

Chapter IV

Land Use



"Laws change; people die; the land remains."

~Abraham Lincoln

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4.1 INTRODUCTION

Understanding and managing land use and development are among the most important concerns of community planning. In the past, Tamworth's village and rural countryside were created and maintained by actions of individual landowners. Individual decisions become a legitimate public concern when they affect neighboring properties, property values, and the makeup of the town.

Land is a finite resource, and thoughtful planning for present and future land use is an issue for all communities. How a community decides to use its land base has a direct impact on natural resources, community character, transportation infrastructure, housing affordability, the tax base, and the cost of providing services. In order to mitigate potentially negative impacts population growth can bring, the community must actively guide the town's development, balancing community interests with those of the individual landowner.

Attitudes toward the land have changed considerably over the past decade. Extensive research and historical experience has taught us that land is a complicated resource, and one parcel of land may be better suited to a particular use than another. Natural factors such as slope, soil, groundwater, and surface water vary across the landscape, and growing communities must take these factors into consideration when planning their future. Unregulated development of steep slopes, shorelines, wetlands, or inappropriate uses impacting groundwater could cause damage to surrounding properties through erosion, sedimentation, flooding, contamination of groundwater and drinking water supplies, which decrease the quality of life for the whole town.

Tamworth, along with other New Hampshire communities, is growing. With this growth come changes in land use. Fields and meadows become residential areas or commercial sites. Forests are cleared and built upon, and new roads and other services become necessary. Land once considered undesirable for development becomes more attractive as prime sites are consumed. Steep slopes, wetlands, and other sensitive environmental areas become more susceptible to development as land becomes more and more expensive. This activity reinforces the need for a Master Plan that includes these factors when determining a plan for growth.

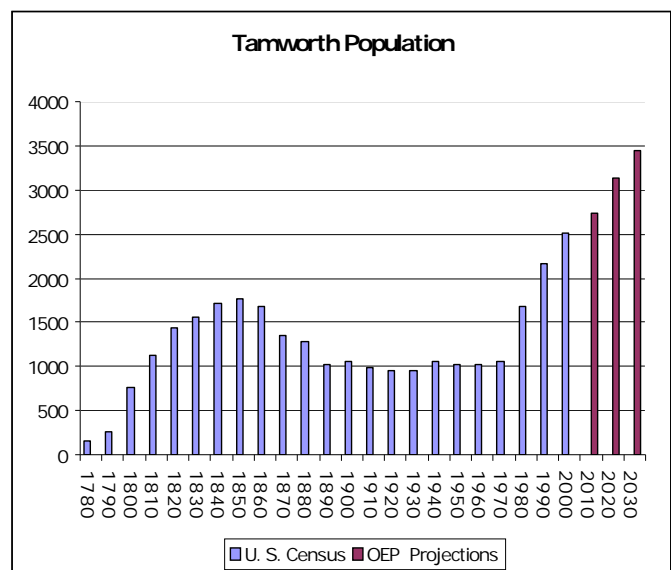


Figure 4.1 Population Trend

The purpose of this chapter is to identify land use trends in Tamworth, discuss how regulations impact such trends, and offer recommendations as to what regulatory and non-regulatory steps should be taken in the future to meet the growing housing, economic, environmental, and land use needs of the community. Existing land use is a key element to consider when attempting to predict and influence the direction of future growth.

4.2 PAST LAND USE

The Historical Landscape

The town of Tamworth is made up of the five separate villages: Tamworth Village, Chocorua, Wonalancet, Whittier, and South Tamworth. Each has its own separate history, character and identity. While all were influenced by four major factors (farming, community life, mills, and tourism) each responded in different ways. As a result, each region has developed a unique historical landscape.

The Farming Legacy

The most important and lasting impact on the town's landscape was farming. Farming was the first and most extensive use of land by Tamworth's early settlers. Although, it might be hard to imagine today, there were farms on every road and in every section of Tamworth. Most of the land was cleared and pastures stretched beyond the horizon.

The 1860 map of Carroll County on display in the Town Office and Cook Memorial Library shows the farm landscape at its height just before the Civil War. On it you can see the farming pattern of evenly distributed, widely spaced farmhouses along all of the roads in town. Remnants of this farm landscape can be seen today in the size and shape of fields and lots, the style of old farm houses and barns, and the patterns made by fences, stone walls, roads and bridges. A large number of the old farm buildings exist now only as cellar holes. The initial population growth peaked in 1850. After the Civil War, a number of factors conspired to lead many families to leave Tamworth and to go to richer farming areas in the west or to the growing cities. Many farms were simply abandoned and left to fire or decay.



Civic and Community Life

Civic construction (churches, schools, stores, post offices, libraries, fire stations, meeting halls, animal pounds, and of course, cemeteries) crosses all chronological periods and architectural styles. Most were erected in the architectural style of the time, making it relatively easy, today, to guess at least an approximate date of construction.

Many of these buildings were adaptations of existing buildings. For example, a number of homes were also used for post offices and abandoned school buildings were turned or incorporated into private homes.

Most community buildings were located near the center of villages. Stores were located in village centers and at corners and crossroads that seemed economically beneficial. Schools were intentionally distributed throughout town, usually near crossroads, so scholars could more easily attend.

Mills and Manufacturing

The least visible phase of landscape history is the period of mills and manufacturing. While once pervasive, evidence of Tamworth's mill history is hard to find today. There were dozens of mills throughout town. There were textile mills for carding, spinning, weaving and fulling. Hats were made here. There were mills for processing cider, corn, oats, rye and wheat.

There were mills, manufactories and craftspeople who used wood to make baskets, bedsteads, boards, clapboards, coffins, furniture, shingles, shoe pegs, spools and toys. It is said that the best wooden rakes in the world were made in South Tamworth. Tamworth residents were even awarded United States patents related to some of these industries.

Chocorua was originally named Tamworth Iron Works; here iron ore was processed into metal bars and then made into nails, tools, chains, and a hundred other metal items. Nearby, animal hides were processed into leather. Trees and bark were processed into charcoal, pearl ash, potash and tannin.

Most of the mill buildings were relatively small, simple timber framed structures. Few of these mills exist today. Many were burned as a result of accidents. Others were simply abandoned and decayed. Some were intentionally closed for aesthetic reasons. Some pieces of the old machinery, a few examples of the products, and some old stone foundations are all that seem to be left of a vibrant and important period in town history.

Tourism

After the Civil War, Tamworth began focusing more and more on tourists and summer residents. Attracted by the rural character of the land and the magnificent views of the mountains, city people flocked here in the summers, especially after the arrival of the railroad in West Ossipee in the 1870's.

Many farmhouses were used as guesthouses. Tourism also led to the development of teahouses and specialty antique, craft and gift shops. Near the end of the nineteenth century, increasingly large inns were built. At the same time, those who could afford it were buying the old farms and expanding them to create large summer cottages or "camps." In some cases, two or more houses were moved together. In other cases, well-known architects were brought in to build in the latest styles. The result was the establishment of many architecturally significant homes which were either owned or visited by a number of historically prominent people, including Presidents Theodore Roosevelt and Grover Cleveland, the president of the Pullman Company, editors of The New York Times, The Atlantic Monthly and The Saturday Evening Post, the secretary of Harvard University, and famous authors, artists, philosophers and professors by the score. Many of these homes



Figure 4.2 Tamworth, N.H. Compiled from government surveys, county records and personal investigations. D.H. Hurd & Co., Boston. 1892.

were clustered in the Chocorua Lake Basin, which, on June 9, 2005, was officially listed on the National Register of Historic Places becoming the largest area in New England to achieve this distinction.

Growth

As more and more people visited Tamworth and became aware of its scenic beauty and peaceful surroundings, they began to settle in the area and the villages began to grow. Churches sprang up in each. Libraries were established in Tamworth Village and in Chocorua. Schools were built and community facilities established. With the influx of new residents, both year round and seasonal, came the awareness that the scenic beauty and natural resources had to be protected so that they could continue to be enjoyed, by both Tamworth residents and visitors. However, land use patterns have changed over the past four decades. Agricultural land declined and was replaced by developed land. Subdivisions proliferated over this period as the need for residential properties grew. Many aspects of the town's landscape became threatened, including natural features—such as locations with significant views, wildlife habitat, surface water, and forests—and man-made elements, which include historical sites, active farmland, dirt roads, and trails. The Hurd map of 1892 (Figure 4.2) shows the town after the period of rural depopulation and farm abandonment.

4.3 PRESENT LAND USE

Today, Tamworth is a mix of residential areas, commercial activity, and open spaces used for forestry, agriculture, and recreation. Land can be analyzed from the top down, using aerial photographs; from the bottom up, using tax assessment records; or by walking and driving around, using local knowledge. There are some inherent differences, based on methods used, as well as expected overlaps in the resulting observations.

Land Cover

Table 4.2 contains Tamworth land cover data from the GRANIT system. The New Hampshire Land Cover Assessment 2001 is based on satellite images acquired by Landsat Thematic Mapper between 1990 and 1999. These were augmented, where possible, by digital aerial photography, digital raster scans of USGS quadrangles, vector data layers archived in the GRANIT database, digital elevation models, and field data collection. The resulting data set categorizes land cover and land use into 23 targeted classes, with as much detail as possible in the forestland and agriculture classes.

There are limits to both the accuracy and precision of the data. Each pixel represents a 30 by 30 meter area, so maps based on land cover data are highly pixilated. Ground truthing the data revealed an 82.2% accuracy, so one should not read more into the statistics than is there.

From a bird's eye view, Tamworth is 82.75% forested, with a fairly even distribution between hardwood, softwood and mixed species. Agriculture and open space account for 9.5% of the land. Water and Wetlands are 3.77% of the town. Only 4% of the land is categorized as developed.

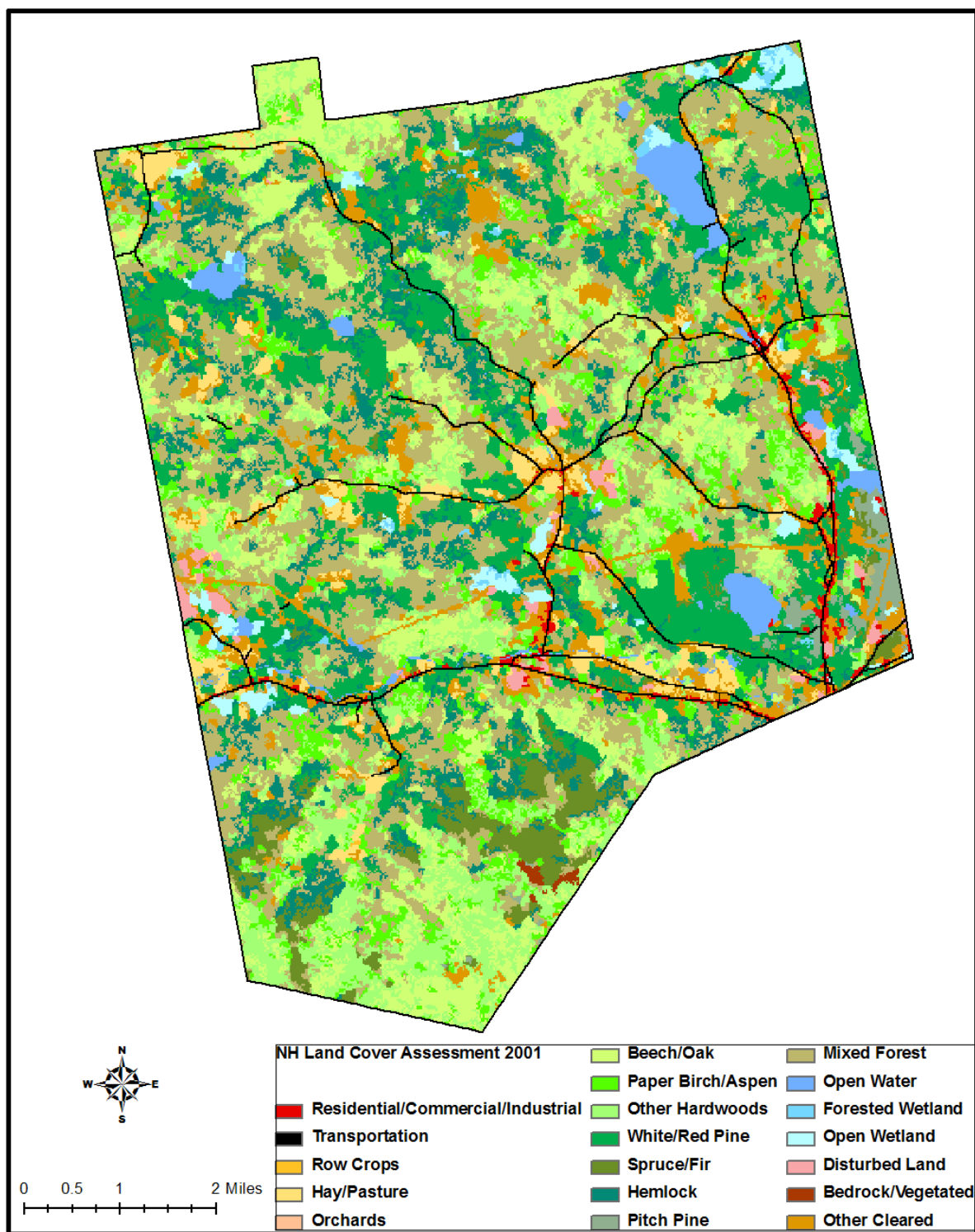
**Tamworth Land Cover Data
Based on
New Hampshire Land Cover Assessment 2001**

	Category	Acres	Percent	
Developed				
	Residential/Commercial/Industrial	220.98	0.57%	
	Disturbed	434.68	1.12%	
	Transportation	897.24	2.31%	
				4.00%
Agriculture & Open Space				
	Row crops	10.17	0.03%	
	Hay/pasture	1,023.71	2.64%	
	Cleared/other open	2,605.27	6.71%	
	Bedrock/vegetated	42.31	0.11%	
				9.49%
Water & Wetlands				
	Water	755.53	1.95%	
	Forested wetland	139.81	0.36%	
	Non-forested wetland	565.96	1.46%	
				3.77%
Hardwood				
	Beech/oak	4,641.00	11.96%	
	Paper birch/aspen	2,384.83	6.14%	
	Other Hardwoods	4,204.24	10.83%	
				28.93%
Mixed Forest				
	Mixed forest	10,360.09	26.69%	
				26.69%
Softwood				
	Hemlock	3,057.64	7.88%	
	Pitch pine	400.55	1.03%	
	Spruce/fir	1,348.55	3.47%	
	White/red pine	5,720.05	14.74%	
				27.12%
	Total	38,812.60	100.00%	

Table 4.3 Land Cover

"The land was ours before we were the land's."
~Robert Frost

Land Use Land Cover



Map 4.4 Land Use Land Cover

Tax List

Table 4.5 categorizes land using tax list information. While some insights can be gained about the land use in town, the results are not comparable to Land Cover data for a number of reasons.

Not all land in Tamworth is included on the tax list. There are 1,119 acres within the state political boundaries that are not on the tax list. There is a total of 37,170 acres on the tax list, compared to 38,289 within the town boundaries. There are three principal reasons for this discrepancy:

1. Town and State roads are not included on the tax list, although private roads are.
2. Surface water is not included for large water bodies, i.e. Chocorua Lake, Great Hill Pond, Moore's Pond, and parts of the Bearcamp, Chocorua River, and Mill Brook. Other streams and great ponds are included.
3. There is an anomaly in the southeast corner of town in the Ossipee Mountains, where the tax map doesn't quite meet the Ossipee border. There are 312 acres of land within the town's borders, but not on the tax list.

The forest types listed under current use taxes are based on owner applications. The totals do not include land not in current use, or government land. Government land is listed as vacant, or government.

The granularity of measurement is based on lot size. For example, an 8-acre house lot would be categorized as 8 acres of housing on the tax list, whereas the land cover assessment would categorize most of the lot as either forest or open space.

The totals have more entries than the number of tax lots because many lots contain more than one use. Some lots contain housing and commercial uses. Many lots in current use are taxed under multiple classifications.

2007 Tamworth Tax List Land Records			
<u>Use Description</u>	<u>#</u>	<u>Acres</u>	<u>% of total</u>
Housing	1,729	4,385	11.80%
Commercial	126	672	1.81%
Non profit	23	41	0.11%
Government	32	1,970	5.30%
Current Use			
White Pine	293	5,650	
Hardwood	235	8,562	
Other	298	9,622	
Unproductive	119	850	
Farm	144	1,097	
Subtotal	1089	25,781	69.36%
Vacant	615	4,321	11.62%
Grand Total	3614	37,170	100.00%

Table 4.5 Tax List

Lot Sizes

Further insight can be gained by examining the pattern of lot sizes. There are 2,625 tax lots in Tamworth, ranging from 0.02 to 983 acres. The mean lot size is 14.16 acres, but the median is 1.8 acres. Table 4.6 groups lots by size.

Two contradictory things become apparent when the distribution of lots is charted by size:

1. More than one-third of all the lots are smaller than one acre, the minimum lot size required by current subdivision regulations. Tamworth is 82% forested and appears quite rural, but based on lot size, Tamworth is actually quite suburban. One third of the lots are smaller than the average lot size in suburban Boston.
2. At the other extreme, if one just looks at the lots over 100 acres in size, 3.2% of the lots in town comprise 47.7% of the acreage. The actions of a few land owners could have a disproportionate impact on the make up and character of the town.

Tamworth Tax Lots by Size				
Lot Size	# Lots	Acreage	% of Lots	% of Acres
0 to 1	951	454	36.23%	1.22%
1+ to 5	856	1,981	32.61%	5.33%
5+ to 10	267	1,858	10.17%	5.00%
10+ to 20	179	2,547	6.82%	6.85%
20+ to 30	99	2,482	3.77%	6.68%
30+ to 40	51	1,809	1.94%	4.87%
40+ to 50	44	2,004	1.68%	5.39%
50+ to 100	94	6,596	3.58%	17.74%
100+ to 200	62	7,972	2.36%	21.45%
200+ to 500	16	4,652	0.61%	12.52%
500+ to 1000	6	4,815	0.23%	12.95%
Total	2,625	37,170		

Table 4.6 Lot Sizes

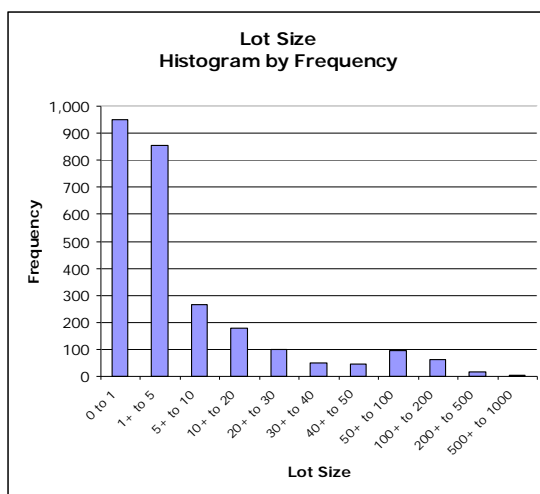


Figure 4.7 Frequency

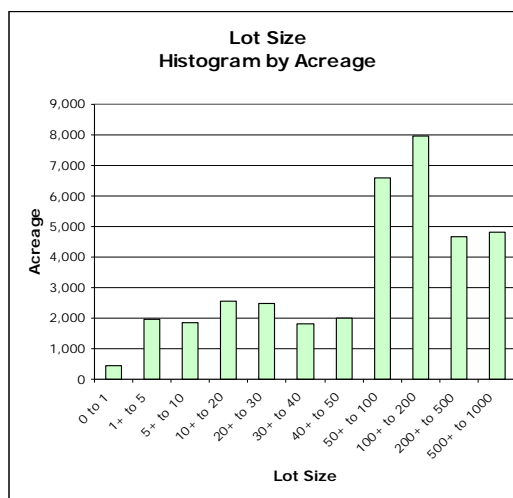


Figure 4.8 Acreage

Non-Resident Owners

The 2000 census indicates 32% of Tamworth's housing units are seasonal residences. This makes vacation homes a significant part of the town's character. As a proxy for identifying seasonal homes, Figure 4.9 shows ownership by zip code. There is some unavoidable imprecision: by including all Silver Lake and West Ossipee addresses, some residents of Madison and Ossipee may be included. There are some seasonal Tamworth residents who receive tax bills at a Tamworth address. The map is a good first approximation of non-resident ownership. Only half of the lots in town (1321 of the 2625) are owned by people with Tamworth mailing addresses.

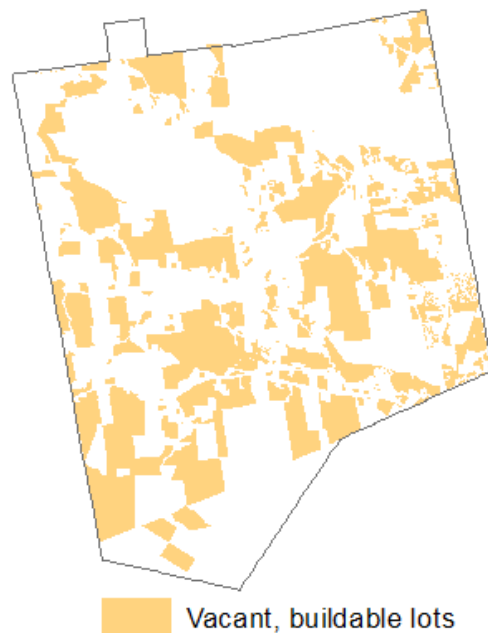


Map 4.9 Non-Resident Property Owners

Similar results are obtained by comparing the voter checklist to the tax list. Registered voters only own 43% of the tax list, calculated by appraised value. Again, this is an approximation because there are some seasonal residents on the checklist.

Vacant Lots

The table of lot sizes includes both vacant and developed lots. 37% of the lots in town are vacant. Of the 1,116 vacant lots, 254 are considered protected, either because they are government owned, owned by a land trust, or protected by a conservation easement. Map 4.10 shows the remaining 862 vacant and potentially buildable lots.



Map 4.10 Vacant, buildable Lots

Density

Density is expressed as the number of people per square mile. Based on the 2000 census, Tamworth's density is 41.96. The figure puts Tamworth in the lower third of towns in the state. Figure 4.11 shows densities for all New Hampshire cities and towns, with a distribution that looks like an exponential curve.

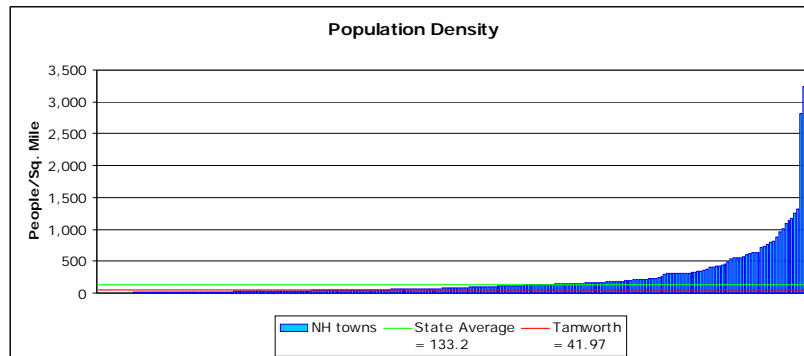


Figure 4.11 Density

Density is an average figure, and varies depending on the area considered. The density for New Hampshire is 138.2, while the Carroll County average is 41.5. Tamworth's number is relatively low because of large un-fragmented blocks of land. The northern part of town is part of a 137,000-acre block encompassing the Sandwich Range. The southern part of town is part of a 35,000-acre block in the Ossipee Mountains.

Measuring density is useful for two reasons. It puts a metric on "rural." While we know what rural looks and feels like, density is a good way to measure it. For instance, 25.4% of New York City is open space, but its population density is 25,000 per square mile. The open space figure is impressive, but the population density figure is needed to understand how urban New York City is.

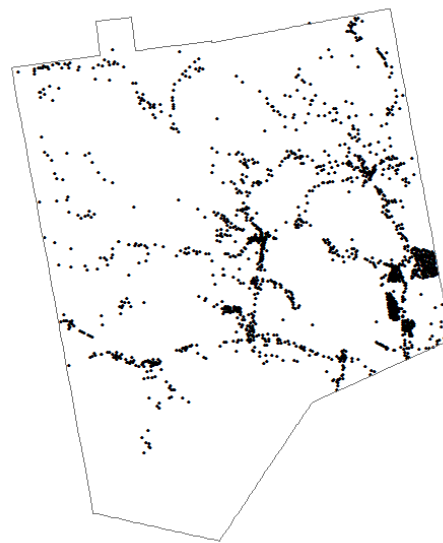
Based on the work of Dr. David Theobald, towns are classified based on density.

Town Type	People/Square Mile	
Rural	< 36	
Exurban	> 36	< 144
Suburb	> 144	< 1,000
Urban	> 1000	

Table 4.12 Town Density Classification

Tamworth can no longer be considered rural. In 1992 Tamworth surpassed the threshold of 36 people per square mile, and is now considered "exurban."

Higher density brings higher infrastructure costs. Map 4.13 shows building locations in town, without lot lines or roads. The distribution of density is quite uneven in town. The pattern clearly reveals development concentrated along roads and in subdivisions.



Map 4.13 Existing Building Locations

Special Features

Satellite images and the tax list allow a statistical analysis of land use. They don't, however, reveal the things we encounter on a daily basis. Specific sections of this Master Plan contain descriptions and analysis of the features and land uses that make up the town. Please refer to the following sections for that content:

- Chapter 5, Transportation: roads, bicycle paths, regional transportation, and parking facilities.
- Chapter 6, Community Facilities: town buildings, departments, and the community facilities and services needed to support the town.
- Chapter 7, Economic Development: economic profile, local business setting.
- Chapter 8, Natural Resources: soils, wetlands, surface water, wildlife habitat, scenic views, forest & agricultural resources, and conservation land.
- Chapter 10, Recreation: recreation facilities, trails, public lands, and beaches.
- Chapter 11, Utility and Public Service: wires, water, and sewers.
- Chapter 12, Cultural and Historic Resources: special features, historic sites, and cultural resources in the town.
- Chapter 14, Housing: population and a description of housing conditions.

Subdivisions

Table 4.14 shows the history of subdivision activity in Tamworth for the period 1995-2007. The location of recent subdivisions is shown on map 4.15.

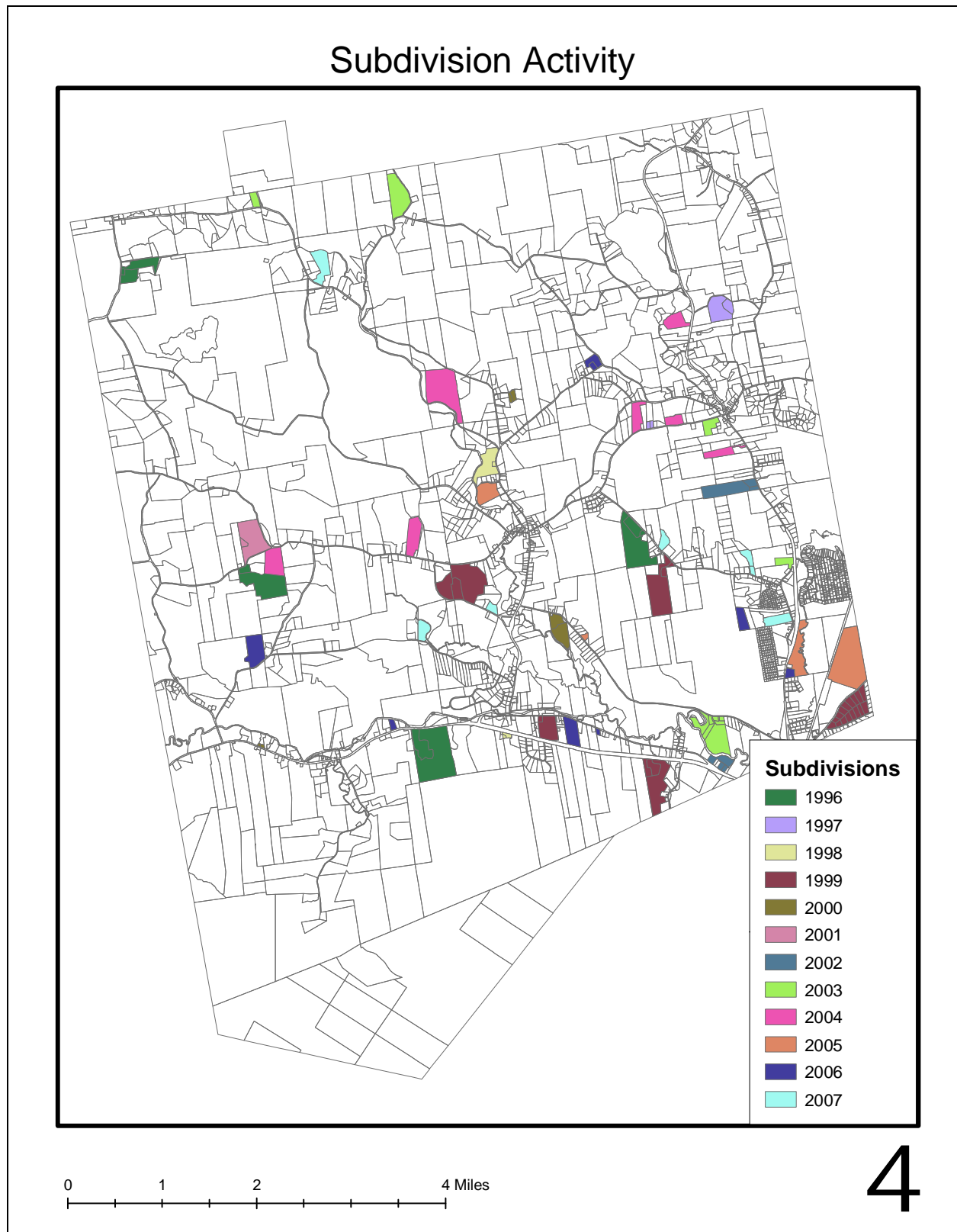
Subdivisions (1996-2007)

Number	Tax map	Date	Subdivided by	Total
				Lots
1	204-1	1996	Alice B. Thompson Trust	2
2	405-17	1996	Chele Miller	3
3	413-7	1996	Francis Cleveland	2
4	415-31	1996	Walter Staples	2
5	210-12	1997	Raymond & Jean Marsh	2
6	408-11	1997	Samuel Newsom	2
7	410-127	1997	Edith Macy	2
8	201-34	1998	John Havlock, et al	2
9	206-39	1998	Elliott Brothers Garage	2
10	206-10	1999	Dorothy Welch	2
11	208-21	1999	William & Mary Lundberg	3
12	212-23	1999	The Kennett Corporation	16
13	414-37	1999	Jean Rogerson	2
14	415-19	1999	Charlene & Guy Pennell	2
15	410-17	2000	Harold & Rosemary Harmon	2
16	415-67	2000	Dana & Laurie Bonica	2
17	420-51	2000	Randall & Lorna Gordon	2
18	413-28	2001	Thomas Cleveland	2
19	210-8	2002	William & Mary Lundberg	3

20	217-47	2002	Tri County Cap	3
21	404-44	2003	Brian Cutter	2
22	211-52	2003	Homestead Trust	4
23	219-119	2003	Emory & Whipple Roberts	2
24	214-162	2003	George & Barbara Jackson	2
25	403-12	2003	The Delude Trust	2
26	215-38	2003	Wayne & Ann Mock	2
27	218-103	2004	Rita Roux	2
28	414-101	2004	Peter & Joan Casarotto	2
29	410-114	2004	Linda Liano Stevenson	4
30	410-129	2004	Anthony Giacalone	3
31	212-21	2004	Cuno Properties	11
32	208-21	2004	William & Mary Lundberg	2
33	414-84	2004	ACF Properties	2
34	411-53	2004	Jeffrey Swan	3
35	407-83	2004	Sam Newsom	2
36	201-25	2005	Kenneth Sebens	2
37	212-21	2005	Cuno/Sokis Pines	48
38	212-23	2005	Whipple Roberts	3
39	214-1	2005	Fred Bickford	3
40	214-162	2005	Scott & Natile Taylor	4
41	415-46	2005	Donald & Anne McGarrity	2
42	206-2	2006	Karl & Laila Smith	4
43	210-9	2006	William & Louise Wroblewski	2
44	214-3	2006	Rose Scolaro	2
45	413-4	2006	John & Rebeca Hackett	2
46	205-15	2006	Isabelle Whittemore	2
47	214-214	2006	Guinea Hen Trust	2
48	407-35	2006	Larry & Ann Davis	2
49	215-27	2007	Ryan Hill Trust/Carl Krachuk	2
50	214-162.2	2007	Bob Chavaree Applewood Condo	20
51	406-25	2007	Dorothy Mallar	2
52	415-4	2007	Ron & Mary Holladay	2
53	415-103	2007	Elizabeth Wiesner	2
54	414-22.1	2007	Debra Davis	2

Table 4.14 Subdivisions

"This land is your land,
this land is my land."
~Woody Guthrie

**Map 4.15 Recent Subdivision Activity**

Land Use Changes

There have been a number of significant changes in Tamworth since the publication of the 1995 Master Plan, which took place with little or no involvement of the Planning Board. The following are examples of things that will have long-term implications for the town, and could have been opportunities for the Planning Board to exercise leadership through planning for the town's future. Each contains some lessons learned for the future role of the Planning Board.

Tamworth Village/Main Street Project

The Main Street Project was initiated by the Tamworth Foundation in 1999 as, "(a) community effort to preserve and enhance the Tamworth Village area, while retaining its rural character." The village faced some serious challenges. The community water system was failing. There was no village septic system and the increase in number and use of private septic systems in the village was endangering the water quality of Swift River. Several entities in the village (the country store, library, town offices, community nurse, historical society, and congregational church) needed to expand or renovate buildings, but were blocked because land wasn't available or existing individual septic systems were in the way. Additional parking, improved snow removal, and water drainage were all needed if use of the village were to expand.

The Main Street Project included a new septic system, upgraded water system, library expansion, new town office/community nurse building to replace the old Willow Inn, additional parking, and improved landscaping.

The \$2.4 million required to accomplish this was raised through a combination of foundation grants, individual contributions, a Community Development Block Grant for the water system, a Land and Community Heritage Investment Program (L-CHIP) grant for part of the library renovation, a donation of one-third of the town office building cost from the Tamworth Community Nurse Association, and town funds raised for town buildings. Costs were minimized by the use of volunteers who did the planning, fund raising, legal work, and landscape architecture on a pro bono basis.

Not everything went perfectly or was trouble free. The utility companies never agreed to bury utility lines, so that element had to be dropped. Ultimately, the project was completed in three years and achieved all the other major objectives.

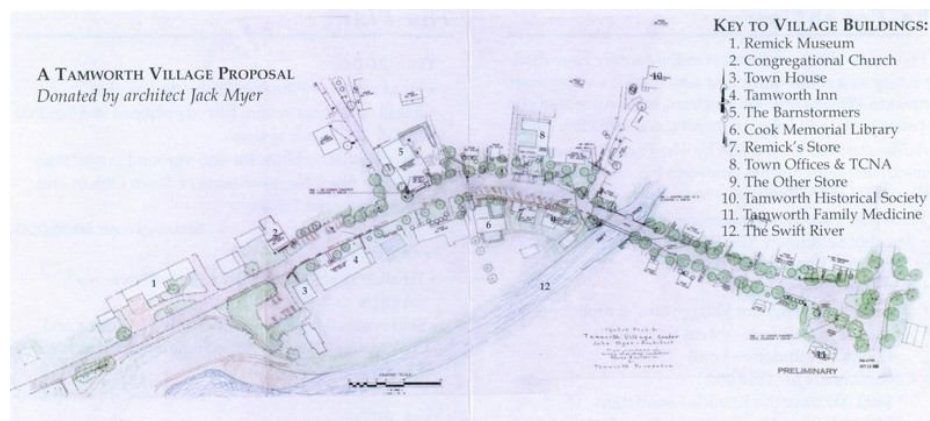


Figure 4.16 Main Street Design

Lessons Learned

The Main Street project demonstrated that a community septic system is required to maintain the density of a village. The alternatives are sprawl—when institutions move out of the village center, as the post office and school did—and pollution.

The project also showed that a non-government solution could be accomplished through volunteer efforts, community involvement, and private donations. The project succeeded using a few guiding principals: a succinct mission statement, a tangible proposal, maintaining an open and inclusive process which saw diversity as an advantage, and avoiding scope creep, or the growth or change of the project's initial requirements.

Chocorua Village Safety Project

Federal and State transportation planners have observed the connections between transportation, land use, the economy, and quality of life. The Route 16 Corridor Protection Study (1993-1998) was a five-year demonstration project that involved citizens from the 5 cities, 24 towns, and 8 unincorporated areas along Route 16's 156-mile long corridor. The project was run by a group comprised of representatives from the Federal Highway Administration, two state agencies, and four regional planning commissions. It developed initiatives to combine land use planning and transportation enhancements to improve the quality of life along the corridor.

The Route 16 Corridor Project demonstrated how conflicts between parking, intersections, through-traffic, and pedestrians in Chocorua Village created access management issues. Route 16 runs between the Chocorua River and Deer Hill, and buildings were originally located close to the road during a different era, leaving few good solutions for change.

Figure 4.17 is a graph of average daily traffic, showing that traffic volume has increased at 2.2% per year for over sixty years, illustrating the growing conflict between through-traffic and local use. The Route 16 Corridor Study identified traffic improvement in Chocorua Village as the number one priority for a follow up project. In order to engage wider public discussion of the issue, two charrettes were convened by Lakes Region Planning Commission and the Tamworth Corridor Planning Committee. A charrette is a brief but intense design workshop in which stakeholders and interested citizens are invited to contribute to the work of an interdisciplinary team of designers during the earliest stages of design and planning. The Tamworth Planning & Corridor Charrette was held on June 12, 1999 followed by the Chocorua Village Charrette on May 11-12, 2000.

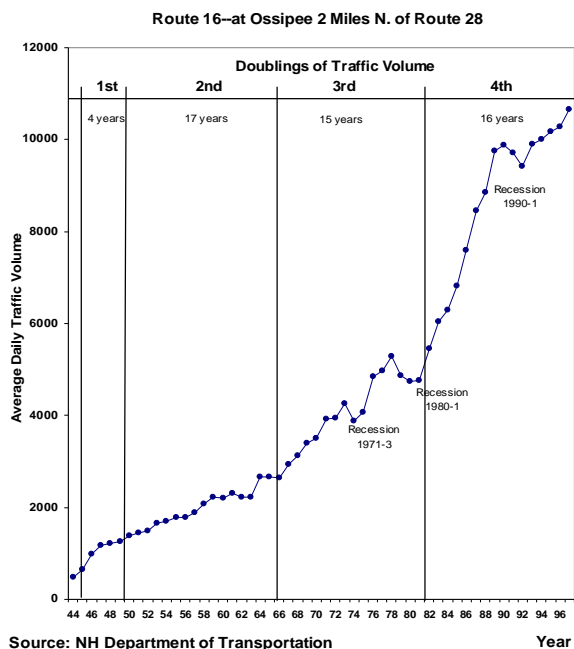


Figure 4.17 Route 16 Traffic Growth

As a result, a grassroots organization, the Chocorua Community Association, was formed in October 2000. One of its primary goals was improvement of traffic safety in the village. These efforts eventually helped secure funding in 2004 for the Chocorua Village Transportation Improvement Project from the Federal Highway Administration. As of 2007, \$1,284,154 has been obtained in five separate Federal and State appropriations.

Lessons Learned

The initial project plan included village amenities, such as community water and sewer. Because the source of funds was from the Federal Highway Administration and NH DOT, non-transportation components had to be dropped. So a community sewer system is no longer included. The NH DOT Ten-year Improvement Program for the period 2001-2010 included over \$90 million for transportation projects from Ossipee to Conway, but only \$100,000 of that was for a project in Tamworth.

The charrettes that followed the Route 16 study generated community input, which helped identify a number of the problem areas, such as pedestrian hazards, inadequate and hazardous parking, excessive speed, and poor visibility for turning vehicles. None of the design recommendations were implemented from the *Tamworth Planning & Corridor Charrette*, *Chocorua Village Charrette*, or the *Tri-Town Committee for the Route 16 & 41 Traffic Report*. When Federal funding was obtained, Fay, Spofford & Thorndike, a professional engineering firm, was hired and developed a design that addressed the many complex issues which community volunteers were never able to solve. This design is the basis for the Chocorua Village Safety Improvement Project, which began construction in 2008. Funding has been obtained for two of the seven phases required to complete the whole project.

The project has not been without controversy and was opposed by a number of town residents. The vote of town meeting in 2005 to purchase the former Chocorua Village Store site at the intersection of Routes 16 and 113 essentially approved the project. Involvement by the Planning Board with a project that will have long-term impacts in town would have provided an opportunity for various interests to be heard.

Kenneth A. Brett School Addition

In 2002 voters approved a \$3.2 million bond for an addition to the K. A. Brett School, the local public elementary and middle school for grades K-8. The project included the addition of nine classrooms and the new gymnasium, replacing portable classrooms. The decision to expand the school came in the context of a number of other decisions about the future of education for Tamworth: the Tamworth Charter High School did not open; the Chocorua Valley Cooperative District was formed in 2000, with Madison and Freedom; and Conway began investigating the creation of a new

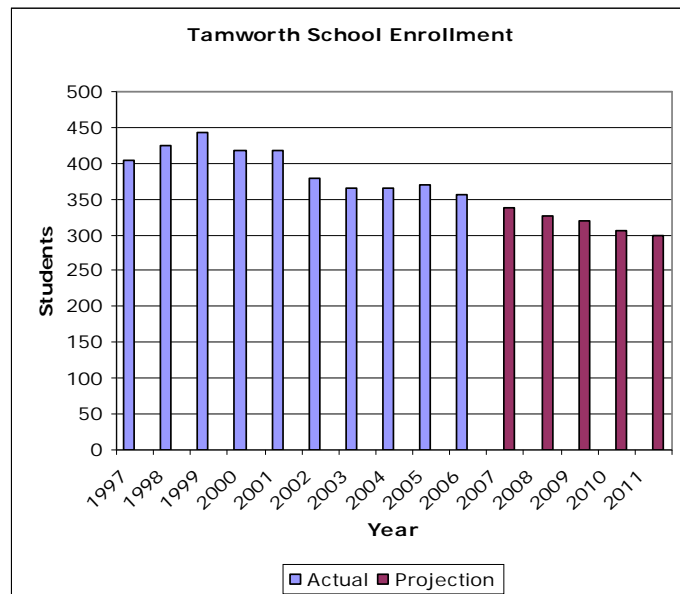


Figure 4.18 School Enrollment

high school and vocational center in 2002. At the time, the existing school was overcrowded (with projected enrollment on the rise) and in need of major renovations to meet basic health and safety codes.

Five years later, circumstances look quite different. Actual enrollment has fallen by 23% since its peak in 1997, and is now projected to drop below 300 by 2011, an overall decrease of 33%. The cost of the bond is actually \$4,758,400 when interest is included. There are increased operational costs for additional maintenance staff, equipment, and utilities. Tamworth's per pupil spending is the 8th highest in the state, and our school tax is 137% higher than the county average. The bond payment is only 8.9% of the total budget, but the school has more capacity than can be used.

Lessons Learned

Past growth rates are used to project future trends for the state, the total is allocated by county, and then by town, based on the history of building permits. Tamworth didn't issue building permits (actually notifications) before March 2004, and therefore did not have its own data to draw on when making decisions about growth trends. The population increases projected by the State over the last five years haven't occurred.

The Office of Energy & Planning's population projections in 2002 showed that Carroll County's population of ages 5-19 would drop by 15% between 2000 and 2020. And OEP projections don't consider changing circumstances, high taxes, local politics, or other controversies that have curtailed growth in Tamworth in recent years

More coordination between the planning board and the school board might have improved the information available to committee and community members prior to making serious capital expenditure decisions. Land use regulations control the amount and type of housing available in town. That impacts total population, student enrollment figures, and the services they require. The policies of the Planning Board have a big impact on the plans of the School Board. There is a Planning Board representative on the School Board's Long Range Planning Committee. The Capital Improvement Plan (CIP) has a representative from the School Board. The CIP incorporates projected capital spending for the school, which represents some of the biggest expenditures of the town. For example, if the school addition had been funded through a capital reserve instead of a bond, the town would have saved \$1,558,400, or one-third of the total cost.



4.4 FUTURE LAND USE

Within the planning horizon of this Master Plan update, future land use in Tamworth will most likely remain consistent with past use and present trends. The pattern of land use changes will continue to be formed by a series of individual decisions. The desires of Tamworth residents and land owners for future land use were revealed in the Community Survey, and at the Future Land Use Forum. The opportunities for specific decisions are driven by growth but constrained by development costs, physical and legal restrictions, and regulatory limitations.

"The land belongs to the future."
~ Willa Cather

Community Survey

The Community Survey contained specific questions on Land Use, as well as questions that have implications for future land use among the Housing, Economic Development, Natural Resources, and Historic Preservation questions. Responses to the survey showed a remarkable consistency on land use issues, favoring land use regulations, and town action in several areas.

The first land use question concerned methods for managing development. It was a check-all-that-apply type question. There were seven options, and the average response rate was 2.5 items selected. "Zoning Regulations" (69.0%) was the clear preference, followed by "Protect more land from development" (58.7%), "User impact fees" (48.8%) and "Subdivision regulations" (48.0%). It should be noted that zoning is a prerequisite for "User impact fees". The choices involving non-regulatory methods were an order of magnitude lower: "None" (4.1%) and "Rely on private enterprise" (3.7%).

The second question asked, "Where should future development occur?" The survey didn't give specific area choices but relied on descriptions for locating residential, commercial, and industrial development, with a check-all-that-apply question. Again, the preferences were significant and clear. The majority wanted to see future residential development in mixed-use neighborhoods, new subdivisions, or along town roads. The majority also wanted to see commercial development along state roads, while one-third of respondents also selected mixed-use neighborhoods and along town roads. The majority wanted to see future industrial development along state roads. There were very few votes for development on present farmland, forested areas, or along rivers and ponds.

In the Housing section, answers to the first question ought to get the Planning Board's attention. More than half thought the town was not managing housing well.

On the question of types of housing, a majority wanted more single-family dwellings, elderly housing, affordable housing, and cluster development, and fewer multi-family dwellings, apartment buildings, apartment conversions, and mobile homes. On the question of methods to control and guide development, a strong majority supported 4 of the 5 options that involved zoning regulations.

In the Economic Development section, 90% agreed, "(i)t is important to identify areas in which to locate business and industrial development."

Questions in the Natural Resources section received the most favorable and consistent responses. Protecting land was supported by 70% to 80%, for all purposes listed. Easements held by the town were supported by 88%. Town ownership of conservation land was supported by 81%. Land protection was supported for wetlands (88%), scenic views (82%), steep slopes (80%), and hilltops (76%).

Encouraging historic preservation was supported by 89%, and a Tamworth Village historic district was favored by 60%.

Land Use Forum

On November 3, 2007 a Land Use Forum was held to solicit public input about how Tamworth should guide its anticipated population growth between now and the year 2020. Forty-five residents attended and participated in an exercise that addressed:

- What lands should be preserved?
- Where and in what manner should Tamworth guide residential growth?
- Where should new businesses be located?

A description of the exercise, a report of the results, and copies of the maps produced are included as an appendix to this chapter.

Land Capability

The *Soil Survey of Carroll County*, published in 1977 by USDA, can be used to evaluate land capability. Each soil series is rated for its suitability for development, agriculture, forestry, and sand & gravel pits. See Chapter 8, Natural Resources, for a detailed discussion of soil types and uses.

Any plan for future land use should maximize the economic capability of the land by favoring the best use of each site, based on the soil's capability. This is especially important because Tamworth has limited amounts of soils characterized as Prime Agricultural Soil, Statewide Important Agricultural Soil, Good Forest Soil, or Very High and High Development Potential Soils.

Soil Characteristic	Acres	% of Town
Prime Ag Soils	685.16	1.77%
Statewide Important Ag Soils	248.57	0.64%
Good Forest Soils	754.14	1.94%
Very High Development Potential	193.67	0.50%
High Development Potential	5,237.00	13.49%
Gravel Potential	6,785.93	17.48%
Sand Potential	10,344.26	26.65%

Table 4.19 Soil Capability

"The nation that destroys its soil, destroys itself."
 - Franklin Delano Roosevelt

Land Use Regulations

While Tamworth does not have a comprehensive land use ordinance or zoning regulation, it does have a number of ordinances and regulations that govern specific land uses:

- Billboard Ordinance
- Cell Tower Ordinance
- Excavations and Excavation Processing Ordinance
- Fireworks Ordinance
- Flood Plain Development Ordinance
- Gravel & Aquifer Protection Ordinance
- Hazardous Waste Ordinance
- Noise Ordinance
- Prime Wetlands Ordinance
- Radioactive Waste Ordinance
- Scenic Roads Ordinance
- Sludge Ordinance
- Subdivision Regulations
- Wetlands Conservation Ordinance

Constraints

There are a number of physical and legal constraints on any future development.

Conservation Lands

Conservation land is generally protected from future subdivision or development. But not all protection is equal. A dirty secret of land protection is that property held by a land trust can be sold and developed (see recent history of The Nature Conservancy in Conway.) Land owned by government entities could be sold or used for non-conservation purposes (see UNH's Bald Mountain lot.) Conservation easements negotiated with individual land owners can contain reserved rights, allowing limited development. For example, the covenants held by Chocorua Lake Conservation Foundation typically allow 8-acre subdivisions. But for purposes of this analysis, and without going through each deed in detail, conservation lands are treated as protected.

Steep Slopes

Tamworth has limited constraints on development of steep slopes. The Sub-Division Regulations prevent subdivision of lots with greater than 25% slopes. While larger lot sizes are required where slopes are between 15% and 25%, development is allowed. There are no limits to building on lots of record as of March 11, 1969.

Wetlands

Both the town and state have regulations that prevent development of wetlands. In addition, the town's wetland ordinance prohibits construction activity within the 25-foot buffer zone surrounding wetlands. Wetland delineation requires site-specific work by a certified wetland scientist.

Flood Plains

No development may occur in a floodplain as shown on the 1991 FIRM map without a flood plain permit from the selectmen.

Already Developed

Obviously, property that has already been developed is not available for future growth.

Critical resources

In addition to land that cannot be developed, there is land that ought not be developed. There are critical resources in town that currently have no protection, but their loss would fundamentally change the character of town for the worse. To date, these resources haven't risen to a level of importance to warrant regulation. Future ordinances should include explicit protection and require best use for all these critical resources.

Agricultural Soils

It's been evident to farmers for the past 150 years that Tamworth is not blessed with the best farm soils. In addition, some of our "prime agricultural" and "soils of statewide importance" are also considered "very highly developable" and "highly developable," creating a conflict as to best use.

Agriculture has long been an important part of the economic, social, and cultural fabric of the state. One of the main goals of the master plan is "preserving rural character." Rural character of the landscape is epitomized by the traditional village center, surrounded by a landscape of working farms and open space. The character of the community is exemplified by people seeking to hold onto and promote the traditional rural or small-town values of family, community, independence, responsibility, self-governance, conservation, entrepreneurship and strong work ethic. In order to preserve the landscape, and those community values, and protect the right to farm, it is recommended that the town adopt agricultural incentive zoning ordinances. This recommendation is supported by the survey data citing a significant majority of respondents favoring land preservation and protection.

Aquifer

Tamworth is fortunate to sit atop the largest stratified drift aquifer in New Hampshire. However, this location brings risk. Stratified drift aquifers are high yield aquifers that can quickly recharge with rainwater and snow melt. But they are also vulnerable to easy contamination and degradation. The unconsolidated sand and gravel material left by the glacier, which creates this great resource, also makes ideal building sites. So it's no surprise that most of Tamworth's built environment, and large parts of potential commercial and village districts, are right over the aquifer.

The available protection mechanism under state law is to create an Aquifer Protection Overlay District, and a set of regulations prohibiting uses that cannot be safely located over an aquifer. Given the location and extent of existing development, this will be challenging.

Since the majority of residents in town rely on private wells without routine monitoring, there's no way of knowing about existing water quality problems. But houses and businesses in Tamworth Village, dependant on the Lakes Region Water Company, are all too

familiar with the impact of recent water quality issues. The contamination of the town water supply, which prevented use in 2004, and again for several weeks during the summer 2007 season, disrupted lives and cost businesses time and money.

Water is a precious resource, but its value is wholly dependant on purity. For Tamworth, the biggest threat is to quality, not quantity. It would be completely impractical to relocate existing development, but without action, we are all vulnerable to potential contamination sources.

The NH Department of Environmental Services administers the Drinking Water Source Protection Program, which provides regulatory and non-regulatory tools to protect groundwater and sources of public drinking water. Regulatory tools include zoning ordinances, site plan review regulations, subdivision regulations, and a drinking water source protection plan. Non-regulatory approaches include household hazardous waste collection, best management practices, and public education.

Many New Hampshire municipalities rely on inspection programs to protect their groundwater resources, and require Best Management Practices (BMP), which are common-sense practices that apply to the storage, handling, and disposal of regulated substances. Locally, the Green Mountain Conservation Group has a program to identify potential contamination sources (PCS) and provide education to both the businesses involved and interested municipal officials.

Given the growing importance and value of pure water as a commodity, Tamworth is ideally situated. Exported water could be a tremendous financial resource for the town given that water is a renewable natural resource and the quantities that are available locally. A safe water supply is critical to survival. But protection requires zoning, and creating an overlay district.

Cultural & Historic Resources

Tamworth has many examples of the preservation of cultural or historic resources through moving and recycling old buildings. The Town House originally stood on the corner of Hollow Hill and Cleveland Hill Roads. The Willow Inn became the town office and Tamworth Community Nurse Association building. The Barnstormer's Theatre had been Cook's and then Kimball's store. The school at the four corners became a day care, laundry, post office, and is now the UUFES Church. The Chocorua Grange became the historical society building and is now a commercial building.

All these changes were driven by economic incentives. It makes Yankee sense to reuse an existing building. If not given pro-active consideration, preservation of historic resources can be an accidental by-product of change, or not occur at all. Registering buildings or districts on the National or State Register does nothing to insure they will be protected.

87% of survey respondents felt Tamworth should encourage historic preservation. Establishing a Historic/Heritage Commission would be the first step toward designating a Historic District(s) and developing an ordinance, appropriate for Tamworth, that would protect cultural and historic resources.

While there are examples of towns with historic district regulations that are overly restrictive, problematic, and counterproductive, that doesn't mean Tamworth needs to follow a bad example.

Heritage commissions do for cultural resources what conservation commissions do for natural resources. Historic districts are a strategy for preserving the character of the community and the tax base, while respecting changes that add architectural richness and visual variety to the town.

Scenic Views

Because Tamworth lies between the Ossipee Mountains and the Sandwich Range, we are blessed with magnificent scenic views. This Master Plan identifies the same 15 Significant Scenic Views that were identified in the 1995 Plan. The loss of any would diminish the town. Over 80% of survey respondents favored protecting land for view sheds or scenic views.

The town has adopted a scenic road ordinance, making every road in town a scenic road. However, this law has an unintended consequence. The ordinance actually restricts cutting trees along roads. The identified scenic views are all places where it is the absence of trees, not their presence, which creates the scenic view.

The Comprehensive Shoreland Protection Act (CSPA) also threatens scenic views. That most photographed view of Chocorua Lake and Chocorua Mountain will be diminished because of limits on cutting trees in the shoreline buffer area established by the CSPA.

Protecting scenic views requires two actions. The first is adopting ridgeline or steep slope ordinances, to protect the natural appearance of the object of the view. The second is to conserve the areas that are the source of the view, and protect them from being overgrown with trees. Care is required to prevent the unintended consequences of ordinances from destroying that which they seek to protect.

Septic System Sites

In order to accommodate the desired village density of future growth, community septic systems with adequate capacity are needed. The septic planning for the Main Street project in Tamworth Village is a good example. Creating a community septic system allowed existing homes and businesses to remain, and expand, in the village. The system, however, does not have sufficient capacity to accommodate all the new users in that geographical area. The system was privately funded by the Main Street project, and is owned by the Tamworth Village Association. Careful planning will be required so the town can concentrate desired growth in village centers without septic system capacity being a limiting factor.

Septage disposal in New Hampshire is primarily dependent upon wastewater treatment plants. State law RSA 485-A:5-b requires municipalities to provide or assure access to septage disposal for residents. Tamworth is one of only 38 towns that have no facility, and no agreement with another town to insure access. Presently many of the state's wastewater plants are nearing their design capacity. Once this point is reached, wastewater plants may restrict septage disposal to only municipalities with signed agreements. This is a situation that could cause waste from towns that do not have agreements to be diverted to facilities further away.

Unfragmented Blocks

A large part of Tamworth's rural character is sustained by unfragmented blocks of land. These areas provide wildlife habitat, recreational opportunities, and scenic views. It is hard to craft ordinances to protect unfragmented blocks, but their loss would destroy the town's

rural character. It requires a larger view, directing development to village centers, and preserving existing large areas for agriculture, forestry, and open space.

Smart Growth

Principle #1 - **Maintain traditional compact settlement patterns** to efficiently use land, resources, and investments in infrastructure;

Principle #2 - **Foster the traditional character of New Hampshire downtowns, villages, and neighborhoods** by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life;

Principle #3 - **Incorporate a mix of uses** to provide a variety of housing, employment, shopping, services, and social opportunities for all members of the community;

Principle #4 - **Preserve New Hampshire's working landscape** by sustaining farm and forest land and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts;

Principle #5 - **Provide choices and safety in transportation** to create livable, walkable communities that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles;

Principle #6 - **Protect environmental quality** by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of communities and people in New Hampshire;

Principle #7 - **Involve the community in planning and implementation** to ensure that development retains and enhances the sense of place, traditions, goals, and values of the local community; and

Principle #8 - **Manage growth locally** in the New Hampshire tradition, **but work with neighboring towns** to achieve common goals and address common problems more effectively.

"Every man holds his property subject to the general right of the community to regulate its use to whatever degree the public welfare may require it."

~ Theodore Roosevelt

Next Steps

Sprawl

To paraphrase Justice Potter Stewart, sprawl is hard to define, but “I know it when I see it...” A definition of sprawl given by Attorney H. Bernard Waugh, Jr., Chief Counsel for the New Hampshire Municipal Association, is “inflation, over time, in the amount of land area consumed per unit of human activity, and the degree of dispersal between such land areas, brought about as the avoidable consequence of society's use of automobiles.” In simpler terms, sprawl is characterized by housing not located within walking distance of any retail venue.

Unfortunately, Tamworth's growth since the first Master Plan is symptomatic of sprawl, as described by David M. Theobald in *Quantifying Urban and Rural Sprawl Using the Sprawl Index*: “dispersed development outside of village centers along highways and in rural countryside.”

In 2002, when the NH Legislature revised the laws defining master plans, they acted because the state's rapid growth was negatively impacting the look and feel of New Hampshire. They offered a set of tools for achieving Smart Growth. Those tools value long-range, regional considerations of sustainability over a short-term focus. The goals of Smart Growth are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.

The most widely used tool for achieving smart growth is the local zoning law.

Community Profile

Zoning has, historically, been quite divisive in Tamworth. Before drafting another land use ordinance, it's recommended that Tamworth engage in the Community Profile exercise, as offered by UNH Cooperative Extension, or some equivalent forum for consensus building. The Community Profile is a grassroots visioning and action planning process facilitated by UNHCE staff. The Community Profile's methodology allows community members to work collaboratively to define current reality, put forth a vision, discuss their community in the context of concrete components, identify issues, hold civilized discussions in a neutral forum, democratically ascertain priorities for the immediate future, and construct action plans to attain community-defined goals.

Build-Out Analysis

Most towns include a build out analysis as part of a master plan. It is an analysis of developable land to determine the pattern of residential and non-residential development that could occur at the municipal and regional level, based on current zoning regulations, and with existing physical constraints. A build-out analysis identifies the community's total capacity for growth and development.

Since Tamworth currently doesn't have zoning regulations, a build-out wasn't done as part of this master plan. It is recommended that a build-out analysis be done for different scenarios, as part of any proposal for land use regulations.

Cost of Community Services Study

A Cost of Community Services study has been done for a dozen different New Hampshire towns. These studies categorize property by class (residential, commercial/industrial, or open space) and then document tax assessments and the cost of services attributable to each. Such studies help inform residents and planners about the impact on the budget that growth in each category would have for taxpayers. These studies show that open space, even when taxed at current use rates, pays more than the services it requires. Residential properties cost towns more than they generate in tax revenues. Even commercial/industrial development costs more than it generates, when considered over the long term. While the results have been consistent in all previous cases, across diverse regions of the state, and in different size towns, there are some in Tamworth who still hold conclusions contradicted by the study results. Perhaps this is because it seems counterintuitive that increasing revenue won't solve the problems of high taxes.

A Cost of Community Services study in Tamworth would help as the town grapples with its high tax rate, and when considering ordinances that would encourage certain types of growth. It is recommended that such a study be completed as part of considering any land use ordinance. Cost of Community Services studies are typically conducted by UNH Cooperative Extension specialists, or by consultants, but they could also be done by residents using guidelines available from the American Farmland Trust.

Ordinance Review

A committee of representatives from the select board, planning board, and conservation commission is reviewing all town ordinances and procedures to make sure they are in compliance with current state laws and statutes and to consider updating procedures for coordination among the different boards.

In November 2007, the Ossipee Watershed Coalition presented the planning board with a *Natural Resources Planning Guide*, which contained nine different model ordinances. It's recommended that the *Natural Resource Planning Guide* be used to create a gap analysis, identifying areas where town ordinances don't incorporate the current state of the art for land use planning. Further, these model ordinances should be used in any revision of ordinances recommended by the committee.

Districts

Village District

Based on the Community Survey and the Land Use Forum, it is recommended that four village districts be designated: Tamworth Village, Chocorua Village, Whittier Village, and South Tamworth Village.

Wonalancet has historically been considered one of the five villages in Tamworth, but it actually consists of land in four towns: Albany, Sandwich, Tamworth, and Waterville Valley. Any recommendation to designate a village district would require coordination with the planning boards and voters of those other towns. Much of the land in the heart of Wonalancet is protected by conservation easement, precluding further development, as is the adjacent land, which is part of the White Mountain National Forest. More importantly, the Wonalancet Preservation Association holds conservation covenants on much of the

remaining land, specifying agreements with the owners on land use decisions for the area. For these reasons, it is not recommended that the Tamworth Planning Board designate a village district in Wonalancet.

Village Districts are areas where land use occurs at the greatest densities in town. Villages concentrate single and multi-family residential uses, certain commercial uses, civic uses, and open spaces, allowing people living in the village area to walk to stores and to other businesses. Mixed uses exist in close proximity to one another, and will be encouraged in the future. Site plan review should be adopted to provide careful controls that ensure new developments are compatible with adjacent architectural and nearby land use patterns.

Commercial District

Based on the Community Survey and Land Use Forum, it is recommended that a Commercial District(s) be designated.

Commercial Districts provide land in appropriate locations for general commercial, office, and light industrial uses. The intent of these districts is to reserve suitable land for the location of new industry, in areas where business development is already in place, or where the current or historical use is of a business nature. Commercial Districts are important to improving employment opportunities and strengthen the economic base of the town.

These districts reserve land for commercial activities and businesses with larger facilities, in controlled areas with supporting infrastructure, and roads providing access for high volume traffic. In order to preserve appropriate land for such uses, residential uses and some other types of commercial and industrial uses should not be allowed in these zones.

Designated commercial districts separate these business uses from residential areas or community facilities, and provide more stringent buffer requirements to isolate them from disturbance or disruption. Appropriate ordinances and site plan reviews should be adopted, to ensure such uses do not adversely affect the natural environment and are not determined to be injurious or hazardous to the public health, safety, and/or welfare.

Rural district

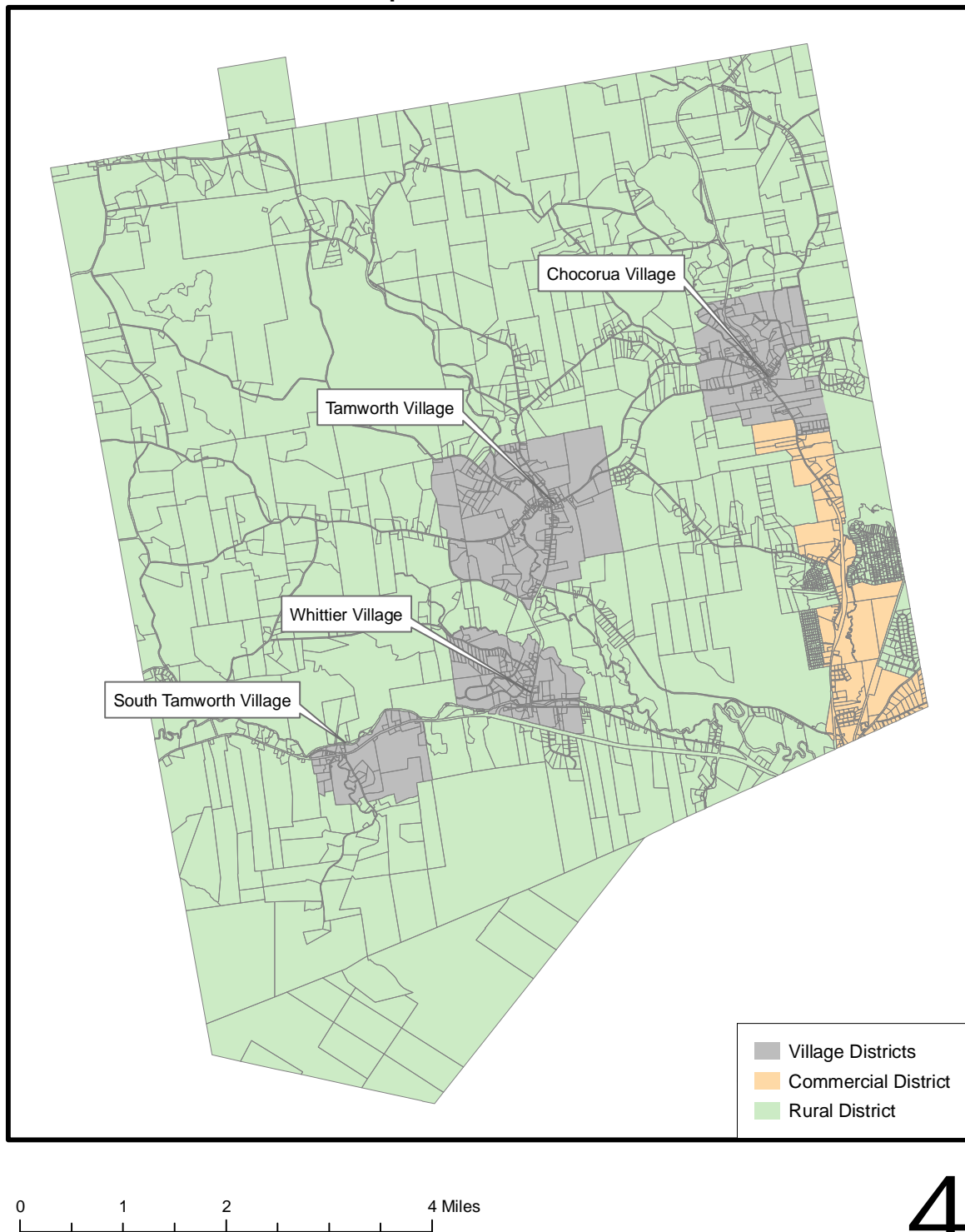
Based on the Community Survey and Land Use Forum, it is recommended that the rest of the town be designated a Rural District.

The Rural District should be established to conserve, as much as possible, the open space, and natural and scenic values of the town's outlying areas, and to encourage a level of development that will not destroy those values.

The Rural District should protect the town's rural resources; timber harvesting and growing areas, agricultural areas, natural resource bases, recreation areas, open spaces, and scenic views. It should maintain a rural land use pattern with large contiguous open space areas, farmland, land in the current use and other forest land, land in which the predominant pattern of development consists of homes and compatible, non-intensive, home occupations, and businesses interspersed among large open spaces.

These areas are generally rural now, without public sewer, and it is proposed that they remain in a very low density of development in order to prevent future problems. Site plan reviews should be used to provide careful controls to ensure the compatibility of future development, in accordance with the physical capability of the land.

Proposed Districts



Map 4.20 District Map

4.5 APPENDIX

THE TAMWORTH MASTER PLAN MEETING MINUTES for THE LAND USE FORUM ON NOVEMBER 3, 2007

THE LAND USE FORUM, Kenneth Brett School,
Saturday, November 3, 2007, 8:00 a.m. to 12:15 p.m.

Egg-Bake Breakfast

The Land Use Forum began with a delicious egg-bake breakfast.

Special thanks to community volunteers, Jack Waldron, Katy Thompson, Dennis Quinn, Chele Miller, Peg Loughran, Jennifer Hocking-Wiley, Ann Albrecht, and Brett School employees, Susan Ricker and Alan Thurston who organized and cooked the breakfast.

Many thanks to community donors who included Ann Albrecht for jam; Thad and Amy Berrier for onions and broccoli; Jen Buzzell, Grammy Gordon's, Tamworth, for bread; Peg DeLong, Stonehedge Farm, Tamworth, for eggs and jam; Dunkin' Donuts, Tamworth, for cups, napkins, creamers, sugars, and other supplies; Peter and Charlotte Goodson, Rivendell Natural Foods, Chocorua, for bacon and butter; Peg Loughran for bread; Hannaford's, Ossipee, for cups and napkins; The Other Store, Tamworth, for paper goods and vegetables from the Booty Farm, Sandwich; Remick Farm Museum, Tamworth, for pork; Kelly Rines, Honey's Delight Bakery, West Ossipee, for bread; Betty Schneider, Scandinavian Bakery, Chocorua, for bread; and Elizabeth Wiesner for butter.

The Egg-Bake was cooked in Sunnyfield Bakery's brick oven, Wonalancet.

The original estimate for the cost of the breakfast was in the range of \$250 to \$300. However, because of the generous donations from the community, the final cost was \$98.66.

Land Use Forum

Tom Peters, Chairman of the Tamworth Master Plan, convened the Land Use Forum at 9:00 a.m. for the 44 people in attendance. Tom explained to the gathering that the State of New Hampshire mandates two parts of the Master Plan: The Vision Statement and Land Use. A Vision Statement Workshop was held on September 8, 2007, which began work on a series of drafts, the last of which was included on the back of the Land Use Forum Agenda. Tom further explained that the Land Use Section should be a guide as to how land in Tamworth should be used in the future.

Tom introduced the two Forum facilitators: Jeff Taylor and Steve Whitman. Jeff Taylor has been a Land Use Planner for 30 years. Steve Whitman has been working with Tamworth on planning for 10 years.

David Little briefed the group about the Vision Statement which was done with Steve Whitman's help at our September 8, 2007 workshop. The Vision Statement has to reflect three things:

- The Community Survey Results
- The Town of Tamworth
- Steps for Improvement

The Vision Statement includes four areas which reflected the community vision, overall.

David invited any and all participants to join the Master Plan Committee at the next meeting which was being held on Tuesday, November 6, 2007, at Cook Memorial Library at 7:00 p.m. People are needed, he said, to do research, to write, and to proofread.

David thanked the Tamworth Foundation and the Green Mountain Conservation Group for financially supporting this event.

Tom Peters also thanked David Little for providing the Forum with so many large and detailed maps.

Jeff Taylor

Facilitator Jeff Taylor started off the discussion by providing the group with a brief explanation of the process, which he called "Quick Master Plan 101."

Of the two pieces mandated by the State of New Hampshire, Jeff said, the Vision Statement is where the town wants to go (in glowing statements). The Land Use Section is a sketch on how the vision will look on the ground. It is the Planning Board that adopts the Master Plan.

What does the Master Plan control? It controls nothing and it regulates nothing. It is a policy document. It is a reinforcement of the town's investments, and the Planning Board should use the Master Plan to look at future investment.

The Master Plan denotes tone, policy, and direction. Various public boards should use this document as a guiding light.

New Hampshire is growing, and so is Tamworth. In 1980, Tamworth had a population of 1,700 people. In 2000, the population was 2,500 people. According to U. S. census forecasts, it appears that Tamworth will have over 630 new residents between the year 2000 and 2020, increasing the town's population to 3,140 year-round residents.

For Tamworth, the anticipated figures are as follows:

- 270 new year-round homes.
- 130 new seasonal homes.
- 36 new businesses will be added to the 70 businesses that are already here.

Thus, growth is coming to Tamworth. We can either be passive or proactive.

Groupings

The 44 people present at the Forum were divided into 4 groups. The Brett School accommodated the Forum by opening up the library and classrooms for breakout rooms. Each breakout room was provided with a large map, markers, and round, colored stickers representing new year-round homes, new seasonal homes, new retail trade, and new business centers.

Each group was assigned the task of wearing two hats: first as a conservationist and second as a developer.

As a conservationist, the task was to see if there was anything else in town that needs to be protected.

As a developer, the task was to decide where 400 new housing units should go. Also, what kind of housing should be included? Should some be low-income housing? Should there be housing near protected areas?

Should Tamworth's retail centers be reinforced?

This exercise was meant to give Tamworth citizens a direction about where to go. It was an activity to get people thinking in a proactive fashion.

Two rules were given to each and every group. All the dots had to be used, and all the dots had to be in Tamworth, not in surrounding towns.

Group members were also encouraged to draw on the maps with the markers. Conservation lands and wetlands were pointed out as places that could not be built up, although steep slopes could be. Also, aquifers were not to be considered good places to build.

A question was raised about local aquifers and our connection to surrounding towns in terms of fresh water. The answer is that 27 towns are affected by local aquifers. Thus, building should be encouraged away from these locations.

Themes from the Groups

After the groups reassembled after their breakout sessions, several themes emerged during the various group reports and are listed below:

- Conservation corridors through town.
- Environmental corridors which include compatible human activities, such as agriculture, forestry, and some level of recreation.
- Cluster and affordable development of housing near village centers.
- Cluster businesses that look more like houses.
- Businesses established in the village centers of Chocorua, Tamworth, Whittier, and South Tamworth.
- Heavy emphasis on the revival of the Whittier business area.
- New business centers that are not strips.
- Development of cottage industry, high tech, and light manufacturing.
- Value added concept: process lumber and other goods here instead of elsewhere.
- The promotion of local entrepreneurship .
- Reliable clean water.
- Concentrated development near West Ossipee, consistent with what is going on in West Ossipee.
- The preservation of rural views and agriculture.
- Bearcamp Corridor for agriculture.
- Conservation of steep slopes.
- Protection of the aquifers the same way as wetlands.
- Existing infrastructure upgraded rather than building new.

Techniques and Strategies

The question was raised if the Land Use Forum was an exercise to prepare the way for zoning.

The answer to the question is: not necessarily. Wolfeboro, for instance, has a Set of Standards to follow rather than zoning. The standards are recommended, but, at the end of the day, the people are free to do what they want to do.

Zoning could also be two districts: business and everything else. It was pointed out that in various sections of the survey, 70 percent of the people of Tamworth, who filled out the survey, wanted zoning.

Zoning and regulatory themes will naturally fall out from such as exercise. The Forum facilitators recommend that Tamworth set the bar at a level which can be approved.

Tom Peters thank everybody for the productive morning, and the Forum came to a close at 12:15 p.m.



Future Land Use Exercise for Tamworth, New Hampshire

Saturday, November 3, 2007

Background

Citizens in Tamworth have been working hard on a new Master Plan and on a Vision for their community in the Year 2020. They have identified several major themes that they hope will be reflected in the patterns of development in that year. Key among them are that:

The small town, rural atmosphere and sense of community in Tamworth will be intact, and even stronger in 2020.

New business opportunities will have be plentiful and the natural resource base has been protected.

Residents and businesses will continue to be good stewards of local resources, adopting sustainable patterns of consumption and development wherever possible.

Housing and infrastructure will be safe, diverse, efficient, and of a high quality.

These are all wonderful goals. In order to achieve them, the community will need to be responsive to the dynamic environment that represents change in the region, in the State, and across broader horizons.

The purpose of today's discussion and exercise is to understand some of the dynamic forces that will be at play, and to devise some strategies for dealing with them. We will discuss some likely trends, and then ask you to envision yourself first as a *Conservationist* and a protector of Tamworth's important resources. Then, as a responsive and responsible *Developer*, we will ask you to begin to think about the nature and location of new infrastructure and development that will be needed to accommodate new residents seeking to come to Tamworth.

First the trends:

Population/Housing/Employment Trends

In the twenty years between 1980 and 2000, Tamworth increased its year round population by 50%, from 1672 to 2510 according to the US Census. The State and Federal agencies estimate that Tamworth's population had increased to 2,520 by the Year 2005, a moderating of growth in the first part of this decade. It is estimated that Tamworth will grow to 3,140 year-round residents by 2020, an increase of 630 new residents and a 25% increase from the Year 2000 figures.

In 2000, Tamworth had an average household size of 2.33 people, a pretty typical figure for New Hampshire communities. Using that figure, and the population increases anticipated between 2005 and 2020, Tamworth will need to accommodate approximately 270 new year-round homes by 2020.

In 2000 Tamworth included a total of some 1,662 housing units, distributed as follows:

Owner Occupied	791 units (48%)
Renter Occupied	283 units (17%)
Seasonally Occupied	526 units (32%)
In transition/etc.	<u>62 units (3%)</u>
	1662 units

If those ratios continue, in addition to the 270 new year-round homes, Tamworth will likely see the development of an additional 130 new seasonal homes by 2020.

Since 1998, the US Census Bureau and other federal agencies have worked to provide *private* employment statistics for all communities, both by size of business and by type of business activity. The figures that are available for Tamworth are as follows:

<u>Year/Business Size (people)</u>	<u>1-4</u>	<u>5-9</u>	<u>10-19</u>	<u>20-49</u>	<u>50-99</u>	<u>TOTALS</u>
1998	26	11	10	1	1	49
2000	31	8	5	3	1	48
2005	43	12	10	2	0	67
TRENDS	+36	S T E A D Y at +/- 21				
2020	79					100

Thus business growth trends would indicate that there might be as many as three dozen new businesses in Tamworth by the Year 2020. Most of these would likely be small, perhaps home-based businesses, while others might be employing a handful of people.

The Exercise

Think about the elements contained in the Vision, and then think about these potential development forces that may be coming into play in Tamworth. Working in small groups, take a hard look at the maps of Tamworth (to be provided on Saturday).

First, as a Conservationist, take a look at the map. Of Tamworth's important natural resources (ponds, lakes, shorefronts, critical views, aquifers, etc.!), which ones are already protected?

Is this sufficient for achieving the Vision? Are there other elements that might be needed?

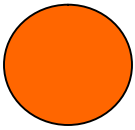
New trails linking existing, protected parcels? New parcels?

New protections? Aquifer protection ordinances?

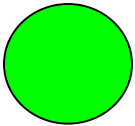
Control of development on steep slopes? Etc. Etc. Etc.

TAKE A MARKER AND ADD ANY ADDITIONAL AREAS/PROTECTIONS THAT YOUR GROUP AGREES WOULD BE USEFUL IN HELPING TAMWORTH ACHIEVE ITS VISION!

Then, as a Developer, think about the new homes, roads, businesses, and other development that will be needed to accommodate the new growth that is arriving in Tamworth.

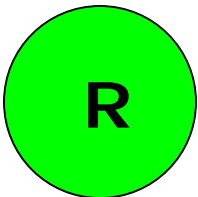


Where should that new development occur? You and your group are the developers for this exercise. You will be provided with 27 small orange dots. **EACH SMALL ORANGE DOT REPRESENTS 10 NEW YEAR-ROUND HOMES.** Place those dots where you think development would be most appropriate. Make whatever recommendations you wish, by adding notes to the map (these should be small, in-town homes on a common leach field. These homes should be clustered at the edge of a field, leaving the balance of it open forever with the view preserved. ETC.)

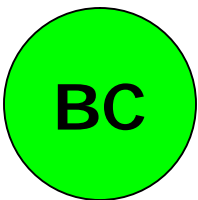


Now for the seasonal homes! You and your group will be provided with 13 small green dots. **EACH SMALL GREEN DOT REPRESENTS 10 NEW SEASONAL HOMES.** Place those where you think they should occur, again making whatever notes and recommendations you think are appropriate (Homes should be clustered. Homes should be setback from the waterfront behind a continuous vegetative screen. ETC.)

And new businesses. The forecast is that you will likely see some three dozen. Most will likely be very small, perhaps home based businesses. **Do you have any thoughts about additional controls on home-based businesses you would like to promote, either regulatory or voluntary? Make some notes on the plan to record these ideas.**



Some of the new businesses may be retail or commercial. **Are there village centers/cross roads, etc. Where you would like to see these businesses aggregate? Place a LARGE GREEN DOT MARKED "R" WHERE YOU WOULD LIKE TO ENCOURAGE RETAIL TRADE.** Add whatever conditional notes you think are appropriate (Buildings at a village scale, attractively landscaped, ETC.).

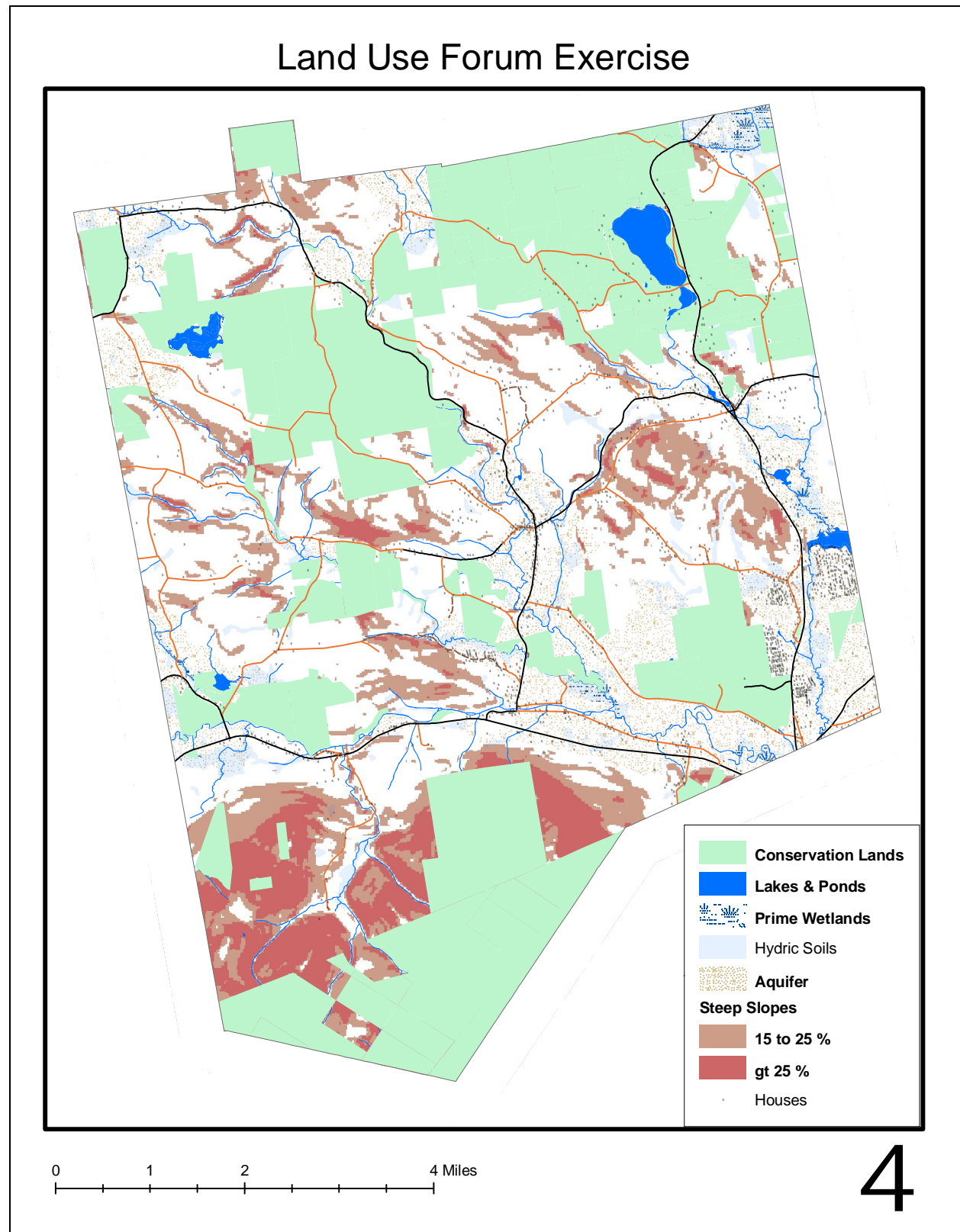


Some of the new businesses may be small scale manufacturing or assembly operations. **Are there places where you might like to encourage the development of a business park, whether for manufacturing or maybe even some offices? PLACE A LARGE GREEN DOT MARKED "BC" WHERE YOU WOULD LIKE TO ENCOURAGE BUSINESS CENTERS.** Again, add whatever conditional notes you wished (Noise/dirt/dust minimal, noise contained within structure, ETC.).

Finally, have your group prepared to come before the entire audience of all the groups to explain your thought process and decision-making discussions.

THE TAMWORTH CITIZENS OF THE YEAR 2020 THANK YOU IN ADVANCE FOR
YOUR VISION AND GOOD PLANNING EFFORTS!

Revised 11/2



Map 4.21 Land Use Forum Exercise

TAMWORTH FUTURE LAND USE EXERCISE

November 3, 2006

Reporting from groups:

Group 1

- Identified key conservation areas.
- Connections between conservation areas.
- Along the west side of Tamworth they identified a north/south “Biological Corridor.”
- Identified a Bearcamp River corridor and Aquifer area.
- The identified corridors can support some compatible development with sensitivity to the resources.
- Cluster some housing near existing village centers.
- Created themes of clustered and affordable units throughout.
- Support existing business in centers.
- New development should not be in strips.
- Businesses should be controlled if over an aquifer.
- Promote green businesses, maybe with controls.
- Start Whittier redevelopment somehow.
- Future water source to be protected.
- Need criteria to control development in conservation corridors.
- Trail system looping through town.
- Clusters near conservation areas or in cooperation with protection.

Jeff Taylor – suggested having a conversation with Ossipee once a draft Land Use plan is available to coordinate visions for land in and near West Ossipee.

Group 2

- Conservation – link Sandwich Range to Ossipee Mountains along west side of Tamworth.
- Corridor along Route 25 – rural, river and farmland corridor reflecting the vision statement with some housing units tucked in.
- Businesses – no strip business development, instead cluster businesses in structures that have the same character and scale as houses.
- Place businesses and housing together.
- Focus on existing centers – South Tamworth, Whittier, Tamworth Village (land behind Town Hall and in Brox pit), and Chocorua Village.
- Residential should be clustered – like Remick Acres and Chocorua Meadows which are not eyesores and are easier to provide services to.
- South side of Route 25 for some housing.

It was noted that this group placed housing dots on the west side of Tamworth. They felt rushed at the end and placed them there. Also felt that lots of people from town will not participate in this discussion, and that implementation of these ideas will be hard to do without an ordinance.

Group 3

- Looked at protection of human wildlife (dark skies, etc.) and animal wildlife.

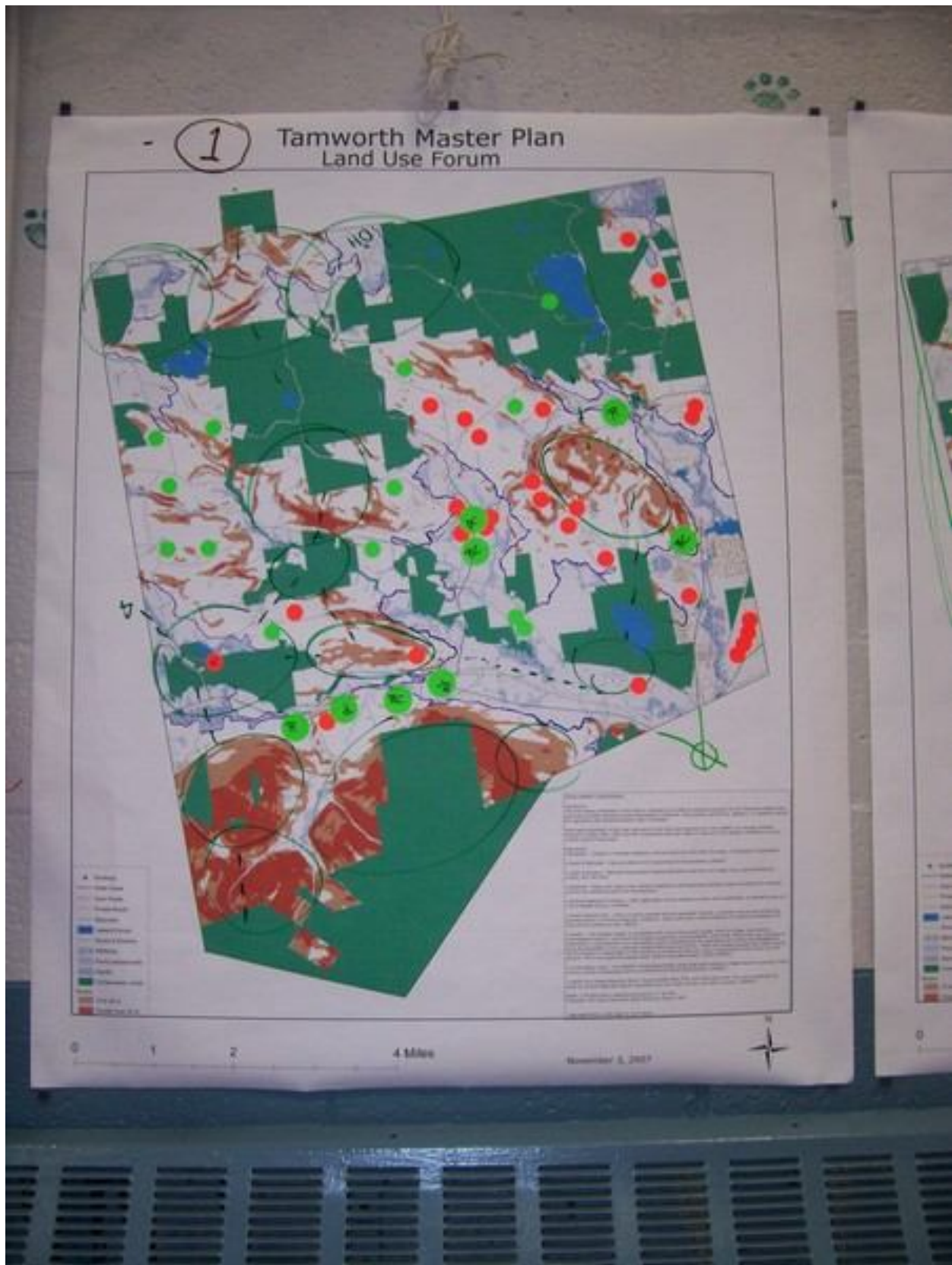
- Designated the west side of Tamworth as a wildlife corridor.
- Interested in tools like cluster housing and clustering businesses.
- Looked to protect steep slopes.
- Protect aquifers and regulate the development that happens on them.
- Treated seasonal and year-round units the same.
- Clustered development where possible.
- Located clusters near villages with affordable housing units.
- Whittier could accommodate businesses, housing, and be walkable.
- Suggested an agricultural land corridor near the Bearcamp.
- Identified other areas to protect in Tamworth.
- Identified 3-4 centers for development activity.

Group 4

- Identified conservation land along the west side of town.
- Identified agricultural land in the Bearcamp River Corridor.
- Aware of land being fragmented, and want to accommodate future development without fragmentation.
- Cluster development in the village areas – Tamworth Village, So. Tamworth, Whittier (Rediscover Whittier!), and Chocorua.
- More intense clustering.
- In the villages provide areas for farming and for development with green spaces within them.
- Seasonal units scattered around town.
- Conservation land is very appealing to those looking to own seasonal property in Tamworth.
- Small cottage scale home business activity.
- Business centers on Route 16 and 141 that include incubators, and opportunities for value added businesses making use of local wood and other resources.
- Build on existing infrastructure.
- Reduce transportation needs.
- Sustainability – local food and products.
- Green businesses.
- Diversify the economic base.
- Regulations for residential development and conservation.
- Transitioning infrastructure – heating and transportation.

At the conclusion of the group reporting there was a discussion on how to use the master plan to implement these ideas. It was explained that this data, along with vision and other master plan chapters, should be used to articulate a Future Land Use Plan and then the necessary implementation actions needed to work toward this plan. The tools needed to implement the various approaches identified during the workshop could include a variety of regulatory and non-regulatory techniques.

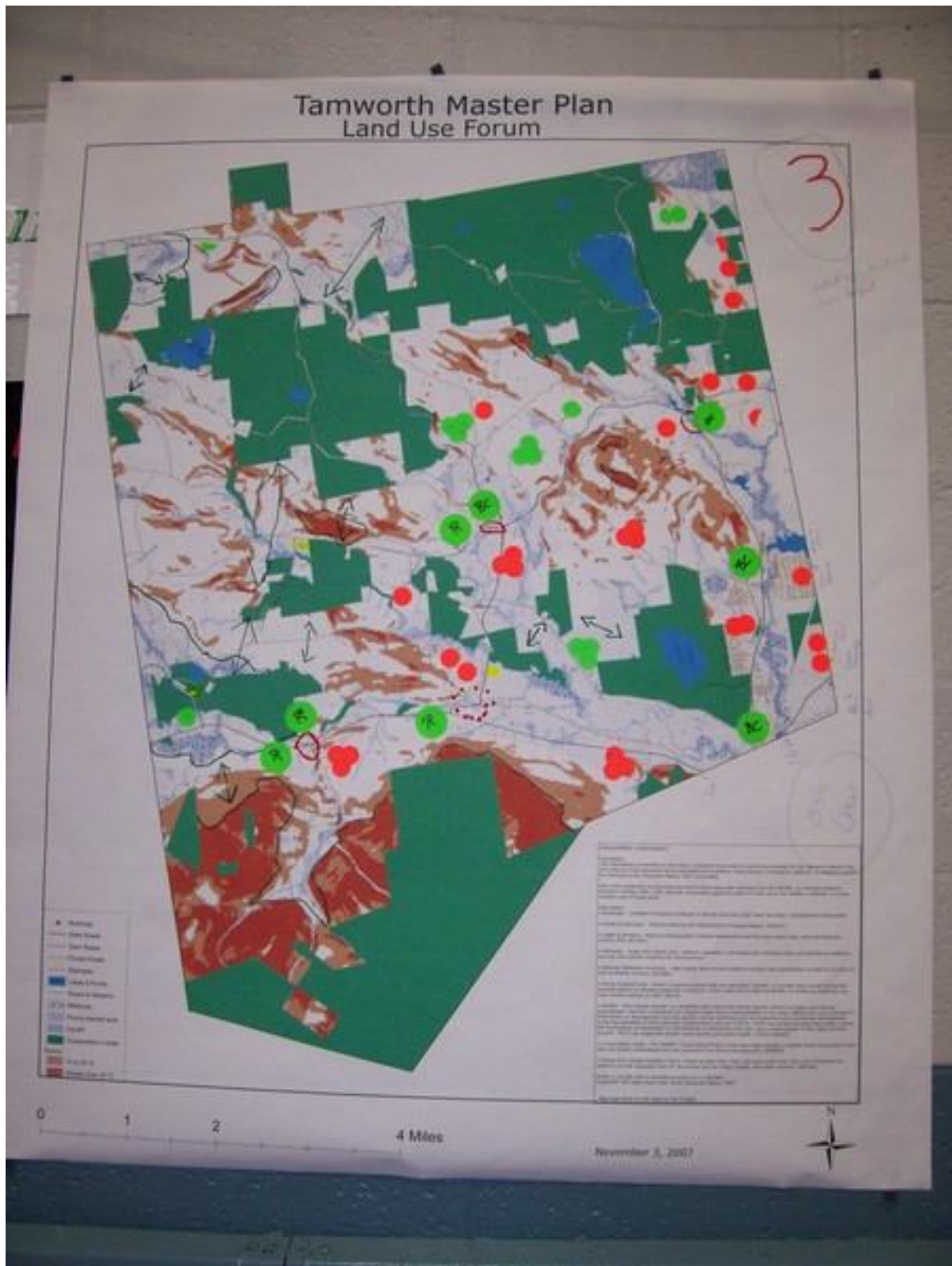




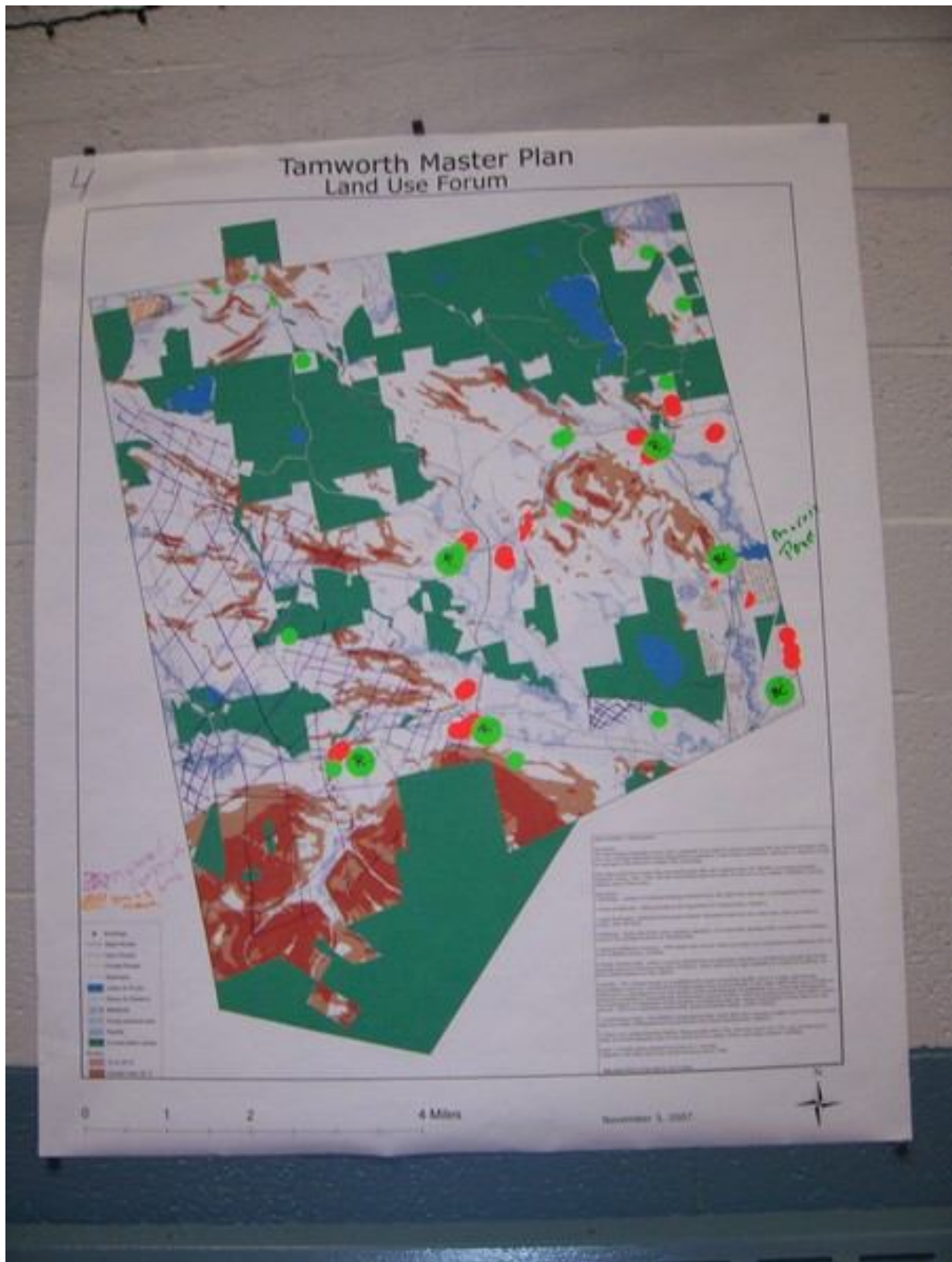
Map 4.22 Group #1



Map 4.23 Group #2



Map 4.24 Group #3

**Map 4.25 Group #4**