms, one classroom used for two sessions of kindergarten, and an art room and a music room. In addition to the regular classrooms, there is a special education room, teachers' work room, and various offices.

The campus of the school consists of 27 acres, located adjacent to the Maine Turnpike. In addition to the school building and related parking, the campus consists of a storage garage, two playgrounds and ball fields.

The school department has reported that the school is in need of four additional classrooms to meet the core educational needs of the student body. The school is currently renting portable classrooms to create additional space.

The school department has also reported that the building does not provide adequate spaces for home economics, industrial arts, foreign language and a gifted and talented program. In order to implement the requirements of Maine

Learning Results fully, the school will need to provide foreign language instruction and improve its existing program for gifted and talented students.

There continues to be a problem associated with the school grounds. The fill material that was brought to the site at the time of construction is partly clay. The ball fields and other parts of the grounds have experienced compaction, due to inadequate fill material.

In addition to the school building and grounds, the school department owns a fleet of six school buses, one more than at the time of the last plan. Table 26-1 presents information on the bus fleet. The state Department of Education recommends that buses be retired after ten years of service. Bus #3 is used only as a back-up vehicle. The remaining five vehicles are used daily. The department is planning to file a request with the state for funding the replacement of bus #1. If an application is approved by the state, the school department will be reimbursed in two years for the full cost of the purchase. The remaining four buses were purchased since 1986 and are in good to excellent condition.

Table 26-1. Arundel School Bus Age and Size

Bus Number	Make	Passenger Capacity	Year Manufactured
1	International	72	1992
2	International	78	2001
3	Chevrolet	72	1986
4	International	62	1996
5	GMC	72	1989
6	International	78	1998

The school department is required by the state to maintain a five-year plan, known as a School Improvement Plan. The School Improvement plan, in addition to addressing facilities and transportation, must also include plans for curriculum development, instruction, staff development, and leadership. The department’s current facilities and transportation plan lists the following needs to be addressed in the next five years.

Table 26-2. School Department Facilities Plans

Item	Estimated Cost
New roof on library/gym wing	\$50,000
New School bus	\$55,000
Residing where “Texture 1-11” is currently	\$20,000

There should be some financial assistance available from the state for these projects. An application for funding for the four new classrooms and the stage was submitted to the state Department of Education in the winter of 2002. In the spring, the Department of Education informed the School Department that these improvements would not be funded..

During the winter of 2002, the School Department was informed that the middle school program was deficient as far as the state’s “Learning Results” standards are concerned. The deficiencies found included the lack of a gifted and talented program, inadequate arts instruction, lack of a foreign language program, and inadequate health education. The School Department has reviewed the options available for the middle school program. These options include entering into an agreement with the City of Biddeford for all middle school students to attend the soon to be constructed middle school in that municipality, the construction of a new middle school in Arundel, the construction of new combination middle school and high school for Arundel students, and contracting with Thornton Academy in Saco for Arundel students to attend a new middle school program there. Following a number of public hearings, a vote in November selected Thornton Academy’s proposal as the choice to pursue. The School Department is currently negotiating with Thornton Academy to develop an agreement. All of the choices would have involved increased costs for education.

### Educational Attainment

The dicennial censuses report the educational achievement of the residents of the town, age 25 years and older. In 1990, 28% of Arundel residents had not finished high school. Arundel had the lowest percentage (11%) of college graduates of any municipality in the subregion. Only Biddeford, of the towns in the subregion, had a higher percentage of the adult population not graduating from high school. By 2000, the percentage of Arundel adults that had not graduated from high school had decreased to 14%, but is still lower than the other communities in the subregion other than Biddeford. Similarly, the percentage of residents with a bachelors degree or higher had increased to 19%, now higher than several other municipalities in the subregion, but still less than the county. Table 26-3 presents the educational attainment of Arundel adults in 2000 compared with the other municipalities in the subregion and York County.

Table 26-3. Years of School Completed, 2000

Municipality	Elementary 0-8 years	High School 1-3 years	High School 4 years	College 1-3 years	College 4+ years	Percent not H.S. Grads	Percent College Grads
Arundel	139	196	892	737	563	14%	19%
Biddeford	1,542	1,527	5,128	3,422	2,227	22%	17%
Dayton	48	66	488	378	209	10%	18%
Kennebunk	119	414	1,566	2,096	3,152	7%	43%
Kennebunkport	36	117	523	842	1,292	5%	46%
Lyman	168	128	1,104	787	356	12%	14%
York County	6,583	10,594	44,641	36,584	29,189	14%	23%

Despite an apparent need for adult and community education programs, the school department currently offers none. GED and other adult education programs are available to Arundel residents through the MSAD 71 system in Kennebunk or through the Biddeford School Department.



## Chapter 27. Fiscal Capacity Analysis - Municipal Spending Patterns and Ability to Expand Services and Facilities to Accommodate Growth

The total budget for the Town of Arundel has increased from \$3,492,157 in 1993, to \$6,039,570 in 2002. This is a 73% increase over an nine-year period or an average of 7% per year. During this same period of time general inflationary pressure increased prices approximately 24%. If the 1993 budget had been adjusted for inflation to express the same amount of money in "1993 dollars", the real increase would have been 39%.

### EXPENDITURES

Municipal expenditures can be divided into two broad categories: educational expenditures and non-school expenditures. This report further divides the non-school municipal expenditures into nine areas of spending, based upon the categories in the annual auditor's report. These areas, and the annual budget for several recent years are shown in Table 27-1 on the following page.

As can be seen from Table 27-1, while Arundel's budget has been increasing, not all departments or areas of expenditure have been increasing at the same rate. Since 1993 the category of spending that grown the fastest is one that is outside of control of Arundel's elected officials or voters, the county tax. The county tax has increase by 157% between 1993 and 2002. While the county tax has experienced the fastest growth, its increase represents only 2% of the increase in municipal expenditures during that period of time. The three non-school municipal departments with the fastest increase in spending have been public safety, general government, and waste disposal. Spending on social services, including general assistance, has decreased by nearly one third since 1993.

During the time period examined, there has been a shift in the percentage of total expenditures for education and non-school expenditures. The 1992 plan noted that twenty years ago, 74% of the total municipal budget went to the School Department but that it had dropped to 64% in 1988. Throughout the early 1990s, it remained at just under two-thirds of all spending, but in the past few years has increased to 70% of expenditures. The shift in spending patterns is shown Table 27-2.

There are three reasons Arundel's total expenditures have been increasing: inflation, rising population, increased responsibility upon local government. General inflationary trends mean that local government, like all of us, must spend more to purchase the same amounts of goods and services. Prices have generally risen approximately 24% during the time frame analyzed in this report. When total expenditures are adjusted by the average Consumer Price Index the impact of inflation on municipal expenditures is removed from the analysis. Adjusted for inflation, total municipal expenditures increased 45% between 1993 and 2002.

Arundel's population increased by 902 people between the 1990 and 2000 censuses. This was a 38% increase. If one assumes that the population increased by 90 people per year during the 1990s, and has continued to do so since then, the average expenditure per person may be calculated for each year. Per capita spending increased from \$1,154 in 1993 to \$1,662 in 2002. This represents a 40% increase. When the difference is adjusted for inflation, and 2002 spending is expressed in 1993 dollars, the real increase in per capita expenditures is 13%.

Table 27-2 Percent Distribution Arundel Expenditures: 1993 - 2002

EXPENDITURES	1993	1995	1997	1999	2000	2001	2002
Education	65%	64%	69%	61%	62%	70%	70%
General Government	7%	8%	8%	6%	7%	7%	7%
Public Safety	2%	2%	2%	1%	2%	2%	2%
Waste Disposal	1%	1%	1%	1%	1%	2%	1%
Social Services	2%	1%	1%	1%	1%	1%	1%
Public Works	6%	7%	6%	5%	6%	7%	5%
Recreation	1%	0%	0%	0%	0%	1%	1%
County Tax	1%	1%	1%	1%	1%	1%	2%
Debt Service	4%	3%	2%	3%	3%	2%	2%
Capital Outlay	11%	13%	9%	22%	17%	8%	9%

Source: Town Reports



Table 27-1. Municipal Expenditures, 1993-2002

EXPENDITURES	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	1993-2002 % Change	1998-2002 % Change	2001-2002 % Change
Education	\$2,262,830	\$2,253,913	\$2,352,427	\$2,631,164	\$2,938,875	\$3,162,806	\$3,889,585	\$3,920,048	\$4,092,604	\$4,382,872	94%	39%	7%
General Government	\$240,136	\$289,569	\$287,312	\$308,136	\$339,949	\$362,083	\$364,976	\$409,095	\$393,696	\$438,746	83%	21%	11%
Public Safety	\$58,469	\$64,584	\$64,905	\$77,005	\$82,891	\$104,385	\$94,311	\$116,965	\$121,844	\$124,000	112%	19%	2%
Waste Disposal	\$48,939	\$66,061	\$50,597	\$49,411	\$56,960	\$61,904	\$62,026	\$85,738	\$89,460	\$88,464	81%	43%	-1%
Social Services	\$79,736	\$68,487	\$44,871	\$43,055	\$44,511	\$51,167	\$40,648	\$57,653	\$51,796	\$55,897	-30%	9%	8%
Public Works	\$213,487	\$227,018	\$249,872	\$303,196	\$259,960	\$293,533	\$293,456	\$363,640	\$409,156	\$343,525	61%	17%	-16%
Recreation	\$23,067	\$18,083	\$17,096	\$21,400	\$21,327	\$24,545	\$21,498	\$14,455	\$29,623	\$40,838	77%	66%	38%
County Tax	\$44,345	\$54,125	\$47,260	\$48,968	\$54,848	\$57,861	\$63,951	\$68,375	\$69,576	\$113,894	157%	97%	64%
Debt Service	\$122,844	\$99,452	\$95,289	\$71,939	\$95,424	\$73,253	\$170,020	\$192,526	\$120,794	\$155,718	27%	113%	29%
Capital Outlay	\$392,557	\$355,290	\$494,247	\$569,950	\$382,478	\$479,383	\$1,402,934	\$1,050,447	\$479,626	\$551,257	40%	15%	15%
TOTAL	\$3,486,410	\$3,496,582	\$3,703,876	\$4,124,224	\$4,277,223	\$4,670,920	\$6,403,405	\$6,278,942	\$5,858,175	\$6,295,211	81%	35%	7%
Per Capita	\$1,186	\$1,154	\$1,187	\$1,285	\$1,296	\$1,378	\$1,840	\$1,751	\$1,588	\$1,662	40%	21%	5%
Infl Adj Expend	\$3,486,410	\$3,409,285	\$3,511,877	\$3,798,282	\$3,850,833	\$4,140,785	\$5,553,974	\$5,268,915	\$4,779,821	\$5,056,465	45%	22%	6%
Adj Per Capita Expend	\$1,186	\$1,125	\$1,126	\$1,183	\$1,167	\$1,222	\$1,596	\$1,470	\$1,296	\$1,335	13%	9%	3%

Source: Town Reports

Table 27-3. Municipal Revenues, 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	1993-2002 % Change	1998-2002 % Change	2001-2002 % Change
Property Taxes	\$1,797,718	\$1,896,979	\$1,940,051	\$1,996,502	\$2,119,042	\$2,297,884	\$2,273,114	\$2,566,111	\$2,550,203	\$2,533,307	41%	10%	-1%
Excise Taxes	\$205,347	\$262,101	\$290,414	\$316,551	\$365,263	\$397,169	\$468,769	\$510,043	\$558,832	\$607,450	196%	53%	9%
License & Permits	\$55,809	\$50,832	\$38,640	\$55,510	\$64,535	\$67,045	\$33,710	\$40,414	\$45,459	\$57,728	3%	-14%	27%
Intergovernmental	\$1,428,545	\$1,278,537	\$1,746,382	\$1,390,594	\$1,536,802	\$1,718,932	\$2,428,295	\$2,204,322	\$2,419,473	\$2,847,770	99%	66%	18%
Charges for Services	\$45,252	\$46,865	\$111,878	\$122,306	\$119,344	\$120,064	\$168,361	\$211,169	\$203,200	\$232,699	414%	94%	15%
Miscellaneous	\$53,258	\$103,878	\$100,955	\$130,486	\$146,874	\$158,068	\$161,287	\$205,852	\$224,365	\$110,255	107%	-30%	-51%
Total	\$3,585,929	\$3,639,192	\$4,228,320	\$4,011,949	\$4,351,860	\$4,759,162	\$5,533,536	\$5,737,911	\$6,001,532	\$6,389,209	78%	34%	6%
Per Capita	\$1,220	\$1,201	\$1,355	\$1,250	\$1,319	\$1,404	\$1,590	\$1,601	\$1,627	\$1,687	38%	20%	4%
Infl Adj Revenues	\$3,585,929	\$3,548,335	\$4,009,135	\$3,694,880	\$3,918,030	\$4,219,012	\$4,799,496	\$4,814,914	\$4,896,789	\$5,131,966	43%	22%	5%
Adj Per Capita	\$1,220	\$1,171	\$1,285	\$1,151	\$1,187	\$1,245	\$1,379	\$1,343	\$1,327	\$1,355	11%	9%	2%

Source: Town Reports

Table 27-5. Change in State Valuation (\$1,000), Arundel and Neighboring Municipalities, 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	93-02 % Change	98-02 % Change	01-02 % Change
Arundel	\$130,750	\$121,550	\$123,300	\$126,650	\$133,100	\$135,650	\$148,550	\$159,800	\$168,400	\$196,400	50%	45%	17%
Biddeford	\$1,058,400	\$1,005,600	\$997,500	\$936,300	\$941,400	\$993,450	\$992,500	\$1,040,450	\$1,105,800	\$1,263,350	19%	27%	14%
Dayton	\$59,150	\$58,200	\$57,450	\$59,650	\$62,750	\$66,700	\$72,100	\$74,150	\$83,550	\$91,250	54%	37%	9%
Hollis	\$133,500	\$126,100	\$128,600	\$129,350	\$130,550	\$134,750	\$137,050	\$145,200	\$155,700	\$178,750	34%	33%	15%
Kennebunk	\$770,050	\$682,050	\$689,800	\$693,000	\$713,800	\$733,150	\$766,250	\$845,600	\$952,150	\$1,106,100	44%	51%	16%
Kennebunkport	\$613,000	\$564,050	\$554,150	\$572,150	\$543,900	\$533,100	\$602,850	\$605,900	\$742,950	\$876,100	43%	64%	18%
Limington	\$97,650	\$93,800	\$95,450	\$97,950	\$98,350	\$102,650	\$107,600	\$114,000	\$120,250	\$133,650	37%	30%	11%
Lyman	\$162,750	\$155,250	\$154,950	\$154,850	\$157,400	\$163,250	\$168,050	\$171,500	\$180,550	\$204,350	26%	25%	13%
North Berwick	\$318,450	\$312,400	\$274,950	\$278,650	\$272,050	\$269,950	\$270,900	\$273,750	\$293,250	\$339,900	7%	26%	16%



So, real per capita expenditures in Arundel have risen 13% since 1993. The third reason for increased spending is now apparent. Increased responsibility on municipal government has been placed upon the town from two directions. The state and federal governments have produced new mandates, such as educational reform and environmental protection. At the same time, residents have increased their expectations of the type and quality of services provided by the town. Further as the town has grown significantly over the past decade there is demand for more services to the residents and the size of the municipal staff has increased.

Perhaps of even greater interest than total expenditures is the source of revenues and the changes that have taken place during the past years.

REVENUES

Arundel essentially has three different sources of revenues: property taxes, intergovernmental revenues, and fees and charges for services such as licenses, permits, and registration fees for recreation programs. In Arundel, property taxes and intergovernmental revenue account for 95% of all revenue. Table 27-3 presents total revenues and their sources for the past ten years. Total revenue increased by 78% between 1993 and 2002. Intergovernmental revenue, now the largest single category, nearly doubled during this same period. Revenue from excise taxes nearly tripled. As a result, revenue from property taxes increased by only 41%.

When municipal revenues are adjusted for inflation, the increase over the ten-year period was 43%. Per capita revenue increased from \$1,220 in 1993 to \$1,687 in 2002, an increase of 38%. When per capita revenue is adjusted for inflation, the increase was 11%

Table 27-4 illustrates the change in percent distribution of Arundel's revenue sources during this time period.

Table 27-4. Percent Distribution Arundel Revenues: 1993 - 2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Taxes	56%	59%	53%	58%	57%	57%	50%	54%	52%	49%
License & Permits	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Intergovernmental	40%	35%	41%	35%	35%	36%	44%	38%	40%	45%
Charges for Services	1%	1%	3%	3%	3%	3%	3%	4%	3%	4%
Miscellaneous	1%	3%	2%	3%	3%	3%	3%	4%	4%	2%

Property taxes are levied on four different sources: real estate, the personal property of businesses, automobiles, and boats. The tax on automobiles and boats is collected as the "excise tax" which is paid annually at the time of registration. The excise tax is a tax based on the value of the vehicle or boat, generally declining with the age of the vehicle down to a certain point. The rate of the tax is established by the Legislature. The value is the manufacturer's list price plus options.

The total excise tax collection by a municipality will depend on the number of vehicles registered (usually proportional to population), the value of the vehicles (perhaps proportional to income of population), and the general economy (more people buy new vehicles in "better" economic times). The amount of excise tax collection will also depend on how well the collection clerk determines the value of the vehicle, by asking about options such as air conditioning and power windows. Excise tax collection in Arundel have increased from \$205,347 in 1993 (a time when the economy was just starting to climb out of recession, and 20% less than collected in 1989) to \$607,450 in 2002. In 1993, excise tax collections accounted for 6% of total revenues. By 2002, they had increased to 10% of total revenues.

Under Maine law, businesses are required to pay a tax on their personal property such as machinery, equipment, furniture and fixtures. The remainder of the taxes collected by the town are real estate taxes.

Intergovernmental revenue is revenue the town receives from the state and federal government. In Arundel, this revenue is currently from the state, or federal assistance that comes through the state, and is used primarily for education, and roads. In recent years the town has received federal grants for public works projects, but there are currently none active. In 2002, the town received a total \$2,114,946 in state funds. Of this, \$1,886,787 was aid to education, and \$47,496 was the highway block grant, accounting together for 91% of the state revenue.

During the 1992-93 school year the state contributed \$1,152,817 in aid to education, accounting for 51% of total school department revenues. For the 2001-2002 school year the state contributed \$2,089,279 towards education, accounting for only 48% of the education budget, leaving the property tax payers to shoulder a larger burden of the budget. During most of the 1980s the state's contribution to education was above 55%.

## FISCAL CAPACITY

“Fiscal capacity” refers to a community's ability to raise money. Differences between communities result in differences in the “ease” with which funds can be raised from town to town. The primary factors that cause differences between municipalities are the total valuation of the municipality compared to the population, the percentage of the valuation that is residential property, and the income of the taxpayers.

In comparing valuations from town to town the Assessors’ valuation can not be used due to varying pricing methodologies and assessment ratios. Therefore the state valuation is used to provide a common methodology and ratio. The state annually produces a valuation of each community, which is used, among other purposes, for determining the amount of state aid to education. Because of the magnitude and complexity of estimating total valuations for each of Maine’s nearly 500 municipalities, the state valuation more closely reflects conditions of two years previous. For example, the 2003 state valuation is based on the value of land and buildings in 2001. The state valuation is derived by comparing actual sales during a given year to the assessors’ valuation of those properties and adjusting all local valuations by the appropriate ratio.

The following paragraphs compare Arundel’s state valuation and spending patterns with that of other York County municipalities with populations ranging between 3,000 and 4,000. The local valuation is an important indicator of the financial burden that local taxpayers must assume to finance town government; therefore, an assessment of Arundel’s local valuation and its implications for its citizens follows this discussion.

Since 1993, Arundel's state valuation has increased 50%. The 1993 state valuation was \$130,750,000, compared to \$196,400,000 in 2002. Table 27-5 above presents the state valuation for Arundel and eight other municipalities for the years 1993 through 2003, and selected percentage changes during that time. The communities selected are those that immediately surround Arundel as well as other York County municipalities with populations between 3,000 and 4,500.

Arundel’s increase in state valuation was among the largest of the nine municipalities. Only Dayton’s state valuation increased more than Arundel’s. North Berwick’s increased by only 7% during the decade. Generally, state valuations decreased during the middle portion of the 1990s. Arundel’s state valuation dropped from \$130 million in 1993 to \$122 million in 1994. It has steadily increased since that time. Other communities’ state valuations, such as Biddeford’s, Kennebunkport’s and North Berwick’s, continued to decline for several years. Generally, following a period of either declining valuations or relatively slowly increases, several communities, Arundel included, have seen a significant increase in the last three years.

Remembering that a municipality's total valuation is one indicator of its ability to raise money through taxation, Table 27-5 clearly shows that, though of similar populations, the six of the eight municipalities may have very different fiscal capacities. In order to raise the same amount of money through property taxes, Arundel must have a tax rate of more than four times that of Kennebunkport and 1 ½ times North Berwick’s.

Another useful concept taken from Table 27-5 is that Arundel’s state valuation increased at a faster rate than most of the other municipalities. Whereas state aid to education is based on a formula comparing enrollment to valuation, assuming similar changes in enrollment, Arundel’s state aid to education, has decreased.

By dividing the total population of a municipality into the total valuation, the value of real estate per person, or per capita valuation, can be determined. This may give a better indication of the “taxing power” of the municipality, than total valuation. A higher per capita valuation will result in a lower average tax per person to raise the same amount of money. As brought out a few paragraphs following, the average tax per person may not necessarily be reflective of a town’s fiscal capacity.

A municipality with a high per capita valuation may be able to raise more funds through the property tax without as much of an impact on its residents than a town with a low per capita valuation. Table 27-6, below compares the per capita valuations of the nine communities. Whereas, as mentioned above, the state valuation typically reflects conditions two years old, the 2002 valuation and the 2000 population are used. Table 27-6 shows that Arundel’s per capita valuation ranges in the middle of those shown in the table. Biddeford, Kennebunk, and Kennebunkport have oceanfront property that increases their per capita valuation. Biddeford, Kennebunk and North Berwick also have industrial property, which may increase its per capita valuation, though a city such as Biddeford tends also to have a substantial amount of low value property. Arundel, Lyman and Dayton are similar. Limington and Hollis have the lowest per capita valuations, reflecting their locations away from the coast and the large amounts of undeveloped land in those communities.

Table 27-6. Per Capita Valuations

Town	2002 Valuation	2000 Population	Per Capita Valuation	Index(Compared to Arundel)
ARUNDEL	\$196,400,000	3,571	\$54,999	1.00
Biddeford	\$1,263,350,000	20,942	\$60,326	1.10
Dayton	\$91,250,000	1,805	\$50,554	0.92
Kennebunk	\$1,106,100,000	10,476	\$105,584	1.92
Kennebunkport	\$876,100,000	3,720	\$235,511	4.28
Lyman	\$204,350,000	3,795	\$53,847	0.98
Limington	\$133,650,000	3,403	\$39,274	0.71
Hollis	\$178,750,000	4,114	\$43,449	0.79
North Berwick	\$339,900,000	4,293	\$79,175	1.44

While the state valuation may provide a convenient method to compare towns because they are produced by a consistent methodology for all municipalities, it is the local valuation that is the figure from which the actual property taxes are determined and in which most citizens are interested. The following tables illustrate Arundel's financial "value" in several ways. Table 27-7 shows the actual total valuation and the valuation per person for the years 1993 to 2002. It also shows these same figures adjusted for inflation to 2002 dollars. The table shows that the growth in the total valuation was not able to keep pace with inflation between 1993 and 1997. Even if no new services were provided, the tax rate during that time would have had to increase solely for the town's budget to keep pace with increased costs of doing business. During this ten-year period during, the total valuation increased at approximately the same rate as the estimated population, resulting in a per capita valuation which changed very little.

Table 27-7. Arundel Local Total Valuation, Per Capita Valuation

	Total Valuation	Per Capita Valuation	Adjusted Valuation	Adjusted Per Capita
1993	\$135,695,924	\$46,161	\$168,939,078	\$57,470
1994	\$138,904,201	\$45,849	\$168,615,828	\$55,656
1995	\$142,007,991	\$45,521	\$167,632,793	\$53,735
1996	\$146,144,099	\$45,533	\$167,567,389	\$52,208
1997	\$148,805,683	\$45,098	\$166,792,164	\$50,549
1998	\$155,908,071	\$45,996	\$172,072,773	\$50,765
1999	\$162,934,011	\$46,826	\$175,941,348	\$50,564
2000	\$172,086,932	\$48,002	\$179,781,876	\$50,148
2001	\$171,155,684	\$46,396	\$173,861,703	\$47,130
2002	\$178,624,264	\$47,168	\$178,624,264	\$47,168

Source: Arundel Town Office

Though the unadjusted per capita valuation remained steady during the ten-year period, the town needed to raise additional money annually, if only to keep pace with inflation. The adjusted per capita valuation decreased during the decade, resulting in a higher "real per person tax" to raise the equivalent amount of money.

During the past ten years the town's fiscal capacity has faced a number of differing trends. The town must spend more money just to keep up with inflation. Additional residents generally mean additional costs for services. However increased intergovernmental revenues means a smaller local share of the budget is raised locally. The town has shifted more its costs to user fees. Table 27-1 and 27-6 indicate that expenditures have increased and taxes as a percent of total revenues decreased during the decade.

Table 27-8 shows Arundel's total assessment during the decade, that is the total amount of money to be raised from real estate and personal property taxes. The total assessment increased by 38% within the decade, with an average annual increase of 4%. It should be noted that the 1992 Comprehensive Plan reported an average annual increase in the commitment of over 25%. Table 27-8 also shows the per capita assessment and its increase during this time period. The per capita assessment grew at an average annual rate of only 1%, less than the rate of inflation.

Table 27-8. Total Assessment and Per Capita Assessment 1993 - 2002

Year	Total Assessment	Change from Previous Year	% Change from Previous Year	Per Capita Assessment	Change from Previous Year	% Change from Previous Year
1993	\$1,804,756			\$614		
1994	\$1,882,153	\$77,397	4%	\$621	\$7	1%
1995	\$1,917,110	\$34,957	2%	\$615	(\$7)	-1%
1996	\$1,965,638	\$48,528	3%	\$612	(\$2)	0%
1997	\$2,120,482	\$154,844	8%	\$643	\$30	5%
1998	\$2,260,667	\$140,185	7%	\$667	\$24	4%
1999	\$2,261,865	\$1,198	0%	\$650	(\$17)	-3%
2000	\$2,398,034	\$136,169	6%	\$669	\$19	3%
2001	\$2,481,757	\$83,723	3%	\$673	\$4	1%
2002	\$2,491,808	\$10,051	0%	\$658	(\$15)	-2%
	Total Change	\$687,052	38%		\$44	7%
	Avg Annual Change	\$76,339	4%		\$5	1%

The tax rate, or mill rate, is established by dividing the total amount to be raised by taxation (the assessment) by the total valuation of the community to develop a tax per dollar value placed on each property. The mill rate is typically expressed as a number of dollars of tax per \$1,000 of valuation. Table 27-9 shows the mill rate by which total taxes are assessed compared to the “full value tax rate.” The full value tax rate is a figure calculated by using the state valuation rather than the town’s total valuation.

Table 27-9. Arundel Tax Rates: 1993 - 2002

Year	Local Tax Rate	Full Value Tax Rate
1993	13.30	14.64
1994	13.55	14.86
1995	13.50	14.4
1996	13.45	14.49
1997	14.25	14.27
1998	14.50	14.15
1999	14.50	13.43
2000	14.50	12.21
2001	13.95	
2002	14.95	

Source: Arundel Town Office

Arundel’s local tax rate has held relatively steady in the past ten years. It has increased by an annual average of less than 1.5% per year. If a property has not been improved, the increase in taxes would not have kept up with inflation during that time.

Per capita valuation and assessment alone are not good indicators of “fiscal capacity.” A high per capita valuation may merely indicate that property in a given municipality is very expensive due to market conditions. A high per capita assessment may merely indicate the town raises a lot of money compared to its population. An additional comparison that is useful to look at in conjunction with per capita income is the percentage of the total municipal valuation that is residential property. This will serve as an indicator of the how much of the tax burden is shouldered by the residents of the town as compared to business property. The Property Tax Division, within the Maine Department of Finance has on file a “State Valuation Analysis” which provides a breakdown of a municipality’s valuation by several categories. The information in Table 27-10 is taken from the 2003 state valuation for each municipality, and shows the value of residential land, residential lots and the percentage of the total valuation that residential property represents.

With the exception of North Berwick, home to two large industries, and Lyman, with no utility property and low commercial value, the municipalities in the above table all have between 80 and 90% of their tax base in residential property. In North Berwick, with a population similar to Arundel’s, of every dollar raised in property taxes, on 52¢ comes from residential property. In Arundel, 82¢ of each dollars comes from residential property.

Table 27-10. Makeup of State Valuation, Arundel Subregion, 2003

Town	State	Undeveloped Land		Residential		Utilities		Commercial	
	Valuation	Total	%	Total	%	Total	%	Total	%
ARUNDEL	\$227,900,000	\$5,422,933	2%	\$187,739,168	82%	\$5,413,511	2%	\$29,429,279	13%
Kennebunkport	\$1,043,700,000	\$4,109,421	0%	\$922,334,820	88%	\$2,453,010	0%	\$117,212,672	11%
Kennebunk	\$1,362,850,000	\$10,897,247	1%	\$1,107,966,078	81%	\$14,075,939	1%	\$227,815,463	17%
North Berwick	\$384,350,000	\$10,811,458	3%	\$201,029,204	52%	\$6,709,180	2%	\$182,779,840	48%
Dayton	\$104,700,000	\$5,312,500	5%	\$87,341,001	83%	\$6,177,526	6%	\$5,893,846	6%
Lyman	\$244,400,000	\$10,119,069	4%	\$226,475,251	93%	\$1,609,321	1%	\$6,815,000	3%
Limington	\$146,200,000	\$9,298,721	6%	\$130,385,327	89%	\$1,903,378	1%	\$5,017,008	3%

From Table 27-10, one would assume that the residents of Kennebunk pay a higher percentage of the property taxes than do the residents of Arundel. However, one caveat in looking solely at this indicator is that the mix of seasonal and year-round residences in a town varies widely. A municipality with a large number of seasonal residences, will be able to raise money without as much of a pinch on its year-round residents. The above data do not differentiate between seasonal and year round residences. Table 27-11 presents data for these communities, reporting the percentage of housing units listed as seasonal dwellings in the 2000 Census. If one assumes that year-round and seasonal dwellings have similar average values, then percentage of the total valuation represented by year-round residential property, and therefore the residents of the community, can be calculated. Table 27-11 shows that the Arundel has among the highest percentage of the property tax base in year-round residential property.

Table 27-11. Percentage of State Valuation in Year-Round Residential Property

Town	Total Housing	Seasonal Housing	% Seasonal	% of Valuation Residential	% of Valuation Year-Round Residential
Arundel	1415	36	3%	82%	80%
Kennebunkport	2555	899	35%	88%	57%
Kennebunk	4985	630	13%	81%	71%
North Berwick	1705	70	4%	52%	50%
Dayton	663	4	1%	83%	83%
Lyman	1749	330	19%	93%	75%
Limington	1354	169	12%	89%	78%

Does this mean that there is less of a burden on the taxpayer now than in 1993? It may, but only if the taxpayers' ability to pay the property tax -- their income -- has increased at a greater rate than the property tax burden.

From Table 2-5, in the Economy Chapter we learned that between 1989 and 1999 Arundel's per capita income increased 48%. This is an average annual increase of 5%, substantially more than the average per capita assessment growth of 1% per year between 1993 and 2002.

In combining all three indicators of a municipality's fiscal capacity, Arundel is clearly not as well of as the surrounding municipalities nor as well as other municipalities of similar size. Arundel's total valuation is about average of similar size towns but has grown the fastest, resulting in the loss of school aid from the state. The town's per capita valuation is somewhat higher than that of nearby towns in the same population category but lowest of all the adjacent municipalities. Finally, while the percentage of the total valuation in residential property is very similar in Arundel and in the other nearby towns of the same population, Arundel's small number of seasonal dwellings means a higher percentage of the property tax is borne by residents of the town.

In its favor, the tax assessment in Arundel has been increasing at a slower rate than residents' incomes and abilities to pay it. An overall analysis of the four indicators shows that Arundel has less fiscal resources available to it, and that increases in municipal spending will have a more direct and harder impact on its residents, than its immediate neighbors and several of the nearby communities with similar populations.. Because of this, careful budget preparation and difficult decisions regarding improvements in facilities and services are necessary to avoid further burdening property owners with tax increases.

**Comparison of Spending Patterns**

Another useful comparison to make between towns is the breakdown of a municipality's budget by departments. The beginning of this chapter presented information on Arundel's expenditures. Below we compare Arundel's spending

patterns with that of other municipalities with similar populations. The same municipalities used in the above discussion on valuation have been used here.

The data presented in Table 27-12 are derived from the annual Fiscal Survey conducted by the Maine Municipal Association. The Association requests information from municipalities about revenue sources and expenditures. Except for Arundel, the municipalities in the table are part of a school administrative district. They do not receive any direct aid from the state for education, it goes directly to the school district. Therefore their education spending only reflects the local appropriation. Arundel, with its own school department, receives and spends state aid. Therefore the educational expenditures in Arundel are higher than the other towns. To present a truly accurate comparison of spending patterns would have required an effort far exceeding the budget constraints of the comprehensive plan.

Table 27-12. Comparison of Municipal Spending Patterns, 2001

	ARUNDEL	Hollis	Kennebunkport	Limington	Lyman	North Berwick
General Administration	12%	11%	9%	7%	12%	12%
Public Safety	3%	10%	12%	10%	3%	14%
Public Works	8%	15%	7%	24%	19%	10%
Codes, Health & Human Services	1%	2%	2%	2%	2%	1%
Parks, Recreation & Library	1%	7%	2%	2%	2%	4%
Education	72%	48%	60%	52%	58%	51%
County Tax	2%	3%	5%	3%	4%	3%
Debt Service	2%	0%	3%	0%	1%	1%
Other	0%	3%	1%	0%	0%	4%
Capital Improvements	6%	2%	6%	0%	0%	13%

Table 27-12 shows that Arundel spends a substantially higher proportion of its expenditures on education than the other municipalities. This has been explained above. Arundel’s spending on public safety (law enforcement, fire and emergency services) is a lower proportion of all of the towns except Lyman. The percentage of expenditures spent on public works (roads and solid waste) is also lower than other municipalities.

**Planning and Budgeting for the Future**

Well, after this analysis, what is the relevancy? As you go back and read the previous chapters in Section IV of the plan, those dealing with public facilities and services, you will notice that in each, there are new facilities or replacement equipment which are identified as needed in order to maintain the town’s level of services to its citizens, or to improve levels of service where they have been identified as deficient. The above analysis indicates that only with careful planning and frugality can the town begin to meet those needs. A summary of the beginning parts of this chapter indicates that municipal expenditures have been increasing at annual rate of 9% (81% between 1993 and 2002, see Table 27-1). The total assessment has been increasing at an average annual rate of 4%. The town’s valuation, based on a common methodology as measured by the state valuation, have been increasing at an average annual rate of 6%. Residential property makes up 82% of the town’s property and Arundel has very few seasonal residences. Further, residents’ income has been increasing only an average of 5% annually.

By further analysis of the municipal budget, and by making assumptions regarding the continuation of past trends, we can make a projection of the availability of funds to meet the identified needs for replacements or improvements in equipment or facilities. Key factors to be looked at are shown in Tables 27-13.

Table 27-13. Key Factors for Financial Planning

Indicator	Total Growth 1993-2002	Average Annual Growth	Per Capita Growth	Per Capita Avg. Annual Growth
Total Expenditures	81%	9%	40%	4%
Total Revenues	78%	9%	38%	4%
Taxes	36%	4%	22%	2%
Assessment	38%	4%	7%	1%
Non-tax revenues	105%	12%	59%	7%
State Valuation	50%	6%	17%	2%
Local Valuation	31%	3%	2%	0%
Per Capita Income*	48%	5%		

\*1989-1999

The tables below use the above indicators of past change as predictors of future change. As with any projections of future conditions, the projections in this table are based on a set of assumptions. The major assumption is that the past trend will continue. These assumptions can be modified to produce other results as additional data becomes available. In addition to the above data, four recent town budgets have been analyzed to separate capital expenditures and operating or maintenance expenditures.

Prior to reading the following tables this major limitation on the reliability must be understood. Solely because one of the following tables projects expenditures at a particular amount, it is not a prediction or certainty that it will come to pass. Towns have the ability to control the amount of money available for spending by setting the rate at which real estate and personal property taxes are assessed. The higher the mill rate, the more money will be brought in by these taxes. In theory (disregarding politics and the ability of the taxpayer) there is an unlimited source of funds available. It is the political process that determines the spending priorities and amounts, and eventually determines the mill rate. The tables below present two different scenarios, both of which maintain the 2003 tax rate. The difference in the two is in the growth in non-property tax revenue.

The tables present actual data from fiscal years 1998 to 2002. For budget year 2003 only the total valuation and the mill rate are actual; the other columns are projections. For 2004 and on, the figures are projections based on the continuation of the trends from the previous years.

The following assumptions and trends are built into these tables. The major assumption is that past trends in spending are indicative of future needs and that past trends in growth of valuation and non-tax income are indicators of future changes. Between 1998 and 2002, the average annual growth in the town valuation was just over 3%. Table 27-1 reports a figure for spending on capital projects. When this amount is subtracted from the total expenditures, the remainder is assumed to operating and maintenance costs. During this same time period the average annual growth in operating and maintenance costs was just under 7%. Both tables assume these trends will continue.

Revenue from sources other than the property tax increased by an average of 9% per year between 1998 and 2002. In Table 27-14, the growth of non-property tax revenues is assumed to continue at 9% per year. Whereas over half of these revenues represent intergovernmental revenue and the future of state spending is questionable for, the projected increase in non-property tax revenues in Table 27-15 has been reduced to 7% per year.

The available property taxes are function of the valuation and the mill rate. If the mill rate is kept constant, the available taxes will increase only as the valuation increases. By subtracting the projected operating and maintenance budget from the projected total available revenues, the amount available for capital expenditures can be calculated. The negative number that appears in Table 27-15 indicates the current tax rate will not provide enough revenue to meet the growth in the operating budget, much less provide for capital improvements by 2014, under the stated current set of assumptions.

Table 27-14. Future Budget Scenarios Based on 9% per year Growth in Non-property Tax Revenues

Fiscal Year	Total Non-Property Tax Revenue	Total Valuation	Mill Rate	Available Property Taxes	Total Available Revenues	Operating and Maint. Expend.	Available for Cap. Impr.
1998	2,461,278	155,908,071	14.50	2,260,667	4,721,945	4,242,562	479,383
1999	3,260,422	162,934,011	14.50	2,261,865	5,522,287	4,119,353	1,402,934
2000	3,171,800	172,086,932	14.50	2,398,034	5,569,834	4,519,387	1,050,447
2001	3,451,329	171,155,684	13.95	2,481,757	5,933,086	5,453,460	479,626
2002	3,855,902	178,624,264	14.95	2,491,808	6,347,710	5,796,453	551,257
2003	4,204,558	184,303,312	14.95	2,755,335	6,959,893	6,184,926	774,967
2004	4,584,740	190,162,916	14.95	2,842,936	7,427,676	6,599,434	828,242
2005	4,999,298	196,208,816	14.95	2,933,322	7,932,620	7,041,721	890,899
2006	5,451,342	202,446,934	14.95	3,026,582	8,477,924	7,513,651	964,273
2007	5,944,260	208,883,383	14.95	3,122,807	9,067,066	8,017,208	1,049,858
2008	6,481,748	215,524,467	14.95	3,222,091	9,703,839	8,554,514	1,149,325
2009	7,067,837	222,376,693	14.95	3,324,532	10,392,368	9,127,830	1,264,539
2010	7,706,920	229,446,774	14.95	3,430,229	11,137,150	9,739,568	1,397,582
2011	8,403,791	236,741,636	14.95	3,539,287	11,943,078	10,392,304	1,550,774
2012	9,163,673	244,268,425	14.95	3,651,813	12,815,486	11,088,787	1,726,699
2013	9,992,265	252,034,515	14.95	3,767,916	13,760,181	11,831,947	1,928,234
2014	10,895,780	260,047,515	14.95	3,887,710	14,783,490	12,624,913	2,158,577

The previous chapters have identified the needs of the community. If municipal spending patterns meet the assumptions built into these tables we can see the amount of money available to meet those needs. It is worthwhile here to recapitulate the three variables in each table. It is assumed that revenues from sources other than personal property and real estate taxes will increase at a rate of 3% per year. It is assumed that the total valuation of the town and the town's operation and maintenance expenditures will increase 5% per year. Obviously these tables can be used only to give an idea of the magnitude of funds available for capital improvements, their accuracy depends on the accuracy of the above assumptions.

Table 27-15. Future Budget Scenarios Based on 7% per year Growth in Non-property Tax Revenues

Fiscal Year	Total Non-Property Tax Revenue	Total Valuation	Mill Rate	Available Property Taxes	Total Available Revenues	Operating and Maint. Expend.	Available for Cap. Impr.
1998	2,461,278	155,908,071	14.50	2,260,667	4,721,945	4,242,562	479,383
1999	3,260,422	162,934,011	14.50	2,261,865	5,522,287	4,119,353	1,402,934
2000	3,171,800	172,086,932	14.50	2,398,034	5,569,834	4,519,387	1,050,447
2001	3,451,329	171,155,684	13.95	2,481,757	5,933,086	5,453,460	479,626
2002	3,855,902	178,624,264	14.95	2,491,808	6,347,710	5,796,453	551,257
2003	4,125,815	184,303,312	14.95	2,755,335	6,881,150	6,184,926	696,224
2004	4,414,622	190,162,916	14.95	2,842,936	7,257,558	6,599,434	658,124
2005	4,723,646	196,208,816	14.95	2,933,322	7,656,968	7,041,721	615,246
2006	5,054,301	202,446,934	14.95	3,026,582	8,080,883	7,513,651	567,232
2007	5,408,102	208,883,383	14.95	3,122,807	8,530,909	8,017,208	513,700
2008	5,786,669	215,524,467	14.95	3,222,091	9,008,760	8,554,514	454,246
2009	6,191,736	222,376,693	14.95	3,324,532	9,516,268	9,127,830	388,438
2010	6,625,158	229,446,774	14.95	3,430,229	10,055,387	9,739,568	315,819
2011	7,088,919	236,741,636	14.95	3,539,287	10,628,206	10,392,304	235,902
2012	7,585,143	244,268,425	14.95	3,651,813	11,236,956	11,088,787	148,169
2013	8,116,103	252,034,515	14.95	3,767,916	11,884,019	11,831,947	52,072
2014	8,684,230	260,047,515	14.95	3,887,710	12,571,940	12,624,913	(52,972)

## ARUNDEL, MAINE 2002 Comprehensive Plan Update Opinion Survey

Total number of responses received: 309  
 Number of surveys mailed: approx. 1,400  
 Approx. response rate: 22%

1. Are you a . . .
  1. Year-round resident 298 97%
  2. Seasonal resident 4 1%
  3. Non-resident landowner 4 1%
  
2. How much land do you own in Arundel?
  1. none 18 6%
  2. < than 2 acres 93 30%
  3. 2 to 5 acres 118 38%
  4. 5 to 10 acres 33 11%
  5. 10 to 25 acres 17 6%
  6. over 25 acres 28 9%
  
3. How long have you owned this property?
  1. less than 5 years 77 27%
  2. 5 - 10 years 61 21%
  3. 10 - 20 years 76 26%
  4. more than 20 75 26%

Do you use your property for . . . (Check as many as apply)

- |                                   |                           |
|-----------------------------------|---------------------------|
| 4. <u>286</u> Residence           | 8. <u>9</u> Business Only |
| 5. <u>7</u> Recreation (no house) | 9. <u>17</u> Timberland   |
| 6. <u>25</u> Agricultural         | 10. <u>23</u> Open Land   |
| 7. <u>51</u> Home Occupation      |                           |

How many people live in your household all or most of the time? (Enter in each blank the number of persons in that age group.)

	1	2	3	4	Total
12. 0-4 years old	28 (12%)	14 (6%)		1 (0%)	43 (18%)
13. 5-18	41 (17%)	34 (14%)	4 (2%)	1 (0%)	80 (33%)
14. 19-34	35 (14%)	38 (16%)	2 (1%)		75 (31%)
15. 35-44	43 (18%)	49 (40%)	1 (0%)		93 (38%)
16. 45-54	61 (25%)	49 (20%)			110 (45%)
17. 55-64	38 (16%)	27 (11%)			65 (27%)
18. 65 and older	38 (16%)	22 (9%)	1 (0%)		61 (25%)
	1	2	3	4	5
19. Total	33 (14%)	107 (44%)	52 (21%)	39 (16%)	8 (3%)
	6				3 (1%)

20. What type of home do you live in?
  1. single family 243 82%
  2. multi-family 16 5%
  3. mobile home 25 8%
  4. modular home 11 4%
  
21. Do you rent or own your home?
  1. Rent 14 5%
  2. Own 279 95%

22. How long have you lived in Arundel?
- |                       |     |     |
|-----------------------|-----|-----|
| 1. 0 -2 years         | 31  | 11% |
| 2. 3 - 5 years        | 55  | 19% |
| 3. 6 - 10 years       | 49  | 17% |
| 4. 11 - 20 years      | 58  | 20% |
| 5. More than 20 years | 100 | 34% |

23. How long have you lived at your current residence?
- |                       |    |     |
|-----------------------|----|-----|
| 1. 0 -2 years         | 34 | 12% |
| 2. 3 - 5 years        | 67 | 23% |
| 3. 6 - 10 years       | 56 | 19% |
| 4. 11 - 20 years      | 65 | 22% |
| 5. More than 20 years | 71 | 24% |

How many people in your household.

24. work full-time?
- |                 |     |     |
|-----------------|-----|-----|
| 1. One          | 114 | 39% |
| 2. Two          | 117 | 40% |
| 3. Three        | 11  | 4%  |
| 4. Four         | 3   | 1%  |
| 5. Five or more |     |     |
| 6. None         | 44  | 15% |

25. work part-time?
- |                 |     |     |
|-----------------|-----|-----|
| 1. One          | 68  | 25% |
| 2. Two          | 11  | 4%  |
| 3. Three        | 4   | 1%  |
| 4. Four         | 1   | 0%  |
| 5. Five or more |     |     |
| 6. None         | 186 | 69% |

26. are retired?
- |                 |     |     |
|-----------------|-----|-----|
| 1. One          | 38  | 14% |
| 2. Two          | 33  | 12% |
| 3. Three        |     |     |
| 4. Four         |     |     |
| 5. Five or more |     |     |
| 6. None         | 205 | 74% |

Where do the people in your household work? (Answer for no more than three; fill in blank with the number of locality)

- |                                  |     |     |
|----------------------------------|-----|-----|
| 1. Arundel                       | 65  | 14% |
| 2. Kennebunk-Kennebunkport-Wells | 115 | 25% |
| 3. Portland Area                 | 83  | 18% |
| 4. Sanford-Alfred                | 20  | 4%  |
| 5. Biddeford-Saco-OOB            | 93  | 20% |
| 6. Kittery-York-Portsmouth       | 19  | 4%  |
| 7. Other                         | 59  | 13% |

30. What is your total household income? (circle number)
- |                        |    |     |
|------------------------|----|-----|
| 1. Less than \$15,000  | 19 | 7%  |
| 2. \$15,000 - \$25,000 | 25 | 10% |
| 3. \$25,000 - \$35,000 | 28 | 11% |
| 4. \$35,000 - \$50,000 | 70 | 27% |
| 5. \$50,000 - \$75,000 | 70 | 27% |
| 6. \$75,000 or more    | 46 | 18% |

31. What is the age of the person answering the survey?
- |                     |     |     |
|---------------------|-----|-----|
| 1. 25 years or less | 3   | 1%  |
| 2. 25-44 years      | 112 | 38% |
| 3. 44-65 years      | 138 | 47% |
| 4. over 65 years    | 42  | 14% |

32. How old is your home?
- |                        |    |     |
|------------------------|----|-----|
| 1. less than 5 years   | 44 | 15% |
| 2. 5 - 10 years        | 48 | 17% |
| 3. 11-20 years         | 68 | 24% |
| 4. 21-50 years         | 90 | 31% |
| 5. 51-100 years        | 15 | 5%  |
| 6. more than 100 years | 24 | 8%  |
| 7. do not know         | 4  | 1%  |

**LAND USE PLANNING QUESTIONS**

33. Some people have suggested that Arundel suffers from the lack of a village center. Do you.
- |                      |    |     |
|----------------------|----|-----|
| 1. Strongly Agree    | 48 | 16% |
| 2. Agree             | 84 | 28% |
| 3. No Opinion        | 47 | 16% |
| 4. Disagree          | 74 | 25% |
| 5. Strongly Disagree | 45 | 15% |
34. Would you favor the town allowing an area of compact development with a mix of residential and commercial uses in an attempt to encourage the development of a village center?
- |                      |    |     |
|----------------------|----|-----|
| 1. Strongly Favor    | 43 | 15% |
| 2. Favor             | 89 | 30% |
| 3. No Opinion        | 48 | 16% |
| 4. Disfavor          | 60 | 21% |
| 5. Strongly Disfavor | 52 | 18% |
35. In your opinion, should cluster development? (Circle one)
- |  |    |     |
|--|----|-----|
| 1. Be required for all new residential development                   | 44 | 16% |
| 2. Be mandatory for all subdivisions                                 | 44 | 16% |
| 3. Be mandatory for some subdivisions, as present ordinance requires | 63 | 23% |
| 4. Be optional for all cases   | 56 | 21% |
| 5. Not be allowed  | 65 | 24% |

What do you think the town policy should be towards the possible types of development listed below? Circle the number under your response.

	Strongly Favor	Favor	No Opinion	Oppose	Strongly Oppose	Score
36. Single family housing	158 (53%)	118 (40%)	12 (4%)	2 (1%)	7 (2%)	1.41
37. Accessory apartments	31 (11%)	78 (28%)	52 (19%)	50 (18%)	69 (25%)	-0.17
38. Apartment complexes	19 (7%)	44 (16%)	27 (10%)	62 (22%)	126 (45%)	-0.83
39. Mobile homes	18 (6%)	77 (26%)	51 (17%)	64 (22%)	82 (28%)	-0.39
40. Mobile home parks	12 (4%)	43(15%)	31 (11%)	74 (25%)	133 (45%)	-0.93
41. Seasonal dwellings	32 (11%)	90 (31%)	97 (33%)	37 (13%)	35 (12%)	0.16
42. Affordable housing	43 (15%)	111 (38%)	53 (18%)	45 (15%)	39 (13%)	0.25
43. Elderly housing	51 (17%)	149 (50%)	59 (20%)	20 (7%)	18 (6%)	0.66
44. Motels, hotels	23 (8%)	87 (30%)	66 (22%)	58 (20%)	60 (20%)	-0.15
45. Small retail stores	52 (17%)	175 (59%)	30 (10%)	17 (6%)	25 (8%)	0.71
46. Large retail stores	28 (9%)	66 (22%)	36 (12%)	77 (26%)	88 (30%)	-0.44
47. Shopping centers	25 (8%)	68 (23%)	37 (12%)	79 (27%)	88 (30%)	-0.46

	Strongly Favor	Favor	No Opinion	Oppose	Strongly Oppose	Score
48. Antiques/Flea Market	23 (8%)	84 (29%)	82 (28%)	58 (20%)	45 (15%)	-0.06
49. Fast food, drive-in & snack bars	20 (7%)	68 (23%)	53 (18%)	81 (28%)	72 (24%)	-0.40
50. Sit down restaurant	55 (18%)	179 (60%)	36 (12%)	10 (3%)	18 (6%)	0.82
51. Light industry	52 (18%)	143 (48%)	45 (15%)	28 (9%)	28 (9%)	0.55
52. Heavy industry	23 (8%)	46 (16%)	49 (17%)	90 (30%)	88 (30%)	-0.59
53. Office/commercial park	45 (15%)	123 (42%)	51 (17%)	38 (13%)	39 (13%)	0.33
54. Industrial park	31 (11%)	83 (28%)	49 (17%)	69 (23%)	62 (21%)	-0.16
55. In-home businesses	65 (22%)	153 (52%)	56 (19%)	17 (6%)	6 (2%)	0.86
56. Professional offices	60 (21%)	151 (52%)	50 (17%)	14 (5%)	17 (6%)	0.76
57. Public recreation area	97 (33%)	125 (42%)	43 (15%)	20 (7%)	11 (4%)	0.94
58. Campgrounds	40 (14%)	109 (37%)	63 (21%)	46 (16%)	37 (13%)	0.23
59. Commercial amusement/recre.	22 (8%)	58 (20%)	61 (21%)	75 (26%)	77 (26%)	-0.43
60. Bed & breakfast/guest houses	55 (21%)	165 (56%)	49 (17%)	15 (5%)	11 (4%)	0.81
61. Village center	61 (21%)	104 (35%)	59 (20%)	34 (11%)	39 (13%)	0.38
62. Commercial agriculture	59 (20%)	107 (37%)	70 (24%)	30 (10%)	27 (9%)	0.48
63. Commercial forestry	49 (17%)	95 (32%)	71 (24%)	47 (16%)	32 (11%)	0.28

64. Do you feel that developers should be required to pay for the costs of improvements to roads, schools, open space and recreation, and water lines necessary for the project even if this raises the cost of housing?

1. strongly agree	149	50%
2. agree	107	35%
3. no opinion	17	6%
4. disagree	17	6%
5. strongly disagree	11	4%

The Land Use Ordinance currently allows the development of a variety of commercial uses, such as service businesses and convenience stores throughout all three “residential” districts. Also, light manufacturing and auto repair garages are permitted in the R-2 and R-3 districts. Do you think that the Ordinance should ...

	Strongly Favor	Favor	No Opinion	Oppose	Strongly Oppose
65. Continue to allow a variety of commercial uses in residential districts	29 (10%)	98 (33%)	34 (12%)	81 (27%)	53 (18%)
66. Continue to allow a variety of commercial uses but limit their size	40 (14%)	120 (41%)	37 (13%)	56 (19%)	39 (13%)
67. Further restrict the variety of commercial uses in residential districts	50 (17%)	99 (34%)	60 (21%)	51 (18%)	31 (11%)
68. Allow only home occupations in residential districts	60 (21%)	88 (30%)	60 (21%)	54 (18%)	30 (10%)

**TOWN SERVICES AND FACILITIES QUESTIONS**

The comprehensive plan will contain recommendations regarding improvements needed in town services and new, expanded or replacement town facilities. Please provide us with your opinion of the following tax-supported town services and facilities.

	(-2) Poor	(-1) Satisfactory	(0) No Opinion	(1) Good	(2) Excellent	AVG
69. Town Roads - Summer Maintenance	7 (2%)	76 (26%)	13 (4%)	141 (47%)	61 (20%)	0.58
70. Town Roads - Winter Maintenance	19 (6%)	61 (20%)	9 (3%)	129 (43%)	80 (27%)	0.64
71. Fire Protection	10 (3%)	67 (23%)	56 (19%)	114 (39%)	47 (16%)	0.41
72. Rescue Services	9 (3%)	66 (22%)	80 (27%)	100 (34%)	39 (13%)	0.32
73. Town Recreational Programs.	47 (16%)	58 (20%)	134 (45%)	41 (14%)	15 (5%)	-0.27

	Poor	Satisfactory	No Opinion	Good	Excellent	AVG
74. School System.	29 (10%)	60 (20%)	100 (34%)	81 (27%)	25 (8%)	0.04
75. Town Office Services.	5 (2%)	60 (20%)	19 (6%)	140 (47%)	75 (25%)	0.74
76. Solid Waste Disposal	57 (19%)	62 (21%)	69 (24%)	87 (30%)	18 (6%)	-0.18
77. Code Enforcement	36 (12%)	62 (21%)	105 (36%)	82 (28%)	9 (3%)	-0.12
78. Police Services	58 (20%)	79 (27%)	78 (26%)	67 (23%)	13 (4%)	-0.35

For which of the following tax-supported town services and facilities should local tax support be increased or decreased?

	Increase	Keep the Same	Decrease	No Opinion
79. Town Roads - Summer Maintenance.	27 (9%)	244 (82%)	11 (4%)	15 (5%)
80. Town Roads - Winter Maintenance.	57 (19%)	224 (75%)	4 (1%)	14 (5%)
81. Law Enforcement.	88 (30%)	142 (48%)	36 (12%)	28 (10%)
82. Town Recreational Programs/Facilities.	95 (32%)	130 (44%)	15 (5%)	57 (19%)
83. School System	97 (33%)	124 (42%)	20 (7%)	53 (18%)
84. Town Office Services/Buildings	36 (12%)	223 (76%)	17 (6%)	19 (6%)
85. Solid Waste Disposal.	63 (21%)	177 (60%)	16 (5%)	38 (13%)
86. Code Enforcement.	40 (14%)	180 (62%)	19 (7%)	53 (18%)
87. Fire Protection.	84 (29%)	178 (61%)	5 (2%)	26 (9%)
88. Rescue Services	87 (30%)	170 (58%)	3 (1%)	32 (11%)

Would you be willing to see tax money spent on any of the following?

	Very Willing	No Opinion	Not at All
89. Educating the public about the causes of water pollution	51 (17%)	74 (25%)	62 (21%)
90. Disposing of household hazardous waste	61 (21%)	33 (27%)	65 (22%)
91. Conducting a survey of septic systems	34 (11%)	70 (24%)	88 (30%)
92. Cooperating with other towns that share the Kennebunk River	67 (23%)	83 (28%)	87 (29%)
93. Substituting more environmentally sound products at home	45 (15%)	65 (22%)	93 (31%)
94. Preserving Wildlife Areas	126 (42%)	108 (36%)	35 (12%)
95. Preserving Undeveloped Areas	119 (40%)	91 (31%)	45 (15%)
96. Developing Recreational Facilities	74 (25%)	89 (30%)	68 (23%)
97. Developing an office/business park	31 (11%)	63 (21%)	60 (20%)
98. Developing an industrial park	27 (9%)	51 (17%)	61 (20%)
99. Developing a village center	58 (20%)	73 (25%)	54 (18%)
100. Protecting Wetlands	110 (36%)	82 (27%)	56 (19%)

101. Fire and rescue services are now manned mostly by volunteers and have shown a decline in volunteer time and effort. Which of the following options would you favor for maintaining desired levels of service? (Circle one number)

- 1. Paid professionals 47 (16%)
- 2. Pay-per-call volunteers 200 (68%)
- 3. Continue to rely exclusively on volunteers 44 (15%)

102. Trash disposal is currently handled either by homeowners hiring private contractors for curbside pickup or individually going to the transfer station. Would you support the town conducting a study of the feasibility of instituting town-wide curbside pick up?

Strongly Favor	Favor	No Opinion	Oppose	Strongly Oppose
99 (32%)	80 (26%)	29 (9%)	47 (15%)	51 (17%)

103. For the past ten years, the town has run a recycling program at the transfer station. The Maine State Planning Office has reported Arundel's recycling rate at 46% in 1999. Obviously, the more items that we can recycle, the more tax dollars are saved. Would you favor a town-wide mandatory recycling program?

Strongly Favor	Favor	No Opinion	Oppose	Strongly Oppose
100 (33%)	89 (29%)	41 (13%)	39 (13%)	35 (12%)

If the town were to develop an outdoor recreation facility, which of the following types of uses should be included? Circle up to 3.

104. Baseball/softball field	138	107. Playground	159	110. Walking & Ski Trails	157
105. Basketball court	74	108. Picnic area	104	111. Ice Skating	83
106. Football/soccer field	57	109. Skateboard park	39	112. Tennis courts	71

Please give us your opinion of the following characteristics of living in Arundel.

	Most Desirable		No Opinion		Least Desirable	Score
113. Proximity to work place .....	99	105	67	9	3	1.02
114. Town's rural character .....	164	92	33	4	2	1.40
115. School system.....	32	70	127	29	27	0.18
116. High school choice.....	95	77	94	8	12	0.82
117. Housing affordability .....	51	122	78	26	10	0.62
118. Recreational opportunities.....	17	44	128	65	31	-0.17
119. Access to shopping opportunities.....	61	126	70	19	12	0.71
120. Population growth .....	21	55	105	53	51	-0.20
121. Loss of farm, open space and forests .....	16	22	74	65	106	-0.79
122. Sense of community .....	29	96	102	40	17	0.28
123. Proximity to cultural activities .....	33	95	115	23	16	0.38
124. Property taxes.....	40	99	59	54	34	0.20
125. Town government structure.....	29	107	109	23	16	0.39

If you have moved to Arundel in the past 5 years, please rate the importance of these issues in your choosing to move to Arundel

	Most Desirable		No Opinion		Least Desirable	Score
126. Proximity to work place .....	35	37	40	3	3	0.83
127. Town's rural character .....	60	33	25	0	3	1.21
128. School system.....	11	24	65	7	9	0.18
129. High school choice.....	28	23	55	2	6	0.57
130. Housing affordability .....	31	40	36	5	4	0.77
131. Recreational opportunities.....	10	16	63	18	9	0.00
132. Access to shopping opportunities.....	19	43	43	6	5	0.56
133. Population growth .....	10	21	60	11	10	0.09
134. Loss of farm, open space and forests .....	4	9	57	16	27	-0.47
135. Sense of community .....	16	31	54	11	2	0.42
136. Proximity to cultural activities .....	12	38	57	7	0	0.48
137. Property tax level .....	18	39	32	14	8	0.41
138. Town government structure.....	15	23	64	10	3	0.32
139. Family or personal ties in the area.....	31	25	47	6	8	0.56

Please rate the following general environmental issues you believe are important to the town of Arundel.

	Not Important	No Opinion		Very Important	AVG	
140. Preservation of river and pond water quality. ....	10	26	30	61	165	3.45
141. Preservation of drinking water supplies. ....	12	24	19	40	198	3.55
142. Protection of wildlife.....	12	21	43	73	144	3.40
143. Preservation of open space and farm land.....	14	27	39	59	155	3.39

Is access to the Kennebunk River important to you?

	Not Important	No Opinion	Very Important	AVG
144. Pedestrian Access	75 (26%) .... 21 (7%)	58 (20%)	76 (26%) 64 (22%)	3.11
145. Visual Access	75 (26%) .... 20 (7%)	70 (24%)	69 (24%) 59 (20%)	3.06
146. Boat Access	87 (30%) .... 22 (8%)	71 (24%)	63 (22%) 47 (16%)	2.87
147. Fishing Access	70 (24%) .... 26 (9%)	58 (22%)	78 (27%) 62 (21%)	3.12
148. Recreational Access	71 (24%) .... 24 (8%)	58 (16%)	82 (28%) 60 (20%)	3.12

149. Should local funds be used for acquisition and development of public access sites?

- 1. Yes 123 42%
- 2. No 106 36%
- 3. No Opinion 66 22%

150. Are there particular features in Arundel, either natural or cultural, that you think should be protected from development?

- 1. Yes 113 45%
- 2. No 43 17%
- 3. No Opinion 97 38%

If yes, please identify these features.

- 1. nice rural areas, trees, farmland streams
- 2. trees
- 3. all of the old hay fields to not be developed
- 4. The Kennebunk River/ 1 room school house
- 5. parts of the town should be kept in their rural state.
- 6. farmland
- 7. open space, farmland
- 8. I don't want this town to be over run with commerce as I quite enjoy the beautiful scenery, fields, trees, animals etc.
- 9. preservation of rural feel is very important, but I also understand the housing need and need for tax revenue generating businesses/homes
- 10. "field" type of area on Route 111
- 11. protect rural character
- 12. the ponds, forest areas
- 13. keep it natural
- 14. The open fields and rural characteristics of Arundel
- 15. keep the farmland
- 16. preserve open spaces - limit growth
- 17. open areas (i.e. fields, plains)
- 18. The woods and farmlands
- 19. Kep Arundel rural -- preserve open space
- 20. people should not post land to snowmobilers
- 21. Keeping growth to a minimum to protect wildlife habitat
- 22. What open farm land that's left
- 23. open space
- 24. old farms, open spaces preserved for wild life
- 25. Its appearance and impression of country
- 26. open space
- 27. Kennebunk River - recreation lands and woods trails
- 28. undeveloped areas
- 29. open areas and woods field are very important
- 30. so you can go hunting and fishing

31. farm land along Route 111
32. woods
33. open fields and farms -- limit development
34. like to see moose around our property!
35. rural character
36. the rural setting
37. I think you are doing fine
38. Kennebunk River
39. good zoning will control this problem
40. farms/fields/forest
41. woodlands
42. The beautiful rolling hills off the Curtis Road (near Alewife), the fields and forests around the Limerick and Mountain Road intersection, land between Dubois farm and Old Brimstone Road
43. wooded areas and open fields
44. open land
45. farm; woodlands
46. maintain rural character; keep out large retailers; clean up wetlands and Kennebunk River
47. The pipeline area should be used for walking or ATV use for people who have a hard time walking.
48. River and ponds; no development along these sights
49. Farms and open space
50. Rural character of Arundel
51. Preserve some or all of farms & % of woods
52. Open space
53. Farm lands, wetlands, open space for recreation
54. Open space woods – woods—fields
55. Wooded areas, farmland & natural waterways
56. I think that over-population is of extreme importance & should be regulated by limiting building permits yearly.
57. Farms, small development areas
58. Kennebunk River and major brook & wetlands
59. The clear land on Rte 111 should remain undeveloped and natural, while Route 1 should be more commercially developed.
60. Vernal pools, woodlands, farmland, wetlands, ponds, rivers, streams
61. Not one specific element, protect & preserve rural character & flavor of area
62. Kennebunk River, Brimstone Pond, open field along Route 111
63. Keep some farm land for farming
64. Agricultural land
65. Farmlands, wildlife, waterways, cultural
66. Arundel center area
67. Farmland, wetlands
68. Wooded areas
69. Brimstone Pond area (deer), Kennebunk River – sprawl out Route 111 from Tri-Town
70. Open spaces
71. Open fields and woods
72. At least some wooded areas, streams, ponds.
73. We need to find ways to preserve open space and not have strings of houses on every road.
74. Rural environment
75. Land
76. River
77. Country atmosphere, not city oriented
78. Farmland

79. Unaccessed forest stretches
80. Keep the town rural!!!!
81. Over development, keep it small & simple
82. Don't chase out long-term residents or business owners who have been doing certain things, certain ways for years.
83. The Kennebunk River. One-room school houses
84. Not sure
85. All of the old hayfields to not be developed
86. Trees
87. The nice rural areas. Trees, farmland, streams.
88. The open fields and rural characteristics of Arundel!!!
89. Keep it natural
90. The ponds, ??? areas
91. I don't want this town to be over run with commerce as I quite enjoy the beautiful scenery, fields, trees, animals, etc.
92. Open space, farmland
93. Farmland
94. Parts of the town should be kept in their rural state.
95. The natural land/wildlife & country atmosphere
96. The water areas to be left undeveloped and natural
97. Undeveloped open space
98. The river – require tree planting; side walk; some sort of buffer along Route One
99. Open fields and farms – limit develop.
100. Woods
101. Farmland along Rt 111.
102. So you can go hunting and fishing
103. Open areas and woods field are very important
104. Undeveloped areas
105. Kennebunk River – rec. lands and woods trails
106. Open space
107. Its appearance and impression of country
108. Old farms, open spaces preserved for wildlife
109. Open space
110. What open farm land that's left
111. Keep growth to a minimum to protect wildlife habitat
112. People should not post land to snowmobilers
113. Keep Arundel rural – preserve open space
114. The woods and farmlands
115. Open areas (i.e. fields, plains)
116. Preserve open spaces – limit growth
117. Keep the farm land
118. Undeveloped land for use as hiking, walking dogs, horseback riding enjoyment of natural beauty & as water resource. In particular, the land between the gas line and Route 1.
119. Arundel Swamp between River Road & Sinnott Road
120. Any land which is saved from development can be an asset to the community in the future.
121. Open hay fields.
122. Woodlands, Kennebunk River
123. I like the country feeling of Arundel
124. All historical dwellings, environmentally sensitive areas and sensitive wildlife habitats
125. Preserve open space, woodlands, farmland from development
126. The rural character and farms. Don't over develop as surrounding towns have.
127. Wooded are for wildlife

128. Kennebunk River esp. north of Rt 1
129. The open space and lack of too many people
130. Farmland
131. Forests
132. Open farm land – lack of “city-ness”
133. Kennebunk River, Brimstone Pond
134. Natural undeveloped areas -- we need more forests, less “housing sites’ – too many trees cut to build developments.
135. Kennebunk River
136. Keeping the area rural
137. Open farmland
138. Open fields and woodlands with no houses
139. We can not allow development to get out of control. Future generations should know what fields and woods are.

If you have any additional comments or questions, please write them in the space below.

### School

1. I would like to see a foreign language class for 7<sup>th</sup> or 8<sup>th</sup> graders at Mildred L. Day School instead of a library class. I would like to see a full time band class offered for 6<sup>th</sup> grade through 8 and maybe a ½ year of tech ed and home ec. offered for the 7<sup>th</sup> and 8<sup>th</sup> grades.
2. Long term planning RE: school enrollment with increased population – I’d like to see a new middle school 6-8<sup>th</sup> grade. These kids are totally unstimulated at ML Day by 6<sup>th</sup> grade and need a new environment in which to learn. Also a new principal with some vitality would help.
3. I have been very involved in the ML Day School. We are doing a fabulous job in K-5. We are doing a lousy job with 6-8. We should not have pre-teens or head-strong parents picking high schools. These children should be merged into one town’s system for 6-12<sup>th</sup> grade.
4. The school system needs to have more one-on-one specialized “tutors” available. Also, more money at the school level should go to testing and screening children’s needs and disabilities.
5. Sports at the middle school should be paid by our tax dollars
6. Keep the school the way it is, K-8.
7. More communication between the town and school. School is our most important issue for this town. Our children are future and we should make them our top priority.
8. Build our own school to stop paying outrageous prices to send our children to school in different places! Build a skate rink/pool for our community and build recreational facilities for our children.
9. We need more teachers at Mildred L. Day. Too many children for one teacher.
10. What is the feasibility of having an Arundel High School?
11. We must soon join a school union or district. We can’t afford to build additional schools. Whether it is a middle school or high school, we simply can’t afford this.
12. Our 2 biggest concerns are 2) M. L. Day – predominantly a superb, devoted staff but desperately UNDERFUNDED: space is an immediate, huge problem & will only get worse with the rapid rate of growth. Currently, the number of students per classroom in some grades is horrendous – no foreign language offered—no programs for “gifted & talented” students in literature, math, science, the arts since the majority of funding is mandated to be spent on special needs and remedial help. These children are the future of Arundel.
13. Any plans for changes in the school system? A separate middle school for grades 6-8, or allowing students to attend in same school system for middle school and high school, would be desirable.
14. I feel the school system should be a top priority for this town. It is our children in which the “future” depends on! Let’s give them the best education we can.

15. We don't want a high school, we like the opportunity to choose. We feel expanding the K-8 grade facility is more important with lots more opportunities of curriculum for the students.
16. More money should be allocated to Mildred L Day for sports at the middle school level

Growth, in general

17. I think there are too many houses being built in Arundel.
18. Sick of all the "developments" – would like to have areas saved for wildlife & keep the area rural.
19. A town ordinance to prohibit the storage of unregistered vehicles and trash from yards (example – Campground Road). Let's keep our country roads attractive.
20. I grew up in K'port. I wanted to stay in the area. K'port was and is being run by out of staters and are ruining it for the locals. I bought my home in Arundel. I love it here. I like the ladies at the town office. A nice sense of community. However, I am worried about the growth. I now have a new home right out my back window. I am not happy about that. But as a person who believes in property owners rights, I can live with it. I am very worried about growth. If I wanted to live near shopping centers, I would have lived in Portland or Biddeford. Please do not ruin our nice little town.
21. Would appreciate no more developments, its taking away Arundel's appeal to me Everywhere you turn a development is showing up!!!!
22. We moved to Arundel because we liked the lack of development. It would be a shame to loose it!
23. Preservation of rural feel is very important, but I also understand the housing need and need for tax revenue generating businesses/homes.
24. I realize development is everpresent, but I would hope that the townspeople don't develop every square inch of land just because the "price is right." Too many towns have become small industrialized and over commercialized and I would be saddened if great thought were not used before each change to the overall landscape.
25. The "bedroom" community, to use a phrase from the 70s, should be kept. It allowed Arundel to grow without having to have the pressure of development that we see today. Progress is not growth for size. The very reason this area is desirable to live in is because of the way it was, not what it is going to develop into because of growth. Limit growth as much as possible thru larger lot sizes rather than what is now done.
26. I believe the land use ordinance concerning cluster housing should be reviewed. The intent is reasonable but the end use is not in the best interest of the town.
27. I think it is important to retain the rural feel and look of Arundel. Make sure the area does not become overdeveloped and commercial.
28. Leaving Arundel as a small town with the beauty of the farm lands and country woods look – not trying to make a city out of a small town
29. Set the amount of new building permits per year to control population growth also to protect our open spaces. Protect land for out wildlife.
30. There's a reason why people from "out-of-state" come to live in Arundel. They're tired of the "city." Do not make Arundel a "city."
31. Slow/stop population growth. Bring in businesses for tax money
32. The land I referred to above [see #118] is currently privately owned, but there is a beautiful natural stream running through it sometimes forming cool pools of clear, clean water. You can walk through forests that open up to granite and blueberries ... exactly what Maine is supposed to be all about. You'll also find granite quarry pools filled with water and some old stone walls & basements to very old homesteads. As we hike the trails and look at these places, and enjoy the quiet & beauty of nature, we always say what an incredible shame it would be to lose all of this to development.
33. We feel house lot size on new development should be 5 acres or more to keep Arundel rural with country charm. Don't spoil it.
34. Our 2 biggest concerns are 1) the rapidly increasing rate of new residences (we'd actually like a moratorium on new residences – at least until the community has a vote on how much future growth we want & put a plan in place.)

35. Arundel has always had a 2-acre lot size and land owners over the years have accepted it as is. Large land owners shouldn't have to protect the "rural character" of the town at their expense. Why should they pay tax on the land so everyone else can enjoy the view. Think about it. Limiting development is necessary to limit an overcrowded school. Two-acre lots entice a nice affordable home (mostly single family) that don't attract a lot of children such as trailer parks and low income projects that do. Maintaining single family 2 acre lots will generate tax revenue without overcrowding schools automatically. These lot sizes provide wildlife space, room for scrubs and trees, small fish and duck ponds, gardens & lawns. All add to rural character, wildlife space, and good tax revenue and add a few new children at a time that the school can absorb slowly.
36. Drinking water should be #1.

#### Public Safety

37. Speed limits more strictly enforced. Wider roads to allow walking/bicycling.
38. I strongly favor the addition of a bike lane(s) on the Log Cabin road. I strongly favor a reduction of the speed limit and stricter law enforcement against traffic violators on the Log Cabin Road.
39. Maybe we could put a bike path or walking path along side major roads to make walking and biking safer. It would also help kids going to school and maybe make some of the walk in nice weather.
40. 1. Bike paths on our roads! Every time we repave, add a bike lane! Starting with area around Mildred Day School.
41. The town needs a dedicated police presence. You take a risk every time you pass through an intersection. The excessive speed is dangerous. It takes up to an hour for the Sheriff to respond. If they show up at all.
42. Make roads safer for bicyclists or create separate bike paths. Bicycle transportation should be encouraged.

#### Business/Commercial/Industrial

43. Commercial growth is desirable, but I don't want Route 1 to become fast food alley!
44. It is my feeling that Arundel should strive to be a residential community with very limited business access. In-home businesses should be strictly controlled. Single family dwellings should be the golden standard. A classic New England town center should be developed and sophisticated businesses encouraged. (No more auto markets please) Give those to the Kennebunks. P.S. Recycling is a moral obligation, and I still am not convinced that tax money should be spent so Arundel residents can be ticketed by the count law. At least be should be on call 24-7.
45. I think we need more businesses in Arundel. It would help generate more tax money for some of the things in this survey!
46. Arundel has reached a critical juncture in its growth and development. It is no longer a rural area where haphazard business development without an over-arching plan is acceptable. Town govt. needs to support separation/distinction between residential and commercial development. Random business permitting in residential areas needs to be eliminated. With housing costs ever on the rise, Arundel will not be viewed as a more affordable alternative as long as the chance of some rogue business popping up in your backyard exists.
47. Businesses wanting to locate along Route 1 should be given positive approach and not a negative one. The feedback I hear has been very negative by some town officials. Regards.
48. Arundel needs to develop both Route 1 and Route 111 business corridors to help decrease the tax burden on the residential population. If we don't it will happen on it own (Chinese proverb).
49. Arundel should maintain its quiet rural personality. Major development should be limited to Route 1 or possibly Route 111. However strip city should be avoided. Businesses should be accessed from access roads and be clustered.
50. For any commercial development, minimum loss of acreage should be considered, i.e. smallest land parcel needed.
51. Please do not allow anymore flea market type outdoor merchants.

52. Arundel needs a shopping center. Opportunities and access for shopping. Village center
53. Local industry creates tax base and reduces travel for residents in the pursuit of employment. A mans home is his castle not his neighbors'. Don't restrict ingenuity, flexibility or tax base by law.
54. Commercial development of Route #1 and Route 111
55. Keep business in commercial zones. Add ???
56. Route 111 should be open for more commercial business uses.
57. Would like more business on Route 1. Keep residential areas for just homes, not businesses. We like the country look of Arundel.
58. Limit commercial development to Rte 1
59. I strongly feel that we (Arundel) must build a stronger commercial and industrial infrastructure. The town is becoming more populated therefore burden of town services will continue to grow. Residential taxes will not cover these costs in the future. Implementation of utilities services and water is needed to draw this higher tax base industry. I am willing to pay little more now, if it means a more stable tax base in the future. We have to stop thinking with a small town mentality. Arundel is positioned in So. Maine one of the most desirable locations to live or have a business.

#### Village Center

60. Establishment of a village center development area is probably the single most important issue facing the town in this comprehensive planning update.
61. 2. Town center a big plus and should include town offices. Like off Route 1 on Limerick Rd around Solar Market.
62. If I had wanted "town center", industrial parks, condos, shopping centers, the noise, crime, pollution and higher taxes, I would have stayed in Philadelphia! What is so shameful about remaining rural?

#### Town Services

63. I feel that the amount of money each family pays in town taxes, the town should be able to provide better schooling as far as more teachers and more space. I also believe that trash p/u and lighting for neighborhoods should be included as well. We pay a lot of money in taxes with very little to show for it.
64. Fire Dept. should be paid, either by call, or as a stipend. This is a very large time commitment by volunteers. All other depts in Arundel are compensated in some way. For example, sports coaches, cheering coach, selectmen, planning board, etc. The fire Dept. deserves the same treatment.
65. "yes" I feel very strongly we need a street light at the entrance of our street at night is hard to find our entrance. (please help)
66. Town hall open one night a week instead of one night a month. Environmental protections from pollution. Noise abatement between 10 pm and 6 am. No bars. No amusement parks like OOB
67. I think we should protect our open spaces and farmlands. I feel that if volunteers for the rescue and fire service is needed then there should be a drive to recruit new volunteers.
68. 1. Solid waste – As residents of this town it seems as if more and more restrictions are in force as to what can and cannot be left at the transfer station – if I wanted to go to Kennebunk transfer station for certain items I would pay taxes in Kennebunk.
69. Q. 103 needs more information, how would it be enforced? Q 64 – The people building the houses should make the town "whole" through increased cost of lots and taxes. The town will realize an extra income with the additional taxes.
70. 3. How about curbside pick up for recycling only. Or real incentives for less trash.
71. Lets be careful renovating our roads. We tend to put in "superhighway" type roads like those found in large cities ... keep it rural and quaint.
72. One day out of the year there should be a day for trash pick up of large items and the town should be responsible. Other towns in the area have this privilege.
73. Do we need all that work on the roads?
74. The Town needs a place like a group center. A place for all the Girl Scouts/Boy Scouts and any other group like cheerleaders to use. We are often either locked out of the school at our meeting

time or bumped from the place we are assigned. When we can get a teacher to let us use their room, 9 times out of ten when we get there, we are locked out of not only the room but the school. If we fill out the paperwork we need to for the gym and are approved. We can still be booted by anyone with the right name!

75. All roads in Arundel should be maintained by public works Department. As long as we are residence and paying taxes we should all have the same service. What else do we get for our taxes.

#### Accolades

76. Our family loves the way Arundel is already.
77. Thank you for this survey. We enjoy living here, but we would like the Code Enforcement Officer to listen to the residents and not bow to coersive techniques by certain residents.
78. I am a year-round but part-time resident who also lives and works in central Massachusetts. Arundel is in a great location for access to so much that is good about southern Maine. However among southern Maine towns, it is probably the least known.
79. I love living in Arundel. Taxes under control. Small town! I know it will be hard to keep it small and simple, but I would like to see it small and friendly.
80. We love it the way its going. Close to everything, but in the country.
81. Just wish we could afford land in the Arundel area – we really like it in this area.

#### Gripes

82. I think you should put out another questionnaire in which the questions aren't loaded to get the answers you're looking for.
83. Not a single real tax (property) question! Taxes are too high need industry!!
84. I found questions 113-125 vague and difficult to answer. Do I think it desirable that we've lost farm & open spaces? No, I don't like it, but does that make it least desirable? Or more desirable that we not lose them? Thank you for the opportunity to fill this out. I hope you have a good response rate.
85. I upsets me to see after living in various homes in Arundel over the past 60 years that Flatlanders come in and want to change the character of the town by demanding the same services that drove them out of Mass, NH, VT or NY because of high taxes (That's where we are headed).
86. I enjoy the space and quiet that Arundel provides. I also value its convenient location, i.e. close to Portland I-95, Portsmouth. I value quiet, space, nature ... but feel this questionnaire is clearly worded in a way that encourages anti-development. Question ... where do my taxes go? I have no kids, no trash/recycling pick-up.
87. Have lived 69+ years in Arundel and hate the ever-increasing imposition of government in our lives. After all, we are not New York City!!!
88. It is not an unknown fact that 802 Old Post Road has no plumbing. Would like to know where the raw sewage is getting dumped??
89. I received a better reply talking to a tree than any of the committees. You only accept peoples opinions if they agree with you. Most of all you spend so much time trying to do something and get NOTHING done at all!
90. Some questions, (i.e. 89-93) and others were hard to answer because of lack of information regarding the amount of money included or implementation of question was missing.

#### Miscellaneous

91. Really not familiar with many issues – retired and living in mobile home park.
92. Put up noticeable signs on Route 1 & 111 when entering and leaving Arundel – spruce up bridge on Route 1 over river.
93. If you do something to improve your home for safety, we don't understand why you have to pay for a permit to make things better. There are plenty of places that are very unrespectable, but some don't have the money but at least they could keep it neat or in their back yard. We also realize that one's home is there castle and it doesn't concern other people. Everyone takes care of their things in one's own manner. Everyone should keep to his, her or their own affairs as long as you're not infringing on someone else. Help if one can.

94. I do not favor creating new ways to spend/increase taxes.
95. Re-merge with Kennebunkport in terms of status of properties and efficiency in administering them.
96. In regards to stock piling manure from farms through the year near residents homes for possible sales through the summer months. Some stockpile 30-50 piles which I believe and am concerned that has an adverse effect of the quality and safety of water contamination.
97. Restricted building heights? A public rec area would be desirable. Access to Kennebunk River would be desirable. Restrict residential commercial uses.



To: Arundel Comprehensive Plan Update Committee  
 From: Mark Eyerman  
 Subject: Summary of Committee Responses to Feedback from the Review Sessions  
 Date: September 10, 2003

I have taken the questions raised by the feedback from the review sessions and have indicated, based upon my notes, the action, if any, that the committee decided to take at its August 27 meeting to address each question. Where the committee proposed leaving the draft unchanged, I tried to summarize the reason for that decision.

This list can serve as a guide for revising/editing the Update and as a check list to be sure that we cover everything as we make the final edits to the Update. In addition, the committee may want to send this to the people who participated in the three review sessions so they can see what the committee did with their comments and suggestions.

<b>Questions Raised by the Feedback from the Review Sessions</b>	<b>Proposed Actions to Address the Questions</b>
1. Should the policies and FLUP propose allowing one acre lots (or even smaller lots) in the Village Residential, Village Transition, and Village Center areas?	No change – protection of groundwater is already addressed
2. If small lots (one acre or less) are proposed to be allowed, should they be required to be served by public or community water and sewer systems?	Revise to incorporate Dan’s proposed revision requiring study of groundwater impacts for smaller lots
3. Should the Future Land Use Plan map be revised so that areas with small lots (Village Residential, Village Transition, Village Center, etc.) do not abut areas designated as Rural Conservation to provide a better transition and “protect” rural uses?	No change – the committee is sympathetic to the concern but doesn’t see any practical way to address it
4. If the goal of the plan is to keep Arundel rural, should the concept of a Village Center be dropped from the update?	No change - this is a key element of the Update
5. If the concept of the Village Center is retained, should Shoreland Zoning provisions be relaxed in that area to allow the river to become a focal point for the center?	Revise to propose reducing the setbacks in the Community Commercial South and Village Residential areas
6. Do the descriptions of the various non-residential districts need to provide more specificity as to the type of uses that are proposed to be allowed or prohibited in these areas?	No change – the FLUP provides adequate description of the general types of uses in each designation – details will be part of a zoning amendment after the Update is adopted
7. How should the Route 111 Corridor be treated in the plan?	No change – land use designations and overlay are consistent with vision for this area
8. If the Route 111 Corridor Overlay concept is	Revise to incorporate Dan’s proposed language to

retained, what standards are appropriate and are the design standards suggested in the policies needed to protect the scenic character?	clarify the standards
9. Does the issue of the allowed signage for businesses need to be addressed in the update, and, if so, how?	Revise to incorporate Dan's proposed language to review sign standards especially for multi-tenant situations
10. Does the update need to more directly address the issue of public or community sewer service to serve the commercial and village center areas?	Revise to add policies dealing with future sewer and water service areas
11. Does the update need to more directly address the issue of the review and approval process for non-residential development to streamline and simplify it?	No change – policies already call for a review to reduce the number of uses subject to PB review
12. Do the provisions in the policies and FLUP relating to buffers between commercial and residential uses need to be clarified or made more specific?	No change – polices provide general guidance but the details will be addressed in zoning amendment after Update is adopted
13. Is the recommendation for “design standards” for non-residential projects needed, and if so, do the proposals need to be clarified or revised?	Revise to clarify the intent and consider limiting where the design standards are applicable
14. Should the update address activities to make the Route One corridor more attractive and safer such as the provision of street lighting?	No change
15. Should the proposals dealing with “maintaining the rural character” in both the policies and FLUP be revised to emphasize working with land owners and providing incentives to keep land undeveloped and de-emphasize regulatory approaches?	No change – policies already promote working with rural land owners
16. Are there additional incentives or voluntary approaches for working with rural land owners to keep their land undeveloped that should be included in the update?	No change – policies already begin to address this concern
17. Is the proposed regulatory scheme for the rural areas too onerous for rural land owners and should it be revised?	No change – overall objective is to limit development in these rural areas
18. Should the proposal relating to allocating building permits by area be revised to provide a larger share of the permits for rural areas?	No change – Overall objective is to assure that most residential development occurs in Growth Areas
19. Does the update need to be more forceful in establishing the concept of acquiring land that the Town wants to see remain as open space?	No change – Update already recommends Town become more active in this area
20. Do the proposals dealing with acquiring development rights and creating a local fund for this purpose need to be clarified or revised?	Revise to clarify the proposal for a local land acquisition fund

21. Should the update address issues related to the use of ATV's and other off-road vehicles, and, if so, how?	No change – this is outside of the Town's control
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Office of the Town Planner

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February 5, 2004

**TO: Comprehensive Plan Update Committee**

**FROM: Dan Fleishman, Town Planner**

**SUBJ: Next meeting, Thoughts on Comments received so far**

The next meeting of the Comprehensive Plan Update Committee is scheduled for **Wednesday, February 18**. It is school vacation week. **Please let me know if you will not be able to attend**. We will be receiving a presentation from the Maine Department of Transportation and Southern Maine Regional Planning Commission about the recently completed Route 111 Corridor Study. I have enclosed a copy of the report from that effort. I have sent out a notice of the meeting to all of the owners of property along Route 111.

As a result of the comments received at the Committee's December 17 and January 20 meetings, I have attempted to compile some options for the committee to consider. I have organized the issues by three broad categories: the land use map, other provisions of the future land use plan, and public facilities and services. For each issue, I have provided a statement of the comment or concern raised, a brief discussion about the issue, and a various number of possible actions the Committee could consider in response to the comment or concern. For each issue there is always the "no action" choice, which would leave the plan unchanged. Committee members may be able to think of other options as well.

Whereas the February 18 meeting will be dedicated to the issue of Route 111, the Committee should have plenty of time to mull these ideas over. I will schedule review of this memo for the following meeting. Once I get an indication from the Committee as to which option, it would like to pursue, I will draft a change for your consideration. Committee members may want to consider whether you want to meet next on the first Wednesday in March or wait until the usual third Wednesday of the month.

### **Land Use Map**

**1. Increasing minimum lot size requirement from 2 acres to 3 acres.**

Comment/Concern: Increasing lot sizes is not fair to property owners who bought their land with a 2-acre lot size.

Discussion: There are three areas where the Future Land Use Plan, if implemented, would increase the minimum lot size requirement from 2 acres. They are southwest of the Limerick Road around the Turnpike, the area between the railroad and the Kennebunkport town line north of Goff Mill Brook, and a triangle of land between Sinnott Road, Lombard Road, and Goff Mill Brook.

The area between the railroad and the town line is perhaps the least controversial. It has limited access and is part of a nearly 3,000-acre block of undeveloped wildlife habitat. Increasing the minimum lot size would not create any nonconforming lots.

The triangle of land between Sinnott Road and Lombard Road contains 70 lots or portions of lots. These lots total 400 acres of land, though not all of this area would be affected by the increase in lot area. Increasing the lot size would create 10 nonconforming lots. There are already 28 lots that do not meet the existing 2-acre lot size requirement. There is a portion of one lot in tree growth tax program and one parcel in the farm tax program.

The area southwest of Limerick Road contains 21 lots or portions of lots. These lots total about 325 acres of land, though not all of this area would be affected by the increase in lot area. Increasing the lot size

would create 3 nonconforming lots. There are already 4 lots that do not meet the existing 2-acre lot size requirement. On the east side of the turnpike, one parcel, accounting for about half of the area, is registered in tree growth. It appears from the tax maps that there may be several parcels that may have access issues to public streets, severely limiting their ability to be developed. The Committee included this area in the RC area as part of putting all of the land along the Kennebunk River in the Rural Conservation area.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use map to place the Rural Conservation area between the railroad and the Kennebunkport town line in the Rural Residential Area; and/or
- b. Amend the Future Land Use map to place the Rural Conservation area between Sinnott and Lombard Roads in the Rural Residential Area; and/or
- c. Amend the Future Land Use map to place the Rural Conservation area west of the Limerick Road in the Residential Area; or
- d. Amend the Future Land Use map to place the area west of the Limerick Road and the narrow strip of Residential Area between it and the Village Residential in Village Residential; or
- e. Leave the map unchanged as far as these three areas are concerned.

## **2. Increasing the depth of the Business Office Park Area to the natural gas line**

Comment/Concern: Will not result in additional business development because it is not practical to create a road that far into the area.

Discussion: The terrain of the area does present obstacles for development. These obstacles will exist regardless of the type of land use area the committee chooses for this area. Because of the natural gas pipeline, this area is not accessible from Mountain Road and any development within this area would need to come off of Portland Road. As economic demand increases and land that easier to develop becomes more scarce in Arundel and our neighboring towns, in time it will become economically feasible to construct roads into the expanded area. Even today there are two developments before the Planning Board that extend roads in off of Portland Road. One is a campground that will extend a road network (granted not at the same quality as if they were streets, though there will be water, sewer and other utilities) 3,300 feet back from Portland Road. The other is a commercial subdivision with a 900-foot long street.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use map to put this area in the Residential Area; or
- b. Leave the map unchanged as far as this area is concerned.

## **3. Narrowing the depth of the business districts along Portland Road.**

Comment/Concern: Reduction in the depth of the business district will decrease opportunities for commercial development and will decrease property values.

Discussion: There are six areas that the Future Land Use Plan proposed to decrease the depth of the commercial areas. They are:

- West of Limerick Road: reduced from 1,000 to 500 feet from Route One, and 500 feet from Limerick Road
- West of Old Post Road: reduced from 1,000 to 500 feet.
- Between Limerick Road and Sam's Road: reduced from 1,000 to 500 feet.
- Between Sam's Road and a point north of Campground Road: reduced from 1,000 to 750 feet.
- Between Log Cabin Road and a point north of Searles Lane: reduced from 1,000 to 750 feet.
- Proctor Road area: south of Proctor Road, reduced to the railroad and, north of Proctor Road, reduced to 500 feet.

Detailed maps of these changes can be viewed on the Town's website. To view these maps, go to [www.arundelmaine.org](http://www.arundelmaine.org) and click on the link in the side bar about the comprehensive plan update. At the

bottom of that page is a paragraph explaining the maps and links to the four maps that I displayed at the last meeting.

As a result of the discussion at the last meeting, I thought it might be important to find out the feelings of the affected property owners. I have sent out a letter and questionnaire to about 45 property owners asking them about their preferences.

Also discussed at the meeting was the issue that the current Land Use Ordinance contains a provision that allows business use to extend into the residential zones when a lot is split by the zoning line. That provision currently reads, "If the lot is partially in a Highway Commercial District any use may be extended a distance of two hundred (200) feet into the other district, provided a vegetative buffer, at least 50 feet in width, is established and maintained along those portions of the lot lines in the non-commercial use to provide an effective visual screen to the abutting residential uses." The Comprehensive Plan Update is silent as to whether this provision should continue.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use map to put all of these areas in the Community Commercial South or Business Office Park Areas; or
- b. Amend the Future Land Use map to put some but not all of these areas in the Community Commercial South or Business Office Park Areas; or
- c. Leave the map unchanged as far as this area is concerned; and/or
- d. Include a provision in the text of the future land use plan or in the goals and policies regarding the issue of being able to extend business uses over the zoning line when a lot is split by a zone boundary.

#### **4. Reducing Lot sizes to 1 acre**

Comment/Concern: Expanding the area of the Village Residential area will promote too much growth, inexpensive houses, school enrollment; too close to neighbors, environmental issues.

Discussion: There are three areas where the Future Land Use Plan calls for reducing the minimum lot size either from 3 acres to 1 acre or from 2 acres to 1 acre. These areas are:

- Between Route One and the Railroad, in the area of River Road and Old Post Road.
- Northeast of Campground Road.
- The area around New Road, Old Alfred Road and Route 111.

The area between Route One and the railroad contains 95 lots with a total combined area of 280 acres. Of these 95 lots, 32 are less than one acre in area and 15 are between 1 acre and 2 acres in area – half of the existing lots are nonconforming today. Of the 95 lots on the tax map, only 21 are vacant, though larger lots with a home on them have potential for further development. There is an approved, but as of yet unbuilt subdivision in this area as well. Eleven of the 21 vacant lots are in this subdivision.

The area northeast of Campground Road contains about 16 lots for just under 200 acres. One of these lots was just approved for subdivision approval, but the new lots have not yet been entered into the tax map data base. The subdivision will have 8 new lots and about 35 acres of dedicated open space. Not counting the new subdivision there is about 140 acres in 15 lots. Eight of these lots, accounting for nearly 90 acres have access to Campground Road through only a 15-foot wide right of way created in a 1930's era subdivision. Therefore, development potential in this area faces significant restrictions. Leaving this area in the Residential Area could serve as a buffer between the Village Residential Area and the expanded Business Office Park Area.

The area around the New Road, Alfred Road. Old Alfred Road intersection was mentioned in our first visioning sessions as an area to encourage growth. This area contains 73 lots with a total area of about 560 acres. It contains two the town's mobile home parks, which are currently developed at an average density of about 2.5 units per acre on 30 acres. There are two parcels, totaling about 235 acres that are registered in the tree growth tax program, though I know there are development plans for the 135-acre parcel. Twelve of the existing lots are less than 1 acre in area and 11 are between 1 and 2 acres in area.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use map to put all of these areas in the Residential Area; or

- b. Amend the Future Land Use map to put some but not all of these areas in the Residential Area; or
- c. Leave the map unchanged as far as these areas are concerned.

### **Other Future Land Use Plan Issues**

#### **5. Duplexes in Rural Conservation Area.**

Comment/Concern: The Rural Conservation Area does not list duplexes as a permitted use.

Discussion: The “residential” areas that have been designated as growth areas all refer to permitting a variety of residential uses. The Rural Residential Area, a designated rural area refers to allowing single family and duplexes. However the Rural Conservation Area, the most restrictive, only refers to single family dwellings.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use Plan to refer to allowing duplexes in the Rural Conservation area; or
- b. Leave the Future Land Use Plan unchanged as far as this issue is concerned.

If the Committee chooses to amend the FLUP to allow duplexes in the Rural Conservation area, then a few other minor changes should be made in the description of the development standards in that area to keep the wording consistent.

#### **6. The Business Office Park Area should permit all of the commercial uses that are permitted in the Community Commercial South Area.**

Comment/Concern: The proposed Business Office Park Area (and to a certain extent the existing HC-2 district) is not sensible because of lack of water/sewer systems to accommodate the larger uses that are directed there. In addition, commenters felt that the BOP Area should accommodate small or large businesses. It is unfair to prohibit small beauty shops/tanning salons. Retail uses should be permitted, at least within the first couple of hundred feet of Route One. Some felt that the town should assist with or participate in the development of a business or industrial park in order to help make it happen.

Discussion: One of the reasons for the distinction between the Community Commercial South Area and the Business Office Park Area is the intent to maintain the northern end of Portland Road for through traffic with less turning movements. The uses that are proposed in the Business Park Area are likely to generate less traffic than retail uses.

The current description of uses in the BOP Area only excludes residential uses and “most retail uses,” specifically allowing restaurants, sandwich shops, convenience stores and accessory sales as part of another use. The current language leaves substantial room for interpretation when revisions to the land use ordinance is drafted and could allow a number of retail uses.

If you review the results of the survey (see plan appendix) 68% of the respondents with an opinion favored development of office/business parks, but when asked whether the tax money should be spent on their development, 60% of those with opinions were opposed.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the description of the uses in the BOP Area to specifically include all those permitted in the Community Commercial South Area; or
- b. Amend the description of the uses in the BOP Area to be more specific about the uses permitted and those that should not be; or
- c. Leave the Future Land Use Plan unchanged as far as this issue is concerned.

#### **7. Objects to “No commercial growth” on Route 111 and to the corridor protection overlay.**

Comment/Concern: Both Lyman and Biddeford have designated Route 111 for commercial growth. Route 111 has more traffic than Route One and so there should be more commercial activity along the road.

Discussion: Though current zoning district is called Rural Residential, the ordinance permits the following commercial uses along the Route 111: auto repair garage; service business; campground; day care center; garden center; inn; kennel; light manufacturing; motel, hotel; neighborhood convenience store; nursing

home; and personal service business. When implemented, the draft plan is likely to only allow campgrounds and garden centers. The plan does note that there is about 10% more average daily traffic on Route 111 than there is Route One. Route 111 is part of the National Highway System and has been designated a “retrograde arterial highway” according to the Maine Department of Transportation’s Highway Entrance Rules. With this designation, the state places the most restrictive standards on new driveways.

When reviewing the comments that respondents to the survey provided, it appears there more comments about not allowing commercial uses on Route 111 than there were to allow them.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the Future Land Use map to expand the size of the Community Commercial North Area; and/or
- b. Amend the Future Land Use map to create a second Community Commercial North Area; and/or
- c. Amend the Future Land Use map to either place one of the other business areas along the Route 111 Corridor; or
- d. Amend the description of the Rural Conservation and/or Village Residential districts to allow certain commercial uses within a specified distance of Route 111; or
- e. Leave the map and plan unchanged as far as this issue is concerned.

### **8. Restrictions on the number of lots in subdivisions in the Rural Conservation Area**

Comment/Concern: Imposition of a restriction on the number of lots in a subdivision in the Rural Conservation Area is a too severe a penalty on property owners. The plan’s use of the building permit limitation ordinance to direct growth into the growth should be adequate to achieve the Committee’s objective. There are no other communities in Maine that have this type of restriction and Arundel shouldn’t be the first.

Discussion: The limitation on the number of lots was one the Plan’s key components to direct growth away from the designated rural area. It was developed in direct response to the vision statement and the survey responses about keeping the remaining rural portions of the town in a relatively undeveloped condition. In the past 6 years, since adoption of the current Land Use Ordinance, there have been 3 subdivisions in the area designated for Rural Conservation. One was an after the fact approval of 4 lots. The other two had 6 and 9 lots each.

As a result of the discussion at the last meeting and further conversations I have had with committee members and members of the public, I have re-analyzed the building permit data for the years 1995-2002. Chapter 16 of the inventory notes that between the effective date of the new current ordinance and the end of 2002, there were 271 permits issued for dwelling units. Based on the rural/growth designation of the 1992 plan, only 22% of the permits were in the designated growth area while 78% were in the rural areas. Using the rural/growth designation of the draft plan, 57% of the new housing during that period of time would have been in the designated growth area and 43% in the designated rural areas.

Another bit of information that may be of use or interest is that of 271 permits, 112 (41%) were in subdivisions. Between 1995 and 2002, only 6 new homes were built in subdivisions in what the draft plan designates as rural. Since that time there have been only 2 more permits issued for “rural” subdivisions.

Options: In response to the comments and concerns raised the Committee could:

- a. Increase the permissible number of lots in a subdivision in the Rural Conservation Area; or
- b. Delete the whole concept from the plan; or
- c. Leave the plan unchanged as far as this issue is concerned.

### **9. Wants business people to be able to live on site.**

Comment/Concern: The ordinance should allow the owner of a business to live at the location of the business.

Discussion: In the Community Commercial South and Community Commercial North Areas, the draft plan allows residential uses. Therefore this comment would only be applicable in the Business Office Park Area. If residency of a dwelling unit is limited to specific individuals, enforcement becomes difficult.

Options: In response to the comments and concerns raised the Committee could:

- f. Amend the description of the Business Office Park Area to allow the residence of business owner on the site; or
- g. Amend the description of the Business Office Park Area to allow the residence of business owner, manger or other person associated with the business on the site; or
- h. Leave the plan unchanged as far as this issue is concerned.

#### **10. Design Review.**

Comment/Concern: Having design review may add too much cost to the development review process. The plan should be more specific about type and extent of standards envisioned.

Discussion: This concern is applicable on Route One in both commercial areas and the Corridor Protection Overlay area on Route 111. An earlier draft of the plan contained a little more detail about the types of architectural standards envisioned for the commercial areas. That draft said “Amend the Land Use Ordinance to include basic architectural and site design standards along Portland Road and in the village centers that reflect traditional New England styles.” There was discussion at the January meeting about perhaps explaining in the plan what “traditional New England style” means.

Options: In response to the comments and concerns raised the Committee could:

- a. Delete reference to design and architectural standards; or
- b. Amend the plan to refer to design and architectural standards only in Corridor Protection Overlay area; or
- c. Amend the plan to refer to design and architectural standards only in Route One business areas; or
- d. Amend the plan to refer to design and architectural standards only in the Community Commercial South Area; and/or
- e. Provide further explanation as to the types of the controls envisioned; or
- f. Leave the map unchanged as far as this area is concerned.

### **Public Facilities and Services**

#### **11. Street lighting on Route One**

Comment/Concern: There should be more street lighting.

Discussion: The plan does not mention street lighting at all. The town currently has a policy that discourages new street lights.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the plan to call for more street lights on (portions of) Route One; or
- b. Amend the plan to call for a review of the existing policy; or
- c. Leave the plan unchanged as far as this issue is concerned.

#### **12. Hydrants**

Comment/Concern: Plan says nothing about hydrants. Need to work with KKW to provide more water pressure and additional hydrants.

Discussion: The plan already contains a recommendation (Action 20.2) to “increase the number of hydrants on Portland Road so there is no more than 1,000 feet between hydrants.” The plan is silent on the issue of inadequate pressure, though it does contain a recommendation (Action 11.3) to work with the water district to extend water service. Extending water service will require that action be taken on the water pressure issue.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the plan to recommend working with the Water District to improve water pressure; and/or
- b. Include a map or narrative description showing the desired area for public water service with policies in place to encourage public water in the designated area and discouraging or prohibiting it elsewhere.

- c. Leave the plan unchanged as far as this issue is concerned.

**13. 3-phase power**

Comment/Concern: It would be helpful to extend 3-phase power to KL&PD (all of Route One), research (no town expenditure).

Discussion: The plan documents location where 3-phase power is available and contains a policy that the town should work to have it extended along the entire length of Portland Road.

Options: In response to the comments and concerns raised the Committee could:

- a. Amend the plan to indicate that the town should spend tax dollars to have 3-phase power extended; or
- b. Leave the plan unchanged as far as this issue is concerned.



## Committee makes changes to Draft Comprehensive Plan

After the defeat of the draft Comprehensive Plan Update at the November election, the Comprehensive Plan Update Committee has been working with the public to address the reasons for its defeat. The Committee has met throughout the winter and spring to discuss the issues that caused a majority of the townspeople to vote no. As a result of four public meetings and multiple committee meetings with several members of the public actively participating, the committee has made a number of changes to the draft Plan. These changes can be summarized as follows.

### Changes in the Future Land Use Plan

- Residential uses that are incidental to a business and occupied by a business owner or manager will be permitted in the Business Office Park area.
- Provisions regarding retail uses in the Business Office Park area are clarified.
- Provisions regarding design standards in the Business Office Park area are clarified.
- Residential uses in the Rural Conservation area are no longer restricted to only single family dwellings.
- The restriction on the number of lots in subdivisions in the Rural Conservation area has been removed.
- The proposal for maintaining the visual character of the Alfred Road Corridor has been revised.

### Changes in the Future Land Use Plan Map

- The size of the Community Commercial North area on Alfred Road has been expanded. The area now extends westward to the CMP power lines and includes all the land between Alfred Road and the Biddeford city line.
- The Community Commercial South area has been expanded to 1,000 feet both sides of Portland Road.
- The sizes of the Village Residential and Residential areas have been changed to better reflect current development patterns.

### Changes in the Goals Policies and Actions

- Use of Transfer of Development Rights to preserve open space in the rural area, as mentioned in the Future Land Use Plan is more clearly referenced.
- The restriction on the number of lots in subdivisions in the Rural Conservation area has been removed.
- Reference to “traditional New England architectural style” is deleted.
- Action steps have been added to spur business development along Portland Road such as working with the Water District to improve water pressure, working with the Kennebunk Sewer District to provide public sewage, and establishing a Pine Tree Development Zone to provide state tax breaks to qualifying businesses.
- An action to periodically review the Residential Growth Ordinance has been added.
- A policy and associated action steps to preserve wildlife habitat has been added.

The Committee will be holding additional public meetings on September 1 and 15. These meetings will be your opportunity to comment on the changes to the draft Plan as well as any other aspect of the Plan. Meetings will be held in the Community Meeting Room of the Arundel Fire Station,

starting at 7 p.m. Copies of the draft Plan are available at the town's website ([www.arundelmaine.org](http://www.arundelmaine.org)) or at the Town Office.

Office of the Town Planner

**Town of Arundel**

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September 16, 2004

**TO: Comprehensive Plan Update Committee**

**FROM: Dan Fleishman, Town Planner**

**SUBJ: Next meeting, Public hearing, final draft**

The next meeting of the Comprehensive Plan Update Committee is scheduled for **Wednesday, September 22**. The committee needs to decide if it will make any changes to the draft plan as the result of comments received at the public informational meetings on September 1 and September 15.

**After September 22, there will not be the opportunity for changes in the plan** due to the statutory requirements to have absentee ballots available 30 days before the election. Therefore, the final draft must be available for review on October 2.

There is a statutory requirement for the Committee to hold a public hearing before the plan is voted on. Notice for the hearing must be posted 30 days in advance of the hearing. A copy of the plan must be available 30 in advance of the hearing. In addition, because it will be voted on by referendum, the Selectmen must also hold a public hearing. Their hearing must be at least 10 days before the date of the election, giving notice at least 7 days before the public hearing.

The town manager and I figured out that the above paragraph means that the Committee and the Selectmen will be holding a joint public hearing on **October 20**. Mark you calendars and plan to be there. **No changes can be made to the draft plan after that hearing.**

Because the Committee must get its work don on September 22, I strongly recommend that the Committee not allow participation by the public. You just had two informational meetings. Everyone has had the opportunity to say what they had to say. While the meeting must be open to the public to attend, there is not legal requirement for you allow public participation.

As I did in the winter, I have once again compiled the comments that were made at the two informational meetings and attempted to present some options for the committee to consider. Most of the discussion at the meetings focused on the future land use plan and the land use map. For each issue, I have provided a statement of the comment or concern raised, a brief discussion about the issue, and a various number of possible actions the Committee could consider in response to the comment or concern. For each issue there is always the "no action" choice, which would leave the plan unchanged. Committee members may be able to think of other options as well. There may be some comments that I failed to catch. Be prepared to bring these tot he committee's attention if you think I missed something of relevance.

### Land Use Map

#### **1. Increasing the depth of the Business Office Park Area to the natural gas line**

**Comment/Concern:** Doing so will "land lock" parcels that do not have access to Route One. An attendee at the meeting is in the process of buying a large piece of land in this area that does not have access to Route One, but does have a right of way over the gas line to Mountain Road. Having Commercial traffic enter on Mountain Road is not desirable, but there is no other access.

**Discussion:** Changes in the zoning will not affect whether a particular property owner does or does not have access to Route One. It will affect the permissible uses for their land. The plan already contains a statement about requiring interconnection of lots to minimize entrances on Route One.

**Options:** In response to the comments and concerns raised, the Committee could:

- a. Amend the Future Land Use map to put (some of) this area in the Residential Area; or

- b. Leave the map unchanged as far as this area is concerned.

## **2. Reducing Lot sizes to 1 acre**

Comment/Concern: A resident of the New Road neighborhood expressed concern that he had moved to Arundel because it was rural and reduction of lot sizes in that area would further destroy rural nature of that neighborhood.

Discussion: In the New Road/Clearview Village Residential area, there are currently 209 lots. Of these:

- 51 lots are less than 1.00 acre
- 60 lots are between 1.00 and 1.99 acres
- 47 lots are between 2 and 3 acres
- 16 lots are between 3 and 5 acres
- 10 lots are between 5 and 10 acres
- 25 lots are larger than 10 acres in area.

90 of the lots are already in a subdivision and, regardless of size could not be further divided

Options: In response to the comments and concerns raised, the Committee could:

- a. Amend the Future Land Use map to put all of these areas in the Residential Area; or
- b. Amend the Future Land Use map to put some but not all of these areas in the Residential Area; or
- c. Leave the map unchanged as far as these areas are concerned.

## **3. Size of Community Commercial North Area on Route 111.**

Comment/Concern: Most of the comments at the first meeting were that the Community Commercial North Area should not be extended beyond the boundaries of the current RT-1 district. At the second meeting there was comment that it should cover the entire length of Route 111.

Discussion: The second meeting was just a rehash of the four of five meetings that the Committee had in the spring and early summer. In my opinion, there was nothing new said. The comments from the first meeting were the first time, I believe that the Committee had heard that the business area on Route 111 should not be expanded at all.

Options: In response to the comments and concerns raised, the Committee could:

- a. Amend the Future Land Use Plan to shrink the Community Commercial North area;
- b. Amend the Future Land Use Plan to expand the Community Commercial North area; or
- c. Leave the Future Land Use Plan unchanged as far as this issue is concerned.

## **Other Future Land Use Plan Issues**

### **4. Chain Restaurants**

Comment/Concern: One participant suggested the town should consider limiting chain restaurants in all of the business areas.

Discussion: Currently, restaurants would be permitted in all three business areas. The draft plan is silent on the issue of chain versus independent, fast food versus slow food, or other distinctions. There are municipalities that do limit or prohibit "formula businesses" or chain restaurants. Many of the concerns associated with chain restaurants can also be addressed in the architectural, site design, and sign standards.

Options: In response to the comment and concern raised, the Committee could:

- a. Amend the description of the one or more of the three business areas to address chain restaurants; or
- b. Leave the Future Land Use Plan unchanged as far as this issue is concerned.

### **5. Transfer of Development Rights.**

Comment/Concern: Though most of the comments regarding TDR were positive, there were two concerns expressed. The first was that land along Route 111 should not be allowed to be a sending area because it

would restrict development in what could in the future be a valuable growth area. The other was a general concern about increased densities in the “receiving” areas.

Options: In response to the comments and concerns raised, the Committee could:

- a. Amend the description of the uses of TDR to specifically exclude Route 111 as a sending area;
- b. Amend the description of the uses of TDR to be more specific about minimizing or mitigating the impacts of increased density in the receiving area; or
- c. Leave the Future Land Use Plan unchanged as far as this issue is concerned.

## **Public Facilities and Services**

### **6. New Road/Route 111 Intersection**

Comment/Concern: The plan should specifically mention the need for improvements to this intersection.

Discussion: The plan does not mention any specific intersection improvements at all. The town has been participating in a regional Route 111 Corridor study. (If you are interested in learning more, you can access the study at <http://www.smrpc.org/transportation/111corridorcommittee.htm>) There may be some minor intersection improvements made in the next few years, particularly if the new shopping mall in Biddeford goes forward.

Options: In response to the comments and concerns raised, the Committee could:

- a. Amend the plan to call for mention the need for improvements at this intersection; or
- b. Leave the plan unchanged as far as this issue is concerned.



**Arundel Comprehensive Plan Update Committee**

*January 2005*

**2004**

**COMPREHENSIVE PLAN UPDATE  
OPINION SURVEY**

**RESULTS – 2004 Comprehensive Plan Update Opinion Survey**

Completed surveys were initially divided according to region. The number of responses from each street name are listed below:

**WEST OF TURNPIKE:**

- 23 – Alfred Road
- 3 – Bittersweet Drive
- 1 – Briar Lane
- 16 – Clearview Drive
- 4 – Curtis Road
- 1 – Downing Road
- 1 – Foxcroft Lane
- 2 – Hill Road
- 6 – Irving Road
- 4 – Liberty Acres
- 28 – Limerick Road\*
- 1 – Lochlannach Lane
- 1 – Maplewood Drive
- 2 – MG Lane
- 7 – New Road
- 7 – Old Alfred Road\*
- 2 – Tamrox Drive
- 21 – Thompson Road
- 2 – Timber Ridge Drive
- 7 – Trout Brook Road
- 3 – Kimball Lane
- 2 – *Alpine Lane*

**TOTAL: 144**

\*road crosses the turnpike

**EAST OF TURNPIKE:**

- 1 – Arundel Road
- 2 – Arundel Woods Drive
- 3 – Bass Lane
- 1 – Country Lane
- 3 – Deer Run Circle
- 4 – Durrell’s Woods Road
- 1 – Indian Acres Drive
- 1 – Jubilee Lane
- 3 – Lady Slipper Lane
- 19 – Log Cabin Road
- 6 – Lombard Road
- 4 – MacChipKay Road
- 14 – Mountain Road
- 3 – Old Boston Road
- 38 – Old Post Road
- 1 – Pine Street
- 5 – Portland Road
- 4 – Proctor Road
- 1 – Rose Terrace Circle
- 16 – River Road
- 4 – Riverwynde Drive
- 1 – Roaring Brook Drive
- 2 – Sam’s Road
- 2 – Sandy Lane
- 2 – Shady Lane
- 11 – Sinnott Road
- 3 – South Evergreen Lane
- 2 – Talbot Drive
- 1 – Tucker’s Way
- 1 – Up Country Lane
- 2 – Walker’s Lane
- 3 – Welch Lane
- 1 – West Lane
- 1 – Windward Lane
- 1 – Debbie Lane
- 1 – *Park Lane*
- 2 – *Pine Wood Circle*

**TOTAL: 170**

**NO STREET NAME GIVEN:**

**TOTAL: 30**

**Q 1: Did you read/review the Comprehensive Plan document before voting?**

Results:	West of turnpike	yes: 113 [81.9%]	no: 25 [18.1%]
	East of turnpike	yes: 121 [73.8%]	no: 43 [26.2%]
	No street given	yes: 23 [88.5%]	no: 3 [11.5%]
<b>Composite:</b>		<b>YES: 257 [78.4%]</b>	<b>NO: 71 [21.6%]</b>
<b>TOTAL: 328</b>			

**Analysis:** Slightly fewer than 4 out of 5 voters responding to this question read/reviewed the Comprehensive Plan document.

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**Q 2: Did you attend any of the meetings or public hearings?**

Results:	West of turnpike	yes: 30 [21.6%]	no: 109 [78.4%]
	East of turnpike	yes: 25 [15.2%]	no: 140 [84.8%]
	No street given	yes: 7 [25.9%]	no: 20 [74.1%]
<b>Composite:</b>		<b>YES: 62 [18.7%]</b>	<b>NO: 269 [81.3%]</b>
<b>TOTAL: 331</b>			

**Analysis:** Slightly fewer than 1 out of 5 voters responding to this question attended any of the meetings or public hearings.

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**Q 8: If you voted against the Comprehensive Plan, did you do so primarily because you didn't have enough information to feel comfortable voting "yes"?**

Results:	West of turnpike	yes: 24 [26.1%]	no: 68 [73.9%]
	East of turnpike	yes: 28 [33.3%]	no: 56 [66.7%]
	No street given	yes: 2 [9.5%]	no: 19 [90.5%]
<b>Composite:</b>		<b>YES: 54 [27.4%]</b>	<b>NO: 143 [72.6%]</b>
<b>TOTAL: 197</b>			

**Analysis:** Slightly more than 1 out of 3 voters responding to this question voted against the Comp Plan because they felt they did not have enough information. [This total of 197 represents 57.3% of the total number of people responding to the survey.]

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**Q 9: If you voted against the Comprehensive Plan, did you do so primarily because you were opposed to the Village Center?**

Results:	West of turnpike	yes: 47 [52.2%]	no: 43 [47.8%]
	East of turnpike	yes: 53 [63.9%]	no: 30 [36.1%]
	No street given	yes: 14 [60.9%]	no: 9 [39.1%]
<b>Composite:</b>		<b>YES: 114 [58.2%]</b>	<b>NO: 82 [41.8%]</b>
<b>TOTAL: 196</b>			

**Analysis:** Slightly less than 3 out of 5 voters responding to this question voted against the Comp Plan because they were opposed to the Village Center. [This total of 196 represents 57.0 % of the total number of people responding to the survey.]

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**Q 3: Do you think the town should:**

- ...continue to allow commercial businesses in the residential districts
- ...allow only businesses that qualify as home occupations in the residential districts

Results:	West of turnpike	commercial: 47 [33.8%]	home: 92 [66.2%]
	East of turnpike	commercial: 51 [32.1%]	home: 108 [67.9%]
	No street given	commercial: 11 [44.0%]	home: 14 [56.0%]
<b>Composite:</b>		<b>commercial: 109 [33.7%]</b>	<b>home: 214 [66.3%]</b>
<b>TOTAL: 323</b>			

**Analysis:** Approximately 2 out of 3 voters responding to this question prefer allowing only businesses that qualify as home occupations in the residential districts.

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**Q 4: Do you think the town should:**

**...keep the commercial business area on Route 111 as currently zoned**  
**...expand the commercial business area west to the CMP power line**

Results:	West of turnpike	keep: 54 [38.6%]	expand: 86 [61.4%]
	East of turnpike	keep: 51 [31.3%]	expand: 112 [68.7%]
	No street given	keep: 10 [37.0%]	expand: 17 [63.0%]
<b>Composite:</b>		<b>keep: 115 [34.8%]</b>	<b>expand: 215 [65.2%]</b>
		<b>TOTAL: 330</b>	

**Analysis: Approximately 2 out of 3 voters responding to this question prefer expanding the Commercial business area on Route 111 west to the CMP power line.**

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**Q 5: Do you think the town should:**

**...require architectural and landscaping standards along Route 111**  
**...not require architectural and landscaping standards along Route 111**

Results:	West of turnpike	require: 96 [67.6%]	not require: 46 [32.4%]
	East of turnpike	require: 126 [75.9%]	not require: 40 [24.1%]
	No street given	require: 13 [48.1%]	not require: 14 [51.9%]
<b>Composite:</b>		<b>require: 235 [70.1%]</b>	<b>not require: 100 [29.9%]</b>
<b>TOTAL: 335</b>			

**Analysis: Seven out of ten voters responding to this question prefer requiring architectural and landscaping standards along Route 111.**

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**Q 6: Do you think the town should: [Re: New Road/Clearview Estates area]**

**...leave the current zoning map unchanged regarding residential zones**  
**...change the zoning map to reflect existing lot sizes**

Results:	West of turnpike	leave: 59 [42.8%]	change: 79 [57.2%]
	East of turnpike	leave: 63 [40.6%]	change: 92 [59.4%]
	No street given	leave: 12 [48.0%]	change: 13 [52.0%]
<b>Composite:</b>		<b>leave: 134 [42.1%]</b>	<b>change: 184 [57.9%]</b>
<b>TOTAL: 318</b>			

**Analysis: Slightly less than 3 out of 5 voters responding to this question prefer changing the zoning map for the New Road/Clearview Estates area to reflect existing lot sizes.**

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**Miscellaneous:**

- **344 [12.4%]** surveys were returned of the 2,790 mailed to registered voters
- based on responses to Questions 8 and 9, which specifically targeted reasons why an individual voted against the Comprehensive Plan, approximately 57.15% of the surveys were returned by voters who did vote against it in November
- **154 [44.8%]** of the surveys included comments, most of which were “informative”, that is, they had information specific to the Comprehensive Plan, the Village Center, or other town issues

**Comments:** The spaces left for comments were used in a variety of ways by many people. In addition, some people jotted comments next to some of the questions. As a result, it was not possible to categorize the comments by simply grouping them. Below is a tabulation of the number/per cent of voters who wrote informative comments as well as an indication of those comments that specifically made mention of the Village Center/town buildings.

All informative comments:

West of turnpike:	65 [45.1%]
East of turnpike:	64 [37.6%]
No street given	10 [33.3%]
<b>Composite:</b>	<b>139 comments [40.4% of total surveys]</b>

Comments regarding the Village Center:

West of turnpike:	19 opposed [29.2%]	1 in favor [1.5%]
East of turnpike:	17 opposed [26.6%]	3 in favor [4.7%]
No street given	3 opposed [30.0%]	0 in favor [0.0%]
Composite:	<b>39 opposed [28.1%]*</b>	<b>4 in favor [2.9%]*</b>

**\*These are percentages of the total number of voters who wrote comments. [139]**

**COMMENTS** [The number on the left indicates the question # on the survey referenced by the comment. The alternating underlining under the numbers indicates comments from a different individual.] Comments regarding the Village Center are in **bold**.

**WEST OF TURNPIKE:**

6 – but all are larger than 1 acre!

10 – The lack of clarity with regard to lot size along the New Road and in Clearview, and the changes to the zoning on 111 near the New Road.

11 – I do not understand question #6. There are no more available lots in Clearview Estates. It seems any change may be an effort to create new, smaller lots in the subdivision??

10 – like just the way the town is now [*checked “yes” on Q 9*]

11 – I like a small town—why do we need to make it big?

10 – Don’t feel we need it, [*checked “yes” on Q 9*] moved here because Arundel is more rural and why must we cater to change that isn’t necessary.

11 – Add on the current town office where space is needed. If I wanted to live in a big town I’d move to one. I want Arundel to stay “more rural”, that’s what Arundel means in Indian language—just kidding.

**10 – Concern about taxes increasing because of Village Center.**

11 – Arundel needs more businesses to ease our property tax burden. Route 111 is clearly the best area to develop business, there’s a lot more traffic which translates into a lot more customers. **The idea of a quaint 1940’s era “downtown” area with little traffic will fail.** Who’s going to shop on there? [*checked “yes” on Q 9*]

**10 – We don’t want a Village Center.**

11 – **Village Centers exist in Kennebunk and Biddeford. That’s close enough for us.** The business the Centers attract are not welcomed in Arundel. [*checked “yes” on Q 9*]

11 – **Do not want a Village Center!** Want Arundel to remain as it is! [*checked “yes” on Q 9*]

4 – Also leave 1000 feet at New Road.

11 – Extend density (1 ac) zone to include area on Limerick Road and Mountain Road around town hall.

10 – The plan needs to be better planned out and explained better than it has been. [*checked “yes” on Q 1 & 2*]

11 – Do not try to push this plan on the taxpayers so fast. They need to understand it completely before they will pass it.

4 – Extend it ALL the way.

5 – Still allow growth [*checked “require standards...”*]

6 – Limit growth on the New Road. Across to 111 is horrible without more traffic. [*checked “leave zoning map unchanged...”*]

10 – Expand 111 growth, limit New Road, Old Alfred Road growth. DON’T try to “push” the plan. WHEN it is ready, it will pass in an honest vote.

11 – People HAVE spoken, so LISTEN. I hear a very one sided view from the committee on 111 issues. 1000+ people shot it down, maybe this time the committee will act on their suggestions. No housing developments on the Old Alfred Road, maintain lot sizes of larger, not smaller. Let’s not sell our town out for a few \$\$.

11 – Do not want 111 or any other main roads in Arundel to turn into strip malls. We did not receive the Comprehensive Plan document.

- 10 – I would like to keep Arundel as rural as possible. That is why I moved here in the first place.
- 10 – I'm sick of out of staters try to change the state. If they don't like it Leave!
- 11 – If you haven't been a resident for 40 years you don't have the right to vote etc. I would like to know why tourists move here, then they want to change everything. Leave Maine the way it is!
- 10 – I voted against it because I don't think it's ready yet. The Rt. 111 should be developed as a high tax paying business zone, not as a rural green zone. We are running the risk of not having enough taxes coming in from businesses.
- 11 – Keep up the good work guys! It will pass next year! You could promote it as “Arundel must have a plan” without it, you could have a tire recycling plant next to the Clearview Estates—(Something to make people realize that having a plan is better than not having one.)
- 11 – Keep Community Commercial North zone off Route 111 because it is too busy and dangerous a road to allow lots of turning into businesses. Focus on more business development on Route 1—more tourists, and plus, if Village Center ever created, it would correspond with that.
- 10 – Cost, we are not Boston, Mass. [*checked “yes” on Q 9*]
- 11 – If people want to check out Arundel they'll drive through just like Goodwins Mills or Dayton. Doesn't matter to me where they go. Keep our town quaint and friendly. \$COST\$COST\$COST
- 10 – Think of the cost. [*checked “yes” on Q 9*]
- 11 – Think of the cost.
- 11 – I didn't see a copy (copies) of the C. plan at the voting area and wonder if this was provided. (I think it would have helped those who didn't get a chance to review it.)
- 11 – If the ballot indicated **only a new town hall was being considered & not the Town Center, I would have voted yes**, a new town hall is needed. [*checked “yes” on Q 9*]
- 11 – **The present town buildings are sufficient**, we have a nice little town, let's keep it that way! [*checked “yes” on Q 9*]
- 10 – Voted for it due to helping the farmers.
- 11 – I think if some one wants to expand like farms and small business without the hassle of lot restrictions (so many feet to property line) for buildings but keep the small town feel I will vote for it again!
- 10 – Please leave things the way they are. [*checked “yes” on Q 9*]
- 11 – Stop trying to be like Kennebunk, if you not happy in Arundel, take your plans and move to Kennebunk. [*checked “yes” on Q 9*]
- 11 – The 2 ballots were voted down, why pressure these 2 issues any longer. Move on. We are not Kennebunk and we do not want to be like Kennebunk. We have other issues in Arundel, get with the program.
- 10 – Rt. 111 should all be commercial.
- 11 – **The town does not need to get involved with a town center.** Let private development build a center. [*checked “yes” on Q 9*]
- 10 – By continually reducing the minimum lot size for residential zoning as well as variations for subdivisions we will lose the aesthetics that make Arundel a desirable place to live.
- 10 – **We don't need a town center** with Biddeford/Kennebunk and Kennebunkport so close. It's a waste of money. [*checked “yes” on Q 9*]
- 10 – We don't need you telling us what to do. [*checked “yes” on Q 9*]
- 11 – Hands off.
- 11 – **Skip the Village Plan.** Plan a new Town Hall for all needs.
- 11 – We need a new town office—complex. **We do not need a village center.**

- 11 – There are enough banks, stores, and small businesses in the area. Arundel needs manufacturing & big businesses on Route 1 to help with the taxes. A **“village center” is a ridiculous waste of money to enhance someone’s private property at the expense of the residents.** [checked “yes” on Q 9]
- 10 – The zoning would effect us in a very negative and personal way. Our family has been here for over 100 years.
- 11 – Our family farm in Arundel appealed to us because of its rural character. With the proposed new zoning plan we would be in a densely populated village zone with one acre lots, while at the same time 3 acre lots with 3 acres set aside in rural conservation is extremely excessive. We did not vote against the comprehensive plan as reported in the newspaper because of misinformation. We voted against it because it is too restrictive in rural conservation. The committee doesn’t seem to be listening and the big question is “is it fair to all concerned”? [*Limerick Road*]
- 10 – The regulations in the Rural Conservation Zone are far too excessive. Three acre lots and setting aside another three acres of developable land for each lot is unacceptable to landowners.
- 11 – Extreme conservation minded members of the committee are imposing their values on the community. That is why the land use plan has been defeated twice. Not because wrong information was passes out in Town as reported in the media. The committee is not listening to the people.
- 11 – ? buffer between existing residential & new commercial lots if allowed on Rt. 111
- 11 – The Village Center was voted down, so abide by the will of the people. Build a new town office space on town property. City water was brought to Route 1 for commercial use. Take advantage of this. [checked “no” on Q 9]
- 10 – Too many businesses along Route 111 now—traffic is terrible. Takes 15 to 20 minutes to get out of driveway some days. [checked “keep...as currently zoned” on Q 4]
- 11 – Traffic light at Hill Rd/Route 111, Old Limerick Rd/Rte 111. Patrol route more often—people pass cars on right turn blinkers before actual right turn is made—dangerous!
- 11 – I think we should think of getting land available for housing for low income for our young & senior citizen. Rents are outrageous. Keep Arundel growing.
- 10 – **Should build a school before any Village Center.** A school is more important. [checked “yes” on Q 9]
- 11 – **This Town is too spread out to have a Village Center.** Build a new town (only) hall either on Route 111 or Route 1. People voted on this—abide by the will of the majority! [checked “yes” on Q 9]
- 11 – Overload of traffic on Rt. 111. Have a hard time turning onto Rt. 111. [checked “keep...as currently zoned” on Q 4]
- 11 – I do not support expanding the business zone any further west along Rt 111 than it currently is! [checked “keep...as currently zoned” on Q 4]
- 11 – If the commercial zone is extended beyond the currently proposed limits on 111, I will vote against the plan. [checked “keep...as currently zoned” on Q 4]
- 10 – I feel that the zoning on Rt 111 should be changed to commercial zoning west to Lyman line.
- 11 – to include all of Rt 111 to commercial
- 10 – Rezone all of Rte 111 commercial
- 10 – Rezone all of Rte 111 commercial
- 11 – I voted for the Plan last November, but if Rt. 111 is zoned commercial beyond the current limit, I will vote against the plan next time. Businesses generate property taxes, but they also demand services as well as generating traffic (which also demands services: road maintenance & emergency response). Open land costs the town nothing, because it requires no services, and still generates property taxes.
- Keep Rt. 111 rural! [checked “keep...as currently zoned” on Q 4]
- 11 – Question 6 should have been reworded or have more explanation about the current lot sizes and the changes.
- 6 – Confusing in the extreme. I am in favor of lot sizes greater than or equal to 2 acres.
- 10 – I think the Comprehensive Plan didn’t do their homework.
- 11 – **Village Center should be on Route 111 corner of Limerick Road & Route 111** [checked “yes” on Q 9]

- 10 – I don't want my excessive tax money used to enhance someone else's property value.
- 11 – Limit town spending to cost of living COLA per federal pay increase.
- 10 – **Don't want a Village Center.** [*checked "yes" on Q 9*]
- 11 – No Village Center for teens to hang out.
- 11 – The "3 acre" lot size requirement is a waste of land. There's a general consensus out there that Arundel is "anti-business". There are too many "tree-huggers" making decisions for the town.
- 10 – Reduce lot size from 3 acres to 1 & 2 acres to make more lots available and affordable for our future generation.
- 10 – We need to focus on our school and worry less about foolish spending!
- 11 – If we thought about the children of Arundel & how we can make improvements in the school. Little Arundel is better as is. **NO Center.** Thanks. [*checked "yes" on Q 9*]
- 10 – **I do not feel that a Village Center is going in the right direction.** These funds & efforts would be better spent on improving services. [*checked "yes" on Q 9*]
- 11 – I would rather see us spend time focusing on and improving the services offered by the town. i.e.: trash pickup (roadside), school improvements, extra opportunities to keep our youth busy—soccer program, paid coaches.
- 10 – **I don't feel a need for a Village Center here in Arundel.** [*checked "yes" on Q 9*]
- 11 – Lower Rt 111 is growing with commercial progress. There is no need to attract people to Arundel with a Village Center.
- 6 – I support whichever plan keeps lots the largest. [*checked neither choice on q 6*]
- 11 – I'm tired of seeing so much land being turned into housing projects—Southern Maine is becoming Northern Massachusetts.
- 11 – Route One should be developed before we think about 111. [*checked "keep...as currently zoned on Q 4*]
- EAST OF TURNPIKE:
- 11 – **I don't feel we need the Village Center.** It will be a waste of money for town. What we need is a new school. [*checked "yes" Q 9*]
- 11 – Build a new school & use the present school for a new town hall. [*checked "yes" on Q 9*]
- 10 – I feel the minimum lot size for Residential zoning should be 3 acres to insure proper growth.
- 11 – I wish the Town of Arundel would approve & accept our street (Roaring Brook Drive) (new street)
- 11 – The town will be losing a substantial amount of tax revenues by not developing Rt. 111 to its fullest (commercially).
- 11 – It is my impression many voters may have confused the Comprehensive Plan with the Town Center proposal.
- 10 – I am against all restrictions.
- 11 – When I built my first home 55+ years ago there were NO restrictions. I am firmly AGAINST anyone telling me what I can and cannot do on MY land. I thought I lived in a free country.
- 11 – **Dump the village center for good.** That is what the voters want. [*checked "yes" on Q 9*]
- 10 – Unsure why taxpayers should pay for private business benefit. [*checked "yes" on Q 9*]
- 4 – 3<sup>rd</sup> option expand C. B. past CMP to entire Route 111
- 10 – The C.P. in relation to business growth archaic, and completely fails to present a competent pattern for business growth.
- 10 – Because of the taxes going up. [*checked "yes" on Q 9*]
- 10 – Since the Business Group (fairly knowledgeable people) didn't support it, I decided not to either. They have spent more time studying it than I have.

11 – The town seems to discourage business in general.

10 – Don't need it. [checked "yes" on Q 9]

11 – Need new school.

11 – I would like to see the town stay a town. **We don't need a Village Center.** I like the country living. Also you need to stop the growth. There are too many new homes and people! [checked "yes" on Q 9]

10 – Don't really understand it. [checked "no" on Q 8]

11 – I have lived in Arundel for 43 years and I like it the way it is. If I wanted to live in the city I would have chose the city. Leave Arundel country like it was! [checked "yes" on Q 9]

**9 – I think the Village Center is a great idea.**

11 – I attended only one meeting, on the village center, because I get tired of listening to people complain about every idea for making Arundel a nicer place to live. I don't see how you keep trying!!! Good luck.

10 – I don't believe that more commercial/industrial businesses are needed. I think Arundel should remain rural. [checked "allow...home occupations" on Q 3 and "keep...as currently zoned" on Q 4]

11 – More businesses does not = lower property taxes and trying to sell that to the public is wrong.

11 – I am not impressed by the arguments by the Arundel Business Association. You need to stay ahead of them media wise. These people don't even live here.

**9 – Although I do oppose the village center.** [checked "no" on Q 9]

10 – There is too much land etc. given over to smaller lots, commercial business etc. I think Arundel should remain rural. [checked "allow...home occupations" on Q 3, "keep...as currently zoned" on Q 4, and "leave...unchanged" on Q 6]

11 – I don't believe that inviting businesses in will lower property taxes or be beneficial to Arundel. There are already enough businesses in Biddeford/Kennebunk.

10 – Too many regulations—too restrictive—I regret supporting the current comp. plan in past elections. [checked "no" on Q 8 & Q 9]

11 – As taxpayers/landowners we are losing too many rights to use our own property as we see fit.

11 – Voters have expressed their opinion—so abide by it. There is a lack of trust. Trying one way—trying the other way—well, is there a twist in it? You are losing your credibility.

**11 – We are for a nice Village Center in Arundel.**

10 – Companies wish to grow & throw large amounts of money & tax money along growth corridors & town govt. turns opportunity away!!!! PERIOD.

11 – Rt 1 looks "tacky". Is there any way to clean it appearance by landscaping, moving business to a park, or -----?

**11 – We are for a nice Village Center in Arundel.**

11 – **Leave the town as is! It's nice to not have a "village".** [checked "yes" on Q 9]

6 – I find this question very confusing (and I have a master's degree). I support establishing minimum lot sizes, but I'm confused about how to answer your question the way it is worded.

11 – Please don't lower your standards or keep diluting the plan in order to get it passed. I think people need to be more educated about why the new regulations/restrictions are valuable/advantageous so they think more long term...

10 – I feel the town wants to be a Biddeford clone.

11 – I moved to Arundel from Kennebunkport because it was more rural and zoning was more realistic, but I am concerned the town will turn into a "Little Biddeford". Just look at Route 1!! [checked "keep...as currently zoned" on Q4 and "no" on Q 8 & Q 9]

11 – **Opposed to Village Center.** [checked "no" on Q 9]

- 10 – **I voted against the Comp Plan because I am opposed to a “town driven” Village Center.** If there should be a village center, allow private business to shoulder the financial risk/costs—not the town. The town should determine the appropriateness of business plans—not be the business planner. Also—get out of promoting new town facilities in the “village”. Apparently both the taxpayers & the businesses seem to oppose such a notion.
- 11 – We need to protect the environment, but architectural and landscape standards make every place look the same. I’d rather see diversity and freedom to express individual preferences.
- 10 – Isn’t Land Use Ordinance sufficient on its merit to negate any need of a Comprehensive Plan? Or, conversely perhaps, isn’t Comp Plan enough without Land Use Ordinance?
- 11 – When in doubt would you simplify instead of diversify (as in chess)?? I work weeknites ‘til 7pm in Portland and can’t get home in time for town meetings and apologize for my poor showing...I’ll try to do more/better in the future. Thanks.
- 10 – I don’t want smaller lot sizes as described in the proposed comprehensive plan. [*checked “leave...zoning map unchanged” on Q 6*]
- 11 – Enough with expanding the business district!! [*checked “keep...as currently zoned” on Q 4*]
- 10 – Business or residential lots should require at least 2 acres or more.
- 11 – Town should limit building permits to a certain amount. Out-of-staters build here and want to run the town. This town use to be small and plenty of open space.
- 10 – We do not need to change the town’s plans. Leave them as they are. [*did not support any changes in the Comp Plan and checked “yes” on Q 9*]
- 10 – Continue to allow business in residential district. (See #3)
- 10 – It’s a waste. Look at Downtown Bidd. Stores are closing cause of Walmart and the other stores on Rt. 111. Keep it there. [*checked “keep...as currently zoned” on Q 4*]
- 11 – The taxpayers already voted?
- 10 – I like the fact that Arundel is a small, rural town, and I want it to stay that way.  
[*checked “keep...as currently zoned on Q 4 and “yes” on Q 9*]
- 10 – I want my town to stay a quiet town. [*checked “keep...as currently zoned” in Q 4 and “yes” on Q 9*]
- 11 – There was a lot of confusion about what the plan was. Some people thought the plan and the town center were one. Others were afraid of the cost of the town center. You need a P.R. man!
- 10 – 1) Find another area.  
2) Don’t let developers outprice locals who can’t afford their house lots.
- 11 – 1) Don’t let developers come first where building permits are given.  
2) Let locals have preference when giving building permits.  
3) Limit developers amount of permits per year in favor of locals.
- 10 – It is getting too many houses in Arundel. Find more commercial in this town.
- 6 – What? zoning map should already reflect existing lot sizes
- 10 – Noise levels from Rt 1 Commercial Zone, ability for 55+/- facilities to be built in my zone, multifams (2 would be OK) & proposed bike sidewalks along my road [*Old Post Road*] & Log Cabin Road.
- 11 – **Village Center is a nice idea (with park), but** eventually the homeowner will have to pay **increasing taxes** to pay for building (construction) & maintenance. **Let’s leave Arundel alone**—we don’t need to keep up with the Jones’—K’bunk/K’port.
- 10 – Definition = “What is Residential” “What is Rural”
- 11 – We have no center to tell us what is Residential and what is Rural or Commercial. [*checked “no” on Q 1 & 2 and “yes” on Q 8*]

- 3 – depends on noise level [*checked “continue to allow...”*]
- 5 – no different from the rest of town [*checked neither*]
- 10 – Because of the changes that would affect people’s property (make more of it useless to them).
- 11 – Fully explain each part of the comp. plan with examples of how it would change zoning.]
- 11 – I am opposed to a Village Ctr.** [*checked “yes” on Q 9*]
- 11 – **I am against a village.** The people voted it and it should not be considered again. [*checked “yes” on Q 9*]
- 10 – Everybody goes to the big store. Don’t need a center.** [*checked “keep...as currently zoned on Q 4 and “yes” on Q 9*]
- 11 –** We already voted. Why bring it up again.
- 10 – I feel that parts of the plan will give the town more control of our property.
- 5 –** Yes for businesses, no for residential.
- 10 – Please lower our town taxes and then we can work on a town center without bonds getting town deeper into debt.** [*checked “yes” on Q 9*]
- 11 – I believe this town can become a better place to live and raise our children if we work together and utilize town funds as we would one’s personal finances instead of following the state’s idea of spending money that we do not have.
- 11 –** I voted for the plan. Even though I am new to the area, I feel that a plan is very necessary. I have lived where there was really no plan and did not enjoy the results.
- 11 – If you change the zoning on the New Road to 1 acre, this would not be fair to others living in Arundel. You should change it so anyone wanting to sell a 1 acre lot could do so. [*checked “leave...unchanged” on Q 6*]
- 4 –** beyond CMP
- 4 –** beyond CMP
- 5 –** allow bus. to expand further
- 10 –** allowing business no further then CMP lie on 111
- 11 – Why does the town planner want business on Rte 1 only and not want business expanded on Rte 1 North in his home town?
- 11 –** If you want to change to 1 acre lots on the New Road, you should change it all through Arundel, so anyone wanting to sell a 1 acre lot could do so.
- 11 – Arundel is fine the way it is.
- 10 –** I do not agree with 1 acre zoning along the New Road or to doing away with commercial businesses already established in residential districts. [*checked “no” on Q 1 & 2*]
- 11 – Regarding the Village Center—I am opposed to it.** I feel we are close enough to other city centers and I would prefer to retain our rural atmosphere. Any monies appropriated to the Village Center should be used to upgrade our school to meet state standards and/or to increase the overall size of the school.
- 11 – The Rt. 111 corridor should be exploited commercially as much as we can right now for the following reasons:
- Exit 4 in Biddeford is expanding at an explosive rate. Inside of ten years the area will be huge. Arundel needs to be pro-active instead of reactive with this development. We need to treat Exit 4 like it’s the next So. Portland and jump on the band wagon.
- The traffic to and from Sanford is not decreasing in any way. This revenue flow must be cultivated now to capitalize its gain.
- It is inevitable that with this population boom continuing, Rt. 111 will need to expand commercially. It would be more prosperous for the residence and businesses to allow expansion now rather than later.
- 1 –** Whatever was sent out. It wasn’t informative enough for me.

- 2 – Can't. My wheelchair is too heavy for friends to lift.
- 3 – Don't know without more information & study of affect elsewhere.
- 4 – I need more study and info.
- 5 – What rural character? Legros? VIP? Every town should, every where.
- 6 – Need more study and info.
- 9 – The wording was unclear whether we were being asked to vote on the center or to vote on voting for the center.
- 10 – Arundel has no town water, sewage, trash pickup, bus or taxi service, building affected the quality of our well water; the one school pushed our taxed out of sight. **Who's paying for a Village Center?**
- 11 – Like many people I know here, I came from an urban setting: greater Boston. The areas proposed for the town center will bring traffic & parking & sewage problems, more pollution, more noise, to a town whose major attraction is its bucolic nature. If they must build, why not on 111, where all these are already present? Walmarts, Shaws, gas stations, 5 corners, etc. \*

NO STREET NAME GIVEN:

- 10 – Feel we need to require larger than 2 acre minimum lots on new development. We are starting to build up too fast.
- 11 – Lyman has the correct idea with 5 acre lots. Also only people living in town should be able to use choice on sending children to private schools. If they rent their property and live elsewhere they lose that money. Wake up town planners...keep Arundel rural and small town. Also make landlords clean up their slum properties. Ex: [*name and address given*] She rents that trailer to people.
- 11 – Stop wasting time and money. If you feel the need to blow money build a school that is desperately needed. Why send our kids to Saco, we should keep them here in Arundel. **Building a Town Center and sending our kids to Saco is totally ridiculous.** Who's bright ideas are these? We should get these people off the committees. Leave the town alone. Stop trying to fix something that is OK. [*checked "yes" on Q 9*]
- 11 – There are enough businesses in all surrounding communities for all of Arundel. It is not necessary to keep clearing wooded areas. [*checked "keep...as currently zoned on Q 4 & checked "yes" on Q 9*]
- 10 – We don't need a town hall. It's top heavy now and **a city center doesn't make sense.** [*checked "yes" on Q 9*]
- 11 – You don't have enough paper here.
- 10 – Too restrictive. Must respect landowner private property rights!
- 11 – Status quo is fine! Not fair with respect to building permits.
- 11 – Get rid of the town planner who lives in Kennebunk. This town is not Kennebunk... [*checked "yes" on Q 9*]
- 10 – I have lived in this town since 1938 and I'm fed up with flatlanders deciding what's best for us.
- 11 – I'm tired of someone trying to dictate what is best for Arundel [namely one person from Kennebunk who is our Town Planner]. He fought against a big box store in Kennebunk, so what qualifies him to influence what is best for us.
- 10 – overly restrictive
- 11 – Leave everything as it is. Also—**no Village Center!** [*checked "no" on Q 9*]
- 11 – I think you are all doing a tremendous job with little thanks.
- 11 – I voted for the Comprehensive Plan and still think it was well done and thoughtful of the future of the town.
- 11 – I voted for and would do so again.
- 11 – Thank you for your efforts. Please know it is not unappreciated.
- 11 – I voted for the Comprehensive Plan and continue to support it.
- 11 – Keep up the good work.
- 11 – This survey is more informative than any of the news articles I have read.

11 – **I am not against the Village Center** or the Comprehensive Plan. I did not vote against it originally but really did not know exactly what it was. Thank you for filling me in. I hope it passes.

11 – It would help if [*name omitted—not a committee member or town official*] could be reasoned with. UNLIKELY!

11 – Good luck!

10 – Voted yes!

11 – This should open some eyes. Good job!

10 – Voted yes

11 – Nice survey. Great job.

#### **ADDITIONAL COMMENTS**

##### *WEST OF TURNPIKE:*

*10* – *It's country living, no traffic, no noise. I love it this way!*

*11* – *We already are starting to have more traffic because people are moving to Arundel!*

*11* – *We live here because it is country living. Let's do all we can to keep it that way!*

*11* – ***I am against the Village Center.***

*11* – *Many people are struggling. Young people can't find affordable housing. I don't approve of anything that will ultimately raise taxes. [checked "yes" on Q 9]*

*11* – *Our laws should be grandfathered.*

*11* – *Leave things alone.*

*10* – ***I like the Village Center idea. I voted for (it)!***

*11* – *Rt. 111 corridor should not be changed for any reason, or under any condition!! Please!*

##### *EAST OF TURNPIKE:*

*10* – *Enjoy rural feel as it is. **We don't need** bike paths, **large town center** or large 55+ developments in residential Arundel.*

*11* – *Office space etc. along Route 1, no industrial or manufacturing, retail with exception to what's already here.*

*10* – *We live in Arundel because of the rural feeling. **We don't need a town center** or large developments in residential areas.*

*11* – *We don't want to see Rt. 1 look like Wells or Saco.*

*10* – *too close to Rte. 1 (proposed center) [checked "yes" on Q 9]*

*11* – ***The nice thing about Arundel is that it has NO center, nor needs one*** that will just generate more traffic on Rte. 1 which is going to mushroom after "Stop & Save" develops in KB.

##### *NO STREET NAME GIVEN:*

*The vote was NO—what is it about this 2 letter word that you don't understand?*

##### *OTHER COMMENTS:*

*8* – *Voted for it.*

*9* – *Voted for it.*

*10* – *Voted for it.*

*11* – *Find the trouble makers & get them on your side!*

*11* – *Good survey.*

## ARUNDEL, MAINE - 2004 Comprehensive Plan Update Opinion Survey

On November 2, Arundel voters narrowly defeated the proposed Comprehensive Plan Update by a vote of 1022 to 928. State Law **requires** that our Land Use Ordinance be in conformance with our Comprehensive Plan. The current ordinance **does not** comply with the 1992 Comprehensive Plan. Therefore, the Town must either amend its Land Use Ordinance to require lot sizes of 2, 3, and 5 acres or update the Comprehensive Plan.

This questionnaire for voters is intended to identify the reason(s) for the defeat of the Comprehensive Plan on November 2. We are particularly interested in knowing why those who voted against the Plan did so. Once we have collected sufficient data, we will review and possibly revise the Plan so it can be presented to the voters for their approval once again.

Please answer the questions below and on the reverse side. If you have no opinion for a particular question, leave it blank. Fold the survey so that the business reply address is showing and tape it closed for mailing or return your survey directly to Town Hall. **Please return all surveys no later than December 10, 2004.** Your input is **IMPORTANT!!** Thank you for your help!

1. Did you read/review the Comprehensive Plan document before voting? \_\_\_\_\_yes      \_\_\_\_\_no

2. Did you attend any of the meetings or public hearings? \_\_\_\_\_yes      \_\_\_\_\_no

3. The current Land Use Ordinance allows a number of commercial uses, such as automobile garages, service businesses, convenience stores, personal services, and light manufacturing in the residential districts. The proposed Comprehensive Plan restricts businesses in the residential areas to home occupations.

*Do you think the Town should: [CHECK ONLY ONE]*

\_\_\_\_\_ continue to allow commercial businesses in the residential districts

\_\_\_\_\_ allow only businesses that qualify as home occupations in the residential districts

4. The current Land Use Ordinance permits a Community Commercial North zone around the intersection of Route 111 and

the New Road. This district extends 1,000 feet west of the intersection. The proposed Comprehensive Plan expands the district from the Biddeford line west to the CMP power lines.

*Do you think the Town should: [CHECK ONLY ONE]*

\_\_\_\_\_ keep the commercial business area on Route 111 as currently zoned

\_\_\_\_\_ expand the commercial business area west to the CMP power line [**additional** 0.4 mile (approx.)]

5. The proposed Comprehensive Plan requires the establishment of architectural and landscaping design standards along Route 111 in an effort to maintain its rural character.

*Do you think the Town should: [CHECK ONLY ONE]*

\_\_\_\_\_ require architectural and landscaping standards along Route 111

\_\_\_\_\_ not require architectural and landscaping standards along Route 111

6. The current zoning boundaries in the Land Use Ordinance do not reflect existing development patterns.

The proposed Comprehensive Plan changes the map by establishing 1 acre zoning along the New Road, including the Clearview Estates subdivision, where there are already many lots smaller than 2 acres.

*Do you think the Town should: [CHECK ONLY ONE]*

\_\_\_\_\_ leave the current zoning map unchanged regarding residential zones [2 acre zoning]

\_\_\_\_\_ change the zoning map to reflect existing lot sizes

7. Please indicate where you live in Arundel: \_\_\_\_\_ [*STREET NAME ONLY*]

8. If you voted **against** the Comprehensive Plan, did you do so primarily because you were opposed to the Village Center? \_\_\_\_\_yes      \_\_\_\_\_no

9. If you voted **against** the Comprehensive Plan for any other reason, please summarize [in one sentence] why you did so:

10. If you have other comments and or suggestions, please indicate those below: