

# **Master Plan**

## **For**

# **Orford, NH**

Revised August 2001

## Orford Master Plan                      Table of Contents

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# **1. INTRODUCTION**

Orford Master Plan

Dear Orford Citizens and Property Owners:

The creation of this Master Plan for our community is an opportunity for us to involve all interested persons in a planning process that is working to achieve a common vision of how we want Orford to evolve in the years ahead. If we have a common vision of what we want for Orford, we have a greater likelihood of achieving that vision. Think of this Master Plan as Orford's roadmap to the future.

The New Hampshire Office of State Planning has provided a useful summary of the statutory requirement vis-à-vis this Orford Master Plan. That summary is provided as EXHIBIT I - Statutory Requirements. The reader may wish to refer to it now.

## **History of This Plan**

This Master Plan is part of an ongoing planning process that builds upon previous versions of the plan. The first Orford Master Plan was adopted by the Planning Board in the mid-1970's. The next major revision was adopted Oct. 2, 1989. An updated and substantially expanded plan was adopted Feb. 18, 1991. Each of these previous plans was adopted after a public process that worked for community agreement.

Work began on this update of the plan when a community questionnaire was mailed in Orford early in 1999. Results of that questionnaire are included as EXHIBIT III - 1999 Orford Master Plan Questionnaire. During the week of May 15-20, 2000, four community meetings were held to obtain relevant information and attitudes concerning the key areas of the Plan. Seventy-six individuals participated in those meetings. A summary of comments at those meetings is included as EXHIBIT II - Summary of Orford Community Meetings.

A draft version of the Plan was circulated to the community May 10, 2001. The Planning Board held public meetings for comment on May 21, 2001, July 16, 2001 and August 20, 2001. Revisions to early drafts were made in response to comments. This Plan was adopted by the Planning Board on August 20, 2001.

This Plan is a public record subject to the provisions of RSA 91-A.

Thank you for your interest -- past, present, and future.

Sincerely,

Orford Planning Board

## 2. AREA MAPS



Figure 1 - Location Map of Orford, New Hampshire

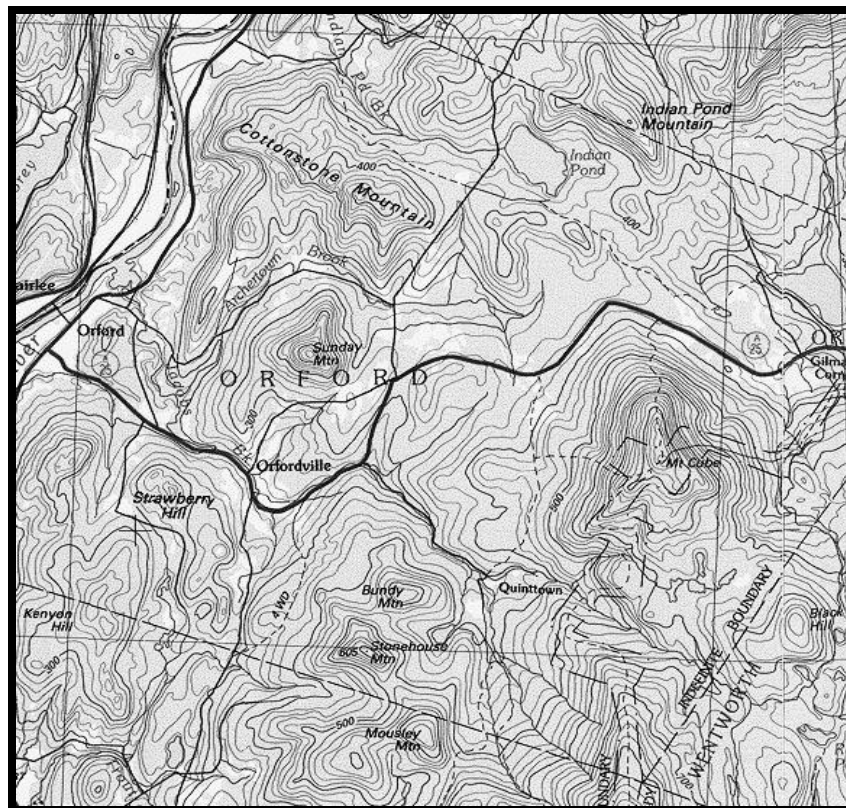


Figure 2 - Topographical Map of Orford, New Hampshire

### **3. GENERAL STATEMENT**

#### **3.1. HISTORICAL OVERVIEW OF COMMUNITY AND POPULATION DEVELOPMENT**

Orford is indebted to historian Alice Hodgson for her research and writing about the early years of our community, "Thanks to the Past", Equity Publishing. More recently the Orford Historical Society has continued that research and documentation and, in early 2001, issued "Back In Time", an historical guide to Orford, NH. Such studies reveal that Orford's first colonial settlers arrived in 1765 and took shelter in a log hut. During the 65 years that followed, all except the most rugged hills were settled for farming. Roads pushed into all the valleys in town. An important turnpike was linked to an early bridge across the Connecticut River and provided access to urban markets to the southeast. This transportation route stimulated commerce in Orford. By 1830, Orford hit its peak population of 1829 residents.

Orford in 1830 was a thriving town with viable farms, numerous water-powered mills, and village centers with shops and roadside inns. During the period of 1775 to 1840, fine homes were constructed in various parts of the town, which now have significant stature in the history of architecture. Notable among these is the group of seven Federal-style homes on the "Ridge" located on Orford's Main Street. An important village center existed in Orfordville that included the Dame Hill neighborhood and the Orford town hall.

However, many farms never developed beyond the self-sufficiency stage, and some of these were occupied for no more than 30 to 40 years. Agricultural production hit its peak from 1835 to 1845.

After 1840, some Orford residents began moving west and to jobs in the larger cities. This loss of population was similar in other rural New England communities and was in response to the industrial revolution and the impact of the Civil War. Farms were abandoned beginning with those that were the most remote and marginal in terms of soils and elevation (climate). Other farms were consolidated in an effort to increase productivity.

During the last decades of the 19<sup>th</sup> century and the early decades of the 20<sup>th</sup> century, efforts were made by the State of New Hampshire to promote new agricultural techniques and to encourage tourism. A number of Orford families took in guests from the city. A local Grange organization was established to support farm families. Children's summer camps began to be set up on the town's scenic mountain ponds. Nevertheless, Orford's year-round population continued its steady decline. In 1890 it was 916; in 1930, it reached its low point of 636 inhabitants.

Although most of Orford's land had been cleared for farming by about 1830, as farms were abandoned, the land began to revert to forests. By the late 1800's, these new forests became an economic resource, and a logging industry developed.

By the late 1930's, some Orford roads had been abandoned. Residents who lived on remote farms experienced isolation, inadequate markets, and, as living standards began to improve in the region after the Depression, a difficult time participating in those improved standards.

Since the 1950's the development of major highways and the ease of automobile travel have had a profound influence on the Upper Valley and Orford. People in Boston and New York found the Upper Valley to be both desirable and accessible for vacations and second homes. They helped create a tourist and recreation industry and stimulated the real estate market. They also brought an expectation about what country and small town living "should be".

Since the 1970's our nation has experienced an out migration from cities to the rural areas thereby reversing a 100-year trend. The ability to live where you want and to take your work with you, due to computers and electronic information processing, is one key factor in this national trend. The Upper Valley has participated in this national trend and has experienced significant population growth. Grafton County's population of 55,000 in 1970 increased to 80,000 by the year 2000.

Major east/west and north/south interstate highways intersect in West Lebanon/White River Junction. This intersection supplemented by the regional airport in West Lebanon is the base for the economic center in the region. Dartmouth College and the Dartmouth Hitchcock Medical Center are the base for the cultural and health care center. Rapid commercial and residential development has taken place in Hanover/Lebanon during the last twenty years including the development of a significant high tech industry. The Dartmouth-Hitchcock Medical Center and the Dartmouth Medical School built new facilities that opened in Lebanon in 1993.

**Population Density in Orford and in  
Selected Communities in the Upper Valley Lake Sunapee Region  
1980 to 2000**

|                 | <b>Land Area<br/>in Square<br/>Miles</b> | <b>Density</b> |             |              | <b>% Increase<br/>1980-2000</b> |
|-----------------|--|----------------|-------------|--------------|---------------------------------|
|                 |  | <b>1980</b>    | <b>1990</b> | <b>2000</b>  |                                 |
| <b>Lebanon</b>  | <b>36.7</b>                              | <b>303.4</b>   | <b>332</b>  | <b>342.5</b> | <b>12.9</b>                     |
| <b>Lyme</b>     | <b>53.9</b>                              | <b>23.9</b>    | <b>27.8</b> | <b>31.2</b>  | <b>30.5</b>                     |
| <b>Orford</b>   | <b>46.7</b>                              | <b>19.9</b>    | <b>21.6</b> | <b>23.4</b>  | <b>17.6</b>                     |
| <b>Piermont</b> | <b>39</b>                                | <b>13</b>      | <b>16</b>   | <b>18.2</b>  | <b>40.0</b>                     |

**Source: US Census and UVLSRPC**

**Table 1 - Population Density**

As rapid development has taken place in Hanover/Lebanon, adjacent communities have also experienced growth. In fact, as the area has grown, the development trend has rippled out to communities that are within 30 to 45 minutes driving time from this commercial and cultural center. The New Hampshire Office of State Planning (NHOSP) reports that in 1998, persons per square mile were as follows: Lebanon (316.6), Hanover (196.2), Lyme (28.7), Orford (22.4), and Piermont (16.9). Even though population growth has rippled out from the center, these numbers show that the density of population continues to be concentrated in Lebanon and Hanover.

Consistent with regional trends, Orford has been experiencing growth. The NHOSP reports Orford's population as follows: 1960 (667), 1970 (793), 1980 (928), 1990 (1008), and 1998 (1039). This growth in population has primarily taken place along Orford's main roads where development occurs most easily. Since this placement of development along frequently traveled roads is highly visible, the feeling of open space and rural character is diminished. To a lesser extent growth has begun to repopulate portions of the town that were abandoned prior to the 1930's.

***Population Growth in Orford and in  
Selected Communities in the Upper Valley Lake Sunapee Region  
1960 to 2000***

| <b><i>Community</i></b> | <b><i>1960</i></b> | <b><i>1970</i></b> | <b><i>1980</i></b>  | <b><i>1990</i></b>  | <b><i>2000</i></b>  |
|-------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| <b><i>Lebanon</i></b>   | <b><i>9299</i></b> | <b><i>9725</i></b> | <b><i>11134</i></b> | <b><i>12183</i></b> | <b><i>12568</i></b> |
| <b><i>Lyme</i></b>      | <b><i>1026</i></b> | <b><i>1112</i></b> | <b><i>1289</i></b>  | <b><i>1496</i></b>  | <b><i>1679</i></b>  |
| <b><i>Orford</i></b>    | <b><i>667</i></b>  | <b><i>793</i></b>  | <b><i>928</i></b>   | <b><i>1008</i></b>  | <b><i>1091</i></b>  |
| <b><i>Piermont</i></b>  | <b><i>447</i></b>  | <b><i>462</i></b>  | <b><i>507</i></b>   | <b><i>624</i></b>   | <b><i>709</i></b>   |

***Source: US Census***

***Table 2 - Population Growth***

Generally speaking, real estate values are the highest near the Hanover/Lebanon center and fall off as driving time and distance from the center increase. Those people who require lower cost housing keep pushing outward from the center in search of more affordable housing. Those people who prefer larger parcels of land also push outward from the center.

Orford is about 30-45 minutes driving time from the Lebanon/Hanover center of economic/cultural activity. Orford is also 30-45 minutes driving time from Plymouth, NH, that has significant services, access to Interstate 93, and Plymouth State College.

In July, 2000 Orford joined with the Vermont communities of Fairlee, West Fairlee and Vershire to form the K-12 Rivendell Interstate School District. The new district has



substantial new school facilities including a new High school building in Orford and two new Elementary School Buildings on the Vermont side of the district. In the future, further development on the Orford site is anticipated. Rivendell has an integrated K-12 curriculum and has already seen increased enrollments. Many are speculating that the attractiveness of Rivendell will cause new population growth in Orford. On the other side of that speculation is the fact that the population of school age children has begun to fall in the region. NHOSP projects the Grafton County total population to increase from 80,000 to 85,000 from 2000 to 2015 but is projecting the number of school age children to fall by 2000 children during that same period.

These NHOSP projections reflect that the aging of America (baby-boomers aging) has begun. Orford will also experience more aging citizens. In recent years some aging citizens have specifically chosen to live on or near Orford's Main Street in order to be within walking distance of daily needs. Some are speculating that Orford and similar small communities will begin to see a migration of the elderly to city centers in order to be close to medical centers and support services--thus running counter to the out migration trends that have existed since the 1970's. This Master Plan will consider special needs of Orford's aging population.

***Percent Change in Population in Orford and in  
Selected Communities in the Upper Valley Lake Sunapee Region  
1960 to 2000***

| <b><i>Community</i></b> | <b><i>% Change</i></b> | <b><i>% Change</i></b> | <b><i>% Change</i></b> | <b><i>% Change</i></b>  |
|-------------------------|------------------------|------------------------|------------------------|-------------------------|
|                         | <b><i>1960-70</i></b>  | <b><i>1970-80</i></b>  | <b><i>1980-90</i></b>  | <b><i>1990-2000</i></b> |
| <b><i>Lebanon</i></b>   | <b><i>4.6</i></b>      | <b><i>14.5</i></b>     | <b><i>9.4</i></b>      | <b><i>3.2</i></b>       |
| <b><i>Lyme</i></b>      | <b><i>8.4</i></b>      | <b><i>15.9</i></b>     | <b><i>16.1</i></b>     | <b><i>12.2</i></b>      |
| <b><i>Orford</i></b>    | <b><i>18.9</i></b>     | <b><i>17.0</i></b>     | <b><i>8.6</i></b>      | <b><i>8.2</i></b>       |
| <b><i>Piermont</i></b>  | <b><i>3.4</i></b>      | <b><i>9.7</i></b>      | <b><i>23.1</i></b>     | <b><i>13.6</i></b>      |

***Source: US Census***

***Table 3 - Population Change***

The growth of the region, the impacts of the new Rivendell School, and the aging of the population are raising questions about land use and the provision of community services.

The Planning Board has heard the following specific concerns from some citizens.

1. While Orford's three ponds have a degree of protection under the New Hampshire Shoreline Protection Act, no similar legislation protects the Connecticut River nor Jacob's Brook. The State is looking to Orford to set appropriate regulation.
2. While all neighborhoods within Orford are historically rural/residential in character, there is no regulation to protect any neighborhood from entry by commercial development inconsistent with residential values.

3. The Planning Board has no way to determine and enforce appropriate lot size, setback, height restrictions nor building density.
4. There are no ordinances regarding preservation of prime agricultural land, scenic vistas, and wildlife habitats/open space.

Those and other concerns are addressed in many other communities by a zoning ordinance. The Planning Board has heard concerns about zoning and potential loss of personal freedoms from some Orford citizens. While zoning has been successful in many areas, the Governor's Task Force on sprawl has recently pointed to the lack of effectiveness of some poorly designed zoning ordinances in parts of the State. The Task Force pointed out the need for expanding the innovative land use control statutes to allow for better mechanisms for guiding and promoting development in the most desirable locations (RSA 647:21). Education and voluntary "best practices" also have an important role. The town needs constructive conversation to learn if there are solutions available that can win broad support.

**Orford Planning Board  
Subdivision Recordings**

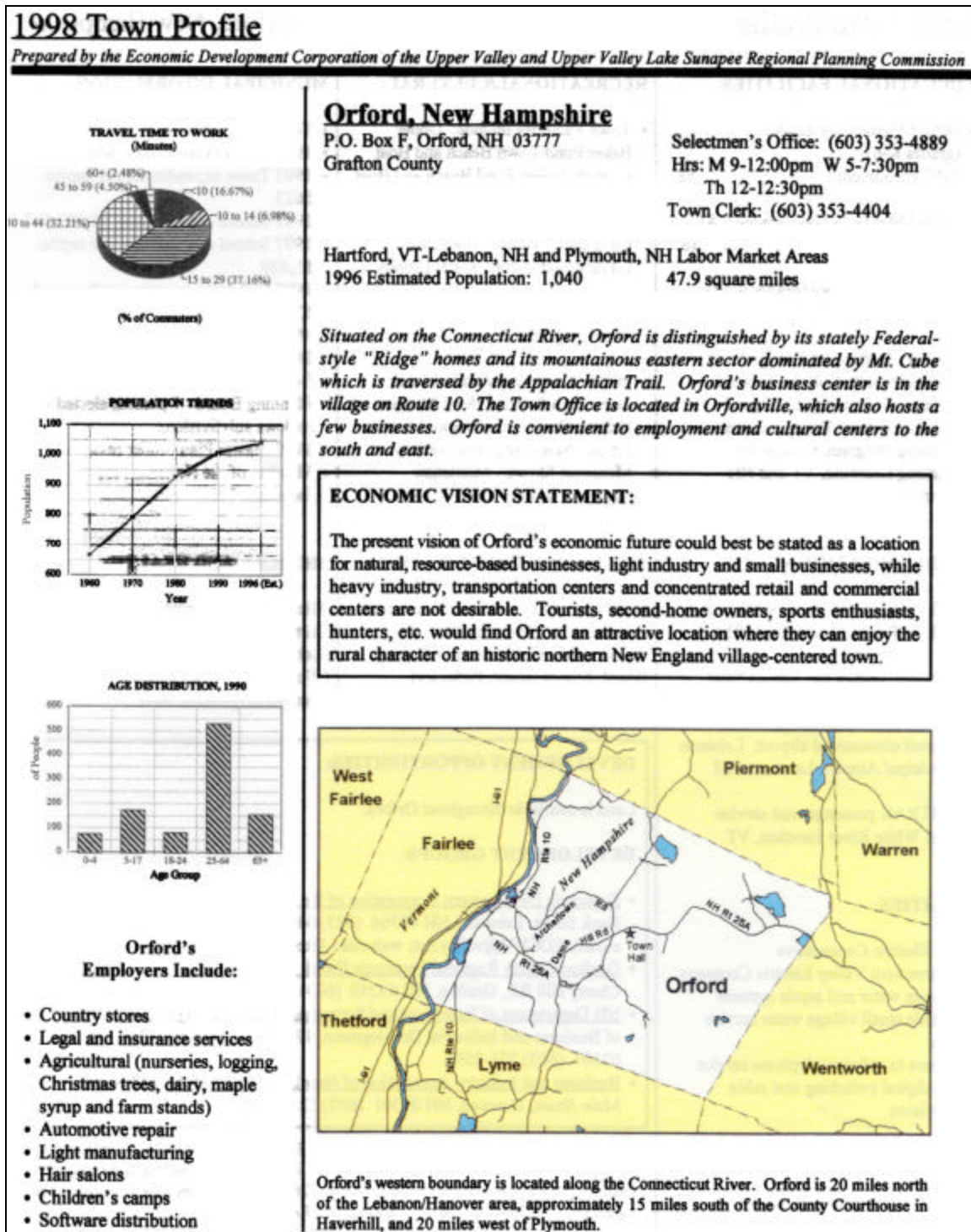
| <b>Year:</b> | <b>Lots Approved:</b>                   | <b>Lots Reduced:</b> | <b>Net Change/Yr.</b> | <b>Cumulative:</b> |
|--------------|---|----------------------|-----------------------|--------------------|
| <b>1985</b>  | <b>(860 lots listed on tax records)</b> |                      |                       |                    |
| <b>1986</b>  |   |                      | <b>14</b>             | <b>14</b>          |
| <b>1987</b>  |   |                      | <b>12</b>             | <b>26</b>          |
| <b>1988</b>  |   |                      | <b>18</b>             | <b>44</b>          |
| <b>1989</b>  |   |                      | <b>12</b>             | <b>56</b>          |
| <b>1990</b>  | <b>7</b>                                |                      | <b>7</b>              | <b>63</b>          |
| <b>1991</b>  | <b>7</b>                                | <b>-1</b>            | <b>6</b>              | <b>69</b>          |
| <b>1992</b>  | <b>4</b>                                | <b>-2</b>            | <b>2</b>              | <b>71</b>          |
| <b>1993</b>  | <b>15</b>                               |                      | <b>15</b>             | <b>86</b>          |
| <b>1994</b>  | <b>19</b>                               | <b>-7</b>            | <b>12</b>             | <b>98</b>          |
| <b>1995</b>  | <b>3</b>                                |                      | <b>3</b>              | <b>101</b>         |
| <b>1996</b>  | <b>5</b>                                | <b>-1</b>            | <b>4</b>              | <b>105</b>         |
| <b>1997</b>  | <b>3</b>                                | <b>-1</b>            | <b>2</b>              | <b>107</b>         |
| <b>1998</b>  | <b>6</b>                                |                      | <b>6</b>              | <b>113</b>         |
| <b>1999</b>  | <b>7</b>                                |                      | <b>7</b>              | <b>120</b>         |

**Table 4 - Subdivision Recordings**

The Planning Board has approved 120 new buildable lots since 1985. Total lots in Orford now stand at 980 as shown in Table 4 - Subdivision Recordings.

From this historic backdrop and the following 1998 Regional Planning Commission Town Profile, this Orford Master Plan is created.

Figure 3 - Orford Town Profile - 1998 - Page 1





## **4. LAND USE**

### **4.1. THE USE OF LAND**

Orford consists of over 29,800 acres of land of which approximately 12,000 are possibly suited for development when soils and topography are considered. Buildings, homes and the immediate yards around them utilize today only about 500 of those acres. Even if Orford continues to grow, it will be some time yet before 2% of the total land is used for development. Even though this use of land sounds modest, some important land-use questions concerning growth and development exist. These questions involve the following:

- Will the excellent agricultural soils be converted to homes and businesses and forever lost for agriculture?
- Will pleasing scenic vistas and the rural feeling that we have come to identify with Orford be lost due to development?
- Will the location of development negatively impact the quality and quantity of ground water resources?
- Will development take place where the town can provide services efficiently?
- Will land continue to be open in sufficient quantity for public recreation?
- Will critical wildlife habitats be destroyed?
- What is an appropriate lot size? Does a minimum lot size sufficiently protect features of concern?
- What considerations surround both existing and new town roads and bridges?
- Will there be commercial development consistent with a rural/residential community?

The 1999 Master Plan Questionnaire (EXHIBIT III - 1999 Orford Master Plan Questionnaire) asked respondents to rank contributing factors to the high quality of life in Orford. The highest scores were:

- Private, quiet and rural
- Unpolluted environment
- Small town atmosphere
- Uncrowded living conditions: low population

### **4.2. LOT SIZING:**

In Orford we have the good fortune of being able to look at the many communities in our state which have in past years already experienced the pressures of growth and who have tried varying approaches to the complex issue of lot size. Numerous towns have been

unsuccessful in maintaining the quality of their community because their original approach to lot size simply did not work when development arrived.

Because of the trial and error that has taken place in other towns across the state, some "state of the art" approaches are now available for Orford to consider. The Planning Board recognizes that this lot size topic is of top importance and suggests two "state of the art" concepts for public discussion and possible adoption. These two concepts are not mutually exclusive and may satisfy Orford's needs best when used together.

#### 4.2.1. Minimum Lot Size by Soil Type

This concept is generally proposed as a mechanism for ensuring adequate water quality when onsite sewage disposal is used. Not all land is equally suited for development -- some land is very steep, some excessively wet, some solid ledge, etc. Some soils percolate wastewater so quickly that impurities such as bacteria, phosphorous and nitrogen pollute ground water. The soil's hydraulic capabilities, purification capabilities, and physical constraints (such as percent slope of the land) could determine minimum lot size.

In 1991, the NH Dept. of Environmental Services and the Office of State Planning jointly established an Ad Hoc Committee "to provide the technical basis and standards for lot sizing for on-site septic systems, while maintaining an acceptable level of groundwater and surface water quality." Based on the premise that nitrogen, in the form of nitrate, is the major contaminant factor affecting water quality, a computer model was developed based on known technology at the time to determine optimum density given a prescribed quality of groundwater. However, since then it is believed that their 1991 report provided the scientific documentation needed but lacked the correlation with measurable physical soil properties. In 1999, the Ad Hoc Committee was reconvened and is expected to issue a revised report early in 2002.

Approximately 175 classifications of soil type and slope exist in Grafton County. Orford soils include most of these classifications. The minimum lot size for each soil-slope classification has been recommended by soil scientists and adopted by the Grafton County Conservation Commission. An increasing number of communities are accepting these recommendations as rational, science based, and are utilizing them to set minimum lot size.

Under these recommendations, in areas not served by waste treatment facilities, minimum lot sizes range between one acre and three acres depending on the ability of a given soil to handle septic and water supply on the same lot. Either community sewer or community water allows some reduction in lot size. Soils that are too wet, too steep, or floodplain are ruled out for development.

This approach to minimum lot size could prove suitable for Orford

#### 4.2.2. Development with Mandatory Open Space

The recommended minimum lot sizes by soil type may allow in certain instances for an "intensity" of development which would undermine the rural character of Orford. To help protect against this possibility, a second "state of the art" concept should be considered. The concept of development with mandatory open space is designed to assure that a rural character is retained.

Development with mandatory open space is a concept that has been generated by the Center for Rural New England that is associated with the school of land planning and architecture at the University of Massachusetts. This concept recognizes that in historic New England towns, "village centers" developed with homes and services grouped together. Fields, farms, and forest surrounded these village centers. Orford has its own example of these village centers with both Main Street and Orfordville.

Under development with mandatory open space, when a parcel of land is developed, some fraction of the land, usually one half or more, is set aside as open space and the buildings are grouped on the remaining land. This approach creates "village centers" which are surrounded by open space in a manner similar to our historic traditional form of development. Rural character is retained.

#### 4.2.3. Sprawl

In any consideration of land use, there should be consideration of general growth and how growth trends affect land development patterns. In August 1999, the NHOSP formed a 27-member Growth Management Committee to help examine the effects of sprawl development in the state. The study looked for ways in which public policy and programs may be contributing to the growth of sprawl. The report offers a series of recommendations to strengthen the ability of state and local governments and regional organizations to cope with the challenges of future growth. An "Executive Summary" of the report is available in the Planning Board files.

**Goal:** Enact lot size regulations that protect environmentally sensitive areas, minimize development on our productive soils, help retain the rural character of Orford, preserve the natural landscape and prevent fragmentation of agricultural lands while ensuring the public health, safety, and general welfare.

**Implementation:** The Planning Board will conduct public education and provide opportunities for public discussion in order to build a consensus on this difficult but critical subject of lot size. The public discussion will include the concepts of lot size by soil type and development with mandatory open space. The Planning Board will then propose specific regulations that appear to have public support.

### 4.3. ROADWAY APPEARANCE

Frequently, the least expensive subdivision is the creation of lots along existing roadways. This is known as strip development. Strip development has the potential to

ruin the "rural feeling" of Orford just as it has in many developing towns across New England. The most traveled road frontage is usually the first to be subdivided. Homes and businesses then are built on these lots -- often close to the road. When enough of this development happens, the "feeling" of open space disappears and the "feeling" of congestion appears. This problem of roadway appearance may be helped by two techniques -- interior roads and setbacks from the major roads.

The Planning Board feels it is preferable for subdivision to take place by the construction of an interior road with lots radiating from it rather than simply subdividing major road frontage. This type of subdivision allows vegetation to act as screening between the major road and the development. If strip development does occur along major roads, the appearance of open space can be significantly helped if structures are set well back from the road and a greenbelt is provided to act as screening.

**Goal:** Protect the rural and open space "feeling" of Orford's most traveled roads.

**Implementation:** The Planning Board and the Conservation Commission will begin working with individual landowners to try to work out a voluntary "green belt" program. The hope is that enough landowners on major roads will voluntarily donate setback easements to assure that Orford's most traveled roads will continue to feel rural and open forever.

The Planning Board will inform subdividers that subdivision using interior roads and setbacks from major roads is viewed by the community as more desirable than strip development and ask for voluntary compliance in the public interest.

The Planning Board will consider an ordinance that would require interior road(s) for subdivisions of five or more lots and setback and/or buffer requirements for all development on public roads.

The Planning Board will consider recommending to the voters of Orford an ordinance that limits driveway and road cuts on major roads to help control strip development.

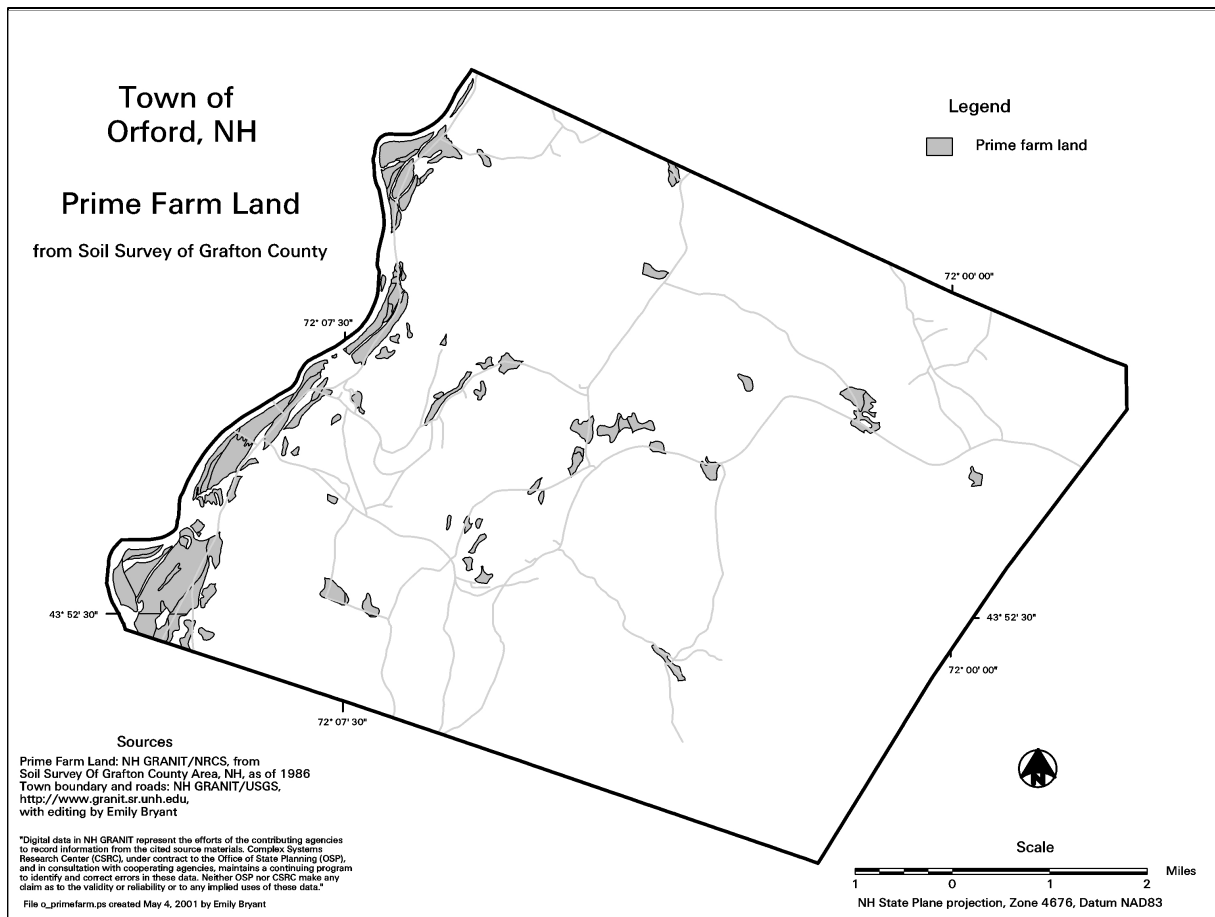
#### **4.4. USE OF AGRICULTURAL LAND**

Orford is blessed in certain locations with agricultural soils of such high quality that they are of national or statewide importance. If these soils are used for development, they will be forever lost for agriculture. Figure 5 - Map of Agricultural Lands on the following page shows where these outstanding agricultural soils are located in Orford.

Unfortunately, today, agriculture is economically marginal. The decline in farming that began in the 1830's has been a continuing trend, and Orford is down to fewer than a handful of farms where farming is the principal source of income and where the farm is profitable in its own right. However, none of us knows what the future will bring. For instance, many top scientists warn that the earth may be in a warming trend that will have a profound influence on regional climate. Transportation of foods from distant markets may become disrupted, or transportation costs may greatly escalate.



**Figure 5 - Map of Agricultural Lands**



The day may come when our children or we are again more dependent on local agriculture for these or other unpredictable reasons. An effort should be made to conserve our most outstanding agricultural soils.

At least two factors add to the complexity of conserving important agricultural soils for the future. First, many of these important agricultural soils are along the most traveled roads, front on the Connecticut River, are flat and are suitable for septic systems. These characteristics make these agricultural properties prime candidates for development. The real estate market values these properties for their development potential. Second, it is conceivable that some farm families who own outstanding agricultural soils have been counting on the development value in their land to act as their pension and will be seeking to sell their land at these higher values.

**Goal:** Agricultural Soils of National and Statewide importance should be conserved.

**Implementation:** The Planning Board and Conservation Commission will establish an ongoing line of communication with each major owner of outstanding agricultural soils with a goal of achieving a customized, voluntary program that provides both for the conservation of critical soils and the needs of the farm family. Donated conservation easements frequently qualify as charitable gifts and may provide the donor with possible income and/or estate tax benefits. For those farm families who are unable or unwilling to donate conservation easements, an important tool that may be available is purchase of development rights by a land trust, which could be facilitated by Orford's Conservation Fund or New Hampshire's Land and Community Heritage Investment Program (LCHIP). Another tool that will be encouraged in some cases is concentrating any development on one portion of a farm so that prime soils may be conserved in blocks that can be efficiently utilized for farming.

The Planning Board, Conservation Commission, and Selectmen shall work to assure Orford remains a "farm friendly" community. Residential neighborhoods near agriculture must accept that early-morning chores, spreading manure, noisy farm machinery, or slow machinery on roads are all normal activities of agriculture. The Planning Board shall seek buffers between agriculture and proposed residential/non-farming development.

Any proposed land use ordinance for Orford shall permit agriculture/farming by right and shall allow farmers to adequately market their products either on site locally, or as cooperatives and shall discourage the fragmentation and development of these farmlands. Also, any land use ordinance shall contain a provision allowing cluster development and authorizing the planning board to administer the cluster provision through subdivision and site plan review regulations.

#### **4.5. COMMERCIAL DEVELOPMENT**

Fifty-four percent of the respondents to the Orford Questionnaire would like to see additional industrial or commercial development in Orford (30% No, 16% Undecided). This response is interpreted as only modestly in favor of industrial/commercial development. Of those who said they would like more industrial/commercial development, there was a clear preference for professional offices, agriculture/produce, home business/occupation, restaurant, day care center, high tech industry, motel/inn/bed & breakfast. The same group strongly indicated that heavy industry and a retail shopping center would be "not desirable".

These responses are consistent with Orford's existing rural/residential character and expressed desire to remain that way. Residents are cautious about changes that would disrupt rural/residential. Today Orford has no ordinance to guide or determine the nature of industrial/commercial development.

**Goal:** Provide for industrial/commercial development consistent with a rural/residential community.

**Implementation:** The Planning Board will consider taking an ordinance regarding industrial/commercial development to the voters with particular attention to noise, water, light and air pollution plus visual impact on the community.

#### **4.6. TELECOMMUNICATIONS:**

Communities must recognize that wireless telecommunication has become an important part of our economy. It is here to stay. The Federal Telecommunications Act of 1996 determines the mechanism by which municipalities can regulate cell towers and other facilities, but it is up to the communities themselves to act in anticipation of what is now an inevitable deployment of the technology.

There are three factors to be considered in developing a philosophy of how Orford approaches the introduction of this new technology. First is concern for the health, safety and general welfare of the community, second, the preservation of the rural character and scenic beauty of the town as expressed by the town-wide questionnaire, and third permitting the establishment of facilities that meet the demand and provide a high level of customer satisfaction. The town can put themselves in a position of strength to deal with wireless telecommunications facilities and, is so doing, can negotiate terms that result in protection of the community's interest while accommodating the right of the telecommunications industry to provide the service that many people now rely on.

In March 2001, Orford voters approved adoption of a telecommunications ordinance "to permit the location of personal wireless service facilities within the Town of Orford, while protecting public health, safety and the general welfare of the community...."

**Goal:** Ensure that the establishment of telecommunication facilities within the Town meet the twin goals of providing needed services while maintaining the rural and scenic character of Orford.

**Implementation:** The Planning Board should continuously monitor the build-out of telecommunications towers in a manner that will protect the character and beauty of the town while allowing the industry to provide the service that many people now rely on.

## 5. HOUSING

### 5.1. HOUSING

One of Orford's strengths as a community is that its residents span a wide range of social and economic groups. Orford has a comfortable mix by age, income, and occupation. Orford's 570 total dwelling units reflect this mix. A wide range of home size and value exists. Most people who work in town and provide service to the town can still afford to live here.

The mix of housing is not easy for a community to influence since homes are built by the personal actions of many individuals. However, the way a community handles subdivision and minimum lot size, plus the community's property tax rate relative to other communities, plus the quality of the community's services -- especially schools -- all influence who will choose to live in the community. It is not unusual for communities within regions which are experiencing rapid growth to take on personalities of having either relatively lower price or higher price housing.

A difficult and unanswered question is how Orford will manage to create a climate for low cost housing for its own young people without opening the gates to a rapid expansion of lower cost housing from the region and a loss of its traditional housing mix and balance. Also, as Orford's population ages, there will be an increasing need for caregivers. Affordable housing is likely to be important in attracting and retaining caregivers in the community. Table 5 - Orford Housing is a current analysis of Orford's housing mix extracted from the 1995 Fair Share Housing Analysis prepared by the Upper Valley Regional Planning Commission. The complete report is available from the Planning Board or the Commission at its offices in Lebanon, NH

| <b>Orford Housing Analysis Summary</b> |               |                    |               |                    |               |                    |
|--|---------------|--------------------|---------------|--------------------|---------------|--------------------|
| <b>Housing Types:</b>                  | <b>1970</b>   |                    | <b>1980</b>   |                    | <b>1990</b>   |                    |
|  | <b>Units:</b> | <b>Percentage:</b> | <b>Units:</b> | <b>Percentage:</b> | <b>Units:</b> | <b>Percentage:</b> |
| <b>Single-family dwellings</b>         |               |                    | <b>296</b>    | <b>79.4%</b>       | <b>402</b>    | <b>75.3%</b>       |
| <b>Multi-family units</b>              |               |                    | <b>37</b>     | <b>9.9%</b>        | <b>49</b>     | <b>9.2%</b>        |
| <b>Moble homes</b>                     |               |                    | <b>40</b>     | <b>10.7%</b>       | <b>65</b>     | <b>12.2%</b>       |
| <b>Other</b>                           |               |                    |               |                    |               | <b>1.8%</b>        |
| <b>Total Units:</b>                    | <b>368</b>    |                    | <b>373</b>    |                    | <b>534</b>    |                    |

**Table 5 - Orford Housing**

**Goal:** Orford's housing goal is the continuation of the mix and balance that exists today.

**Implementation:** The Planning Board will monitor the development of homes in Orford in order to have an early indication of whether the mix and balance of the community is changing. The Planning Board will be guided by this balanced housing goal.

## **6. TRANSPORTATION**

### **6.1. PUBLIC TRANSPORTATION**

Public transportation can be expected to become more important to Orford as its citizens age. In addition, the environmental, energy, social and investment costs of the automobile may stimulate efforts to encourage more sustainable transportation alternatives. In the first half of the 1900's, Orford was served by rail transportation in Fairlee, VT. After a brief interruption, freight service was reinstated in 2000. Today, limited public transportation is available to Orford residents via school buses, a senior van service and commercial van and bus service stopping in Fairlee, VT. There are also local park-and-ride options. Public discussion suggests that the extent of existing transportation is not well understood. A need exists to document and announce today's transportation options and to explore any addition services that may reasonably be provided.

**Goal:** Assure appropriate public transportation options to Orford citizens.

**Implementation:** The Selectmen shall appoint a task force to assess this subject and to recommend any action that may be appropriate for Orford to consider.

### **6.2. ROADS AND BRIDGES**

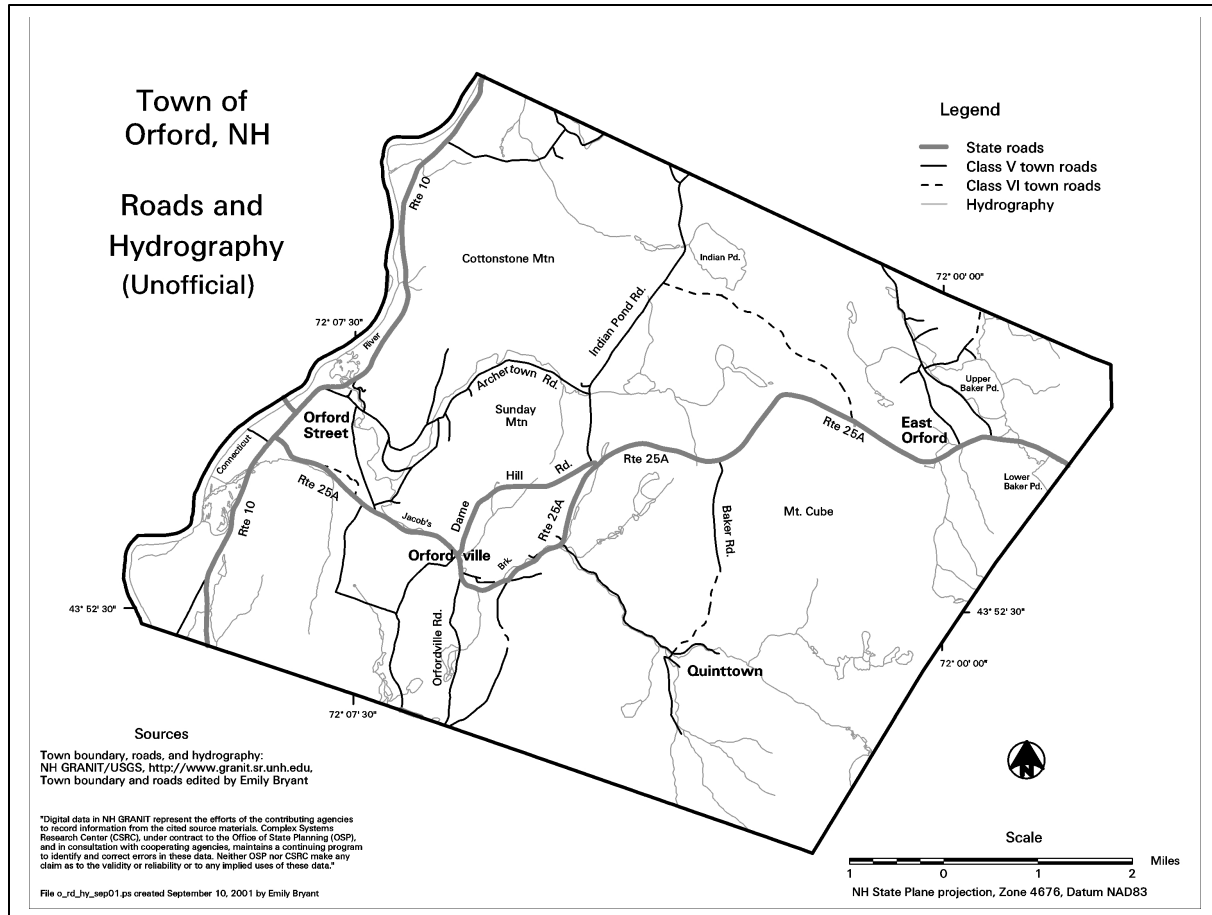
Existing Town Owned and Town Maintained Roads (Class V)

Today Orford maintains over 31 miles of roads and bridges. (See Figure 6 - Map of Roads and Hydrography on the following page.) These roads include a wide range of road conditions. Surface materials range from hard surface to gravel. Widths range from 20 feet wide plus good shoulders down to fourteen feet wide with no shoulders. Some roads include hills that are up to 17% steep and some have short sight lines to oncoming traffic. Existing roads were constructed for the most part by going the easy route over and around ledge and rock outcropping.

Many miles of town roads include road conditions that fall far short of the road standards for new roads that are part of the Orford subdivision regulations. Although this is true, Orford's 31 miles of existing roads (excluding bridges) would cost about four million dollars to construct today to achieve only the conditions that exist today. The four million dollars is the cost of construction and does not include the cost of the easements that make up the road rights-of-way. Roads and bridges are an expensive and valuable capital asset.

The cost to bring existing roads (excluding bridges) up to essentially the same standards as those named for new roads in the subdivision regulations would be 2.5-3.0 million dollars. Fundamental questions face Orford concerning the extent to which existing roads should be upgraded, the priorities and timetable for upgrading, and the method for payment.

**Figure 6 - Map of Roads and Hydrography**



The current growth of the Upper Valley and Orford creates a need to continue to upgrade Orford roads to assure public safety. At the same time, many of Orford's roads have special qualities that contribute significantly to the scenic beauty and rural nature of the town. It is in the interest of Orford to maintain or improve its roads in a manner that does not result in a loss of their scenic character unless necessary for public health, safety and general welfare.

**Goal:** Develop a timetable and priorities for upgrading Orford roads that takes into consideration the growth rate of the town and examines the possibilities for preserving the scenic character of those roads.

**Implementation:** the Planning Board, in fulfilling its responsibility to create an Orford Capital Improvement Plan, will create a plan for upgrades on existing roads and will include priorities and a timetable. That road section of the Capital Plan will be a guide to the Orford Budget committee and the town in setting its annual road budget.

### **6.3. NEW DEVELOPMENT:**

Any request to subdivide land gives the Planning Board the opportunity to consider the way in which that subdivision will impact on public safety. If the condition of an existing road dictates that a requested subdivision is inappropriate without a road upgrade, the Planning Board has traditionally required the subdivider to help pay for the upgrade. However, in Nov. 2000, the NH Supreme Court struck down this option unless the town has a specific impact fee ordinance added as an amendment to a general zoning ordinance. In towns without zoning, such as Orford, such fees can no longer be required as a condition of approval. Nothing in the decision prohibits the Planning Board authority to declare a subdivision “scattered and premature...as would involve danger or injury to health, safety or prosperity...” but such cases must now be carefully documented.

**Goal:** Develop processes to guard against land development which might negatively impact the Town’s safety, health and excessive expenditure of public funds.

**Implementation:** The Planning Board will study the possibility of an ordinance which would restore the town’s ability to require impact fees as felt necessary.

### **6.4. ROADS DISCONTINUED SUBJECT TO GATES AND BARS (CLASS VI)**

Orford has approximately ten miles of roads which many years ago were discontinued subject to gates and bars. The town no longer maintains these roads. Private owners with town approval may maintain these roads themselves. Certain building restrictions and other restrictions apply to these rights-of-way. In the early history of Orford these now discontinued roads served many farms and even a village center.

Each of these existing Class VI Roads has its own history of use and ownership as well as its own physical characteristics. Some portions in the future may be returned to use while other portions simply have no potential to meet modern road standards. If sections of these Class VI roads are reactivated, the same construction standards may be applied as for new roads. The expense for the upgrade of Class VI Roads to new road standards must be paid for by the subdivider/developer or private owners and the town will bear none of the improvement costs.

**Goal:** Preserve public rights-of-way for recreation where appropriate.

**Implementation:** The Town should retain its rights-of-way over Class VI roads where reasonable and justified and develop policies that maximize non-destructive recreational use.

### **6.5. NEW ROADS**

New roads may be proposed by subdividers/developers. The Orford Subdivision Regulations have established standards for new roads and provide assurance that any new

roads will be constructed to those standards and at no construction cost to the town. The Selectmen act as Administrative Officer during construction and may, in some cases, accept new roads for the town upon adequate completion.

New roads move development off the most traveled existing roads which helps both with issues of public safety and roadside appearance. Subdivider-financed new road construction provides a valuable, high-quality road for the town, with no capital expenditure by the town. However, maintenance of these roads, if accepted by the Town as town roads, should be considered in these decisions.

In order to encourage development off the most traveled roads, the town has established less expensive "country lane" standards for development limited to a maximum of six dwellings.

## **6.6. NEW ROAD LOCATIONS**

The Master Plan provides an opportunity to protect rights-of-way for any new road locations or road extensions. This is accomplished by showing possible future routes on an official map and by making those routes part of this plan. When a possible future route is included in this plan, then that road right-of-way is protected from any development that might use up that right-of-way.

**Goal:** Consider possible new road locations.

**Implementation:** The Planning Board will create an updated official map including consideration of future road routes if any.

## **6.7. BRIDGES**

Orford's bridges periodically are inspected and rated for their load carrying ability by the State. Bridges are a capital investment that requires an ongoing program of maintenance/replacement.

**Goal:** Include a program for bridges in the Orford Capital Improvement Plan.

**Implementation:** The Planning Board will include a timetable and priorities for the maintenance and improvement of bridges in the Capital Improvement Plan.



## **7. UTILITY AND PUBLIC SERVICES**

### **7.1. POLICE DEPARTMENT**

Since 1988 the Town has employed a full-time police chief. At this time, in addition to the chief, one paid part-time officer and one volunteer officer provide police services to the town. The Department has one four-wheel drive police cruiser that is replaced every four years. The Orford Police Department is located in a well-equipped office in the Town Offices Building on Route 25A.

Residents and businesses in need of emergency services need only dial 911 to reach the professionals who are dedicated to assisting those in need. As summarized in the Orford Police Reports, safety and security services equal that of criminal-related type events that are handled by the police department. Crime and Drug prevention is a continuing need.

Increase in part-time staff may be required in the future depending on the population increases in the town and the needs of the Rivendell School.

### **7.2. FIRE DEPARTMENT**

(To be completed)

### **7.3. EMERGENCY MANAGEMENT PLAN**

Orford established an Emergency Management Plan approved by the Selectmen in 1992. The Plan describes the preparation and emergency response required by the town to react to any type of disaster, either natural or man-made which would require the utilization of most or all of the community's resources and which has the potential for necessitating a request for additional assistance from State and/or Federal sources.

Part I provides general background information pertinent to Orford – potential hazards, emergency response organization, interface with surrounding communities and with State and Federal authorities.

Part II provides a description of the functions necessary for a coordinated response to an emergency by the community's resource agencies.

Part III contains plans for specific hazards that are unique to Orford and present a high potential for property damage and/or loss of life.

## 7.4. WATER SUPPLY

Orford does not have a “Public Water Supply” per se but there are nine (9) individual water sources serving at least 25 people each, which the NHDES Water Supply Engineering Bureau lists as “Public Drinking Water Supplies”.

| <b>PUBLIC DRINKING WATER SUPPLIES IN THE TOWN OF ORFORD</b>                    |                                   |                   |        |            |            |            |            |   |     |                 |
|--|-----------------------------------|-------------------|--------|------------|------------|------------|------------|---|-----|-----------------|
| <b>Report produced 22 November 1999, NHDES Water Supply Engineering Bureau</b> |                                   |                   |        |            |            |            |            |   |     |                 |
| PWSID  | SYSTEMNAME                        | ADDRESS           | TOWN   | SYS<br>TYP | SYS<br>ACT | SRC<br>TYP | SRC<br>ACT | SOURCE<br>DESCRIPTION                               | WD  | POP<br>SER<br>V |
| 1831010-001  | ORFORD WATER<br>SUPPLY<br>COMPANY | WATER ST          | ORFORD | C          | A          | G          | A          | INF, 40' NOF BROOKS                                 | 10  | 78              |
| 1831010-002  | ORFORD WATER<br>SUPPLY<br>COMPANY | WATER ST          | ORFORD | C          | A          | G          | A          | DUG #1, 20' NOF OLD<br>RTE 25-A                     | 6   | 78              |
| 1831010-003  | ORFORD WATER<br>SUPPLY<br>COMPANY | WATER ST          | ORFORD | C          | A          | G          | A          | DUG #2, 40' SOF OLD RTE<br>25-A                     | 10  | 78              |
| 1835010-001  | ORFORD HIGH<br>SCHOOL             | RTE 25-A          | ORFORD | P          | A          | G          | A          | BRW, 8' SEC CORNER HS<br>IN PUMPHOUSE               | 200 | 282             |
| 1835020-001  | ORFORDVILLE<br>SCHOOL             | RTE 25A           | ORFORD | N          | A          | G          | A          | BRW, UNDGRND PIT 25'-<br>NE CORNER OF BLDG.         | 39  | 3               |
| 1836010-001  | ORFORD<br>ENTERPRISES LLC         | ARCHERT<br>OWN RD | ORFORD | P          | A          | G          | A          | BRW 1, 250' SOUTH OF<br>REED NEWSON<br>BUILDING     | 300 | 97              |
| 1837030-001  | THE PASTURES<br>CAMPGROUND        | RTE 10            | ORFORD | N          | A          | G          | A          | PTW, INF IN PASTURE                                 | 24  | 145             |
| 1837040-001  | CAMP<br>MERRIMWOOD                | RTE 25-A          | ORFORD | N          | A          | G          | A          | BRW 1, 20' FROM SW<br>CORNER OF LIBRARY             | 325 | 150             |
| 1837050-001  | CAMP<br>MOOSILAUKE                | RTE 25-A          | ORFORD | N          | A          | G          | A          | BRW 1, ACROSS RD FROM<br>PUMPHOUSE BEHIND<br>KITCH- | 300 | 95              |

### Notes:

**PWSID** System-Source ID number

**TOWN** Town served by the source

**SYS TYP** System Type:

**C** = Community public water systems which serve at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents

**P** = Non-transient, non-community systems which are not community systems and which serve the same 25 people or more over 6 months per year

**N** = Transient public water systems serving 25 people or more per day for 60 days or more per year, but not the same people every day - examples include restaurants and hotels with fewer than 25 employees)

**SYS ACT** Activity status of the system ( 'A' = active; 'I' = inactive )

**SRC TYP** Source Type ( 'S' = surface water; 'G' = groundwater; 'E' = treatment facility

**DESCRIPTION** Description of the source ( "BRW" = bedrock ; "ART" = artesian ; "GRW" = gravel ; "GPW" = gravel packed ; 'INF' = infiltration ; 'PH' = pump house

**WD** Well depth (feet)

**POP SERV** Population served by the System

The largest is the privately operated Orford Water Company which serves homes and businesses in the Village Center on Route 10 and lower Route 25A. The following chart describes each system in detail.

**Goal:** Insure the long-range availability of high quality drinking water throughout town.

**Implementation:** Study the overall water supply/availability situation and recommend/develop long range plans to insure both supply and quality.

## **7.5. TECHNOLOGY**

High-speed internet access is rapidly becoming available in urban areas of our country. So much of our national as well as local economy has become internet dependent that failure to have access to high speed internet is threatening to rural communities.

**Goal:** The goal is to assure high-speed internet access for Orford.

**Implementation:** The Selectmen shall appoint a task force to assess this subject and to recommend any action that may be appropriate for Orford to consider.

## **8. COMMUNITY FACILITIES**

### **8.1. CAPITAL IMPROVEMENTS PLAN**

The provision of public services is an important element in promoting and protecting the health, safety, and general welfare of the Orford community. These public services in many cases require facilities and equipment that are capital items. Examples of services which require capital items include schools, roads and road maintenance, recreation, cemeteries, libraries, police and fire protection, waste disposal, and other such services. Capital items in support of community services are a major financial investment by the community.

As the needs of the Orford community change in the future due to growth or other factors, certain facilities and equipment which are included in the list of Orford's capital items will need to be expanded, eliminated, or replaced. Replacement is also necessary due to items wearing out or becoming obsolete. Because community facilities and equipment are such a significant financial investment on the part of the community, it is important to plan ahead for capital item needs.

Failure to effectively plan for capital needs may result in at least two unpleasant consequences. First, poor planning may result in facilities not being available when needed and, therefore, community services may suffer. Second, poor planning may result in town budgets and property tax rates which unnecessarily fluctuate from year to year or which grow at an unaffordable rate. For these reasons it is best for Orford to have a Capital Improvements Plan.

The Capital Improvement Plan shall classify projects according to urgency and need and shall recommend a time sequence for their implementation. The program may also contain the estimated cost of each project and indicate probable operating and maintenance costs and probable revenues, if any, as well as existing sources of funds or the need for additional sources of funds for the implementation and operation of each project. The program shall be based on information submitted by departments of the Town. In setting priorities, the community attitudes expressed in answer to the community attitude survey (See appendix) shall be considered.

**Goal:** Create and maintain an updated Capital Improvements Plan (CIP).

**Implementation:** The Planning Board will, at the request of the Selectmen, create a Capital Improvement Plan (CIP) which recommends capital improvement projects over a period of at least 6 years. The purpose and effect of the Capital Improvements Plan shall be to aid the selectmen and the budget committee in their consideration of the annual budget. The CIP shall be periodically updated to remain current and valid. Consider annual updates.

## **8.2. ORFORD LIBRARIES**

The town of Orford is served by two public libraries. The Orford Social Library is located on Main Street next to Patterson's Store and the Orford Free Library is on Route 25A in Orfordville next to the town offices. Policies and operations are overseen in each library by a board of trustees, with funding provided by the town. Additional financial support for the Orford Social Library comes from a trust fund.

Both libraries house many historical photographs, artifacts, and genealogical records, and circulate books, magazines, videos, and audiocassettes. They each have a public access computer with internet access and a copier for public use. Each library employs a part-time librarian assisted by volunteers. Expanded services and programs are enabled by membership in the *Libraries of the Upper Valley Co-op* and by support of the Friends of the Orford Libraries.

The Orford Social Library is housed in an 1840 building. In 1988, with help from federal funding, a major addition was added to the existing structure, increasing its square footage to 1164. At that time improvements included central heat, plumbing, a meeting space for public use, and handicap access. The additional space created a sense of openness and light with a warm, welcoming atmosphere. An unfinished attic space gives the possibility for expansion as needed. At present the library is open 15 hours each week with a collection of approximately 8,000 volumes.

The Orford Free Library offers an informal, neighborhood atmosphere to its patrons and is within walking distance for many. Since the mid-80's, when the library was made handicapped accessible and the partitions between the library and former town offices were opened, the library has been available as a meeting place for organizations and a gathering place for townspeople. During the summer of 2000 the library underwent a facelift, including renovation of the former historical room into a large, bright, children's library space. The library houses 6,500 volumes in three rooms with a total area of approximately 970 square feet. The library is currently open 13.5 hours a week.

## **8.3. EDUCATION:**

Orford is a member of the Rivendell Interstate School District, SAU #78, along with Fairlee, West Fairlee and Vershire, VT. Orford's K-5 grade children attend school at the Samuel Morey Elementary School in Fairlee, VT. This is a newly renovated school, finished in 2001. Its capacity is in excess of 250 students and provides a moderate buffer for anticipated growth. Orford's 6-12 graders attend the Rivendell Academy in Orford, NH. The Rivendell Academy initially consisted of the original historic Academy building in which the high school was housed, the old elementary school which currently houses the middle school students from the district, and Memorial Hall providing a kitchen, gymnasium, locker rooms and extra classrooms. A new high school building, designed for a core capacity of 500 students, incorporates a new, larger gymnasium, cafeteria, kitchen, locker rooms, media center and classrooms to replace those in the original Academy building. Memorial Hall, while currently in use, will need substantial

renovation or reconstruction in the future. The Rivendell district also owns the adjoining lot on Main Street in Orford and maintains that lot under a conservation easement that permits no further development and guarantees agricultural use for the future. Enrollment for the Fall of 2001 was approximately 317 students.

## 9. RECREATION

### 9.1. RECREATION

Orford is fortunate to have significant public recreation facilities. Table 6 - Public Recreation Facilities lists some of these sites.

**Table 6 - Public Recreation Facilities**

| <b>ID#</b> | <b>Site</b>              | <b>Primary use</b> | <b>Acreage</b> | <b>Owner</b>   |
|------------|--------------------------|--------------------|----------------|----------------|
| 0001       | Beach and Boat Launch    | Water Sports       | 1.0            | NH Fish&Game   |
| 0002       | Appalachian Trail        | Hiking             | .              | Federal Gvt    |
| 0003       | Camp Merriwood           | Summer             | 6.0            | Private        |
| 0004       | Camp Mooselauke          | Summer             |                | Private        |
| 0005       | Beach and Boat Launch    | Water sports       | 0.0            | Town of Orford |
| 0006       | Flat Rock                | Natural area       | 1.5            | Town of Orford |
| 0007       | Community Field          | Sports field       | 9.5            | Town of Orford |
| 0008       | Reeds Marsh              | Wildlife area      | 64.0           | NH Fish&Game   |
| 0009       | Conn. River Boat Launch  | Water Sports       | 1.0            | Town of Orford |
| 0010       | The Pastures campground  | Camping            | 9.0            | Private        |
| 0011       | Jacob's Brook Campground | Camping            | 38.0           | Private        |
| 0012       | Boat Launch              | Water Sports       | 0.5            | NH Fish&Game   |
| 0013       | Indian Pond Beach        | Water sports       | 1.0            | Town of Orford |

As shown and described, these include several playing fields and an outdoor basketball court, boat access on the Connecticut River, three ponds with beaches and boat access, and a portion of the Appalachian Trail as well as several forested areas with maintained public access. During public discussion some citizens pointed out that a toddler safe playground would be a welcome addition.

Where appropriate, these facilities are managed by The Orford Parks and Playgrounds Committee, made up of five elected community members. The committee's major function is to oversee the management and maintenance of the town's community field, the beaches at Indian Pond and Upper Baker Pond, the Connecticut River boat landing, the "mall" or town common along Route 10, and the grounds around the town office. The committee assists with two recreational programs--the ski program at Dartmouth Skiway and swimming lessons at Indian Pond. The committee supports the idea of conducting feasibility studies for additional recreational programs.

The new basketball court at the community field, better water access through the rocky shoreline at Indian Pond beach, and ramp improvements at the boat landing are some of the recent projects of the Parks and Playgrounds Committee. The committee supports the development and use of capital reserve funds for use in further improving community recreational facilities. The committee will cooperate with any state and regional efforts to develop a system of bicycle/pedestrian paths.

When asked, "Are there other recreational programs that the community should support?" 68% of the respondents to the Orford questionnaire checked hiking trails and 54% checked cross country ski trails.

In addition to public recreation, major property owners have been generous about allowing public use of their properties for recreation including hunting and fishing. However, recreation on private land, which has been taken for granted in Orford, may require more public/private voluntary cooperation in the future. In other parts of the state and region where subdivision and development have already taken place, a significant reduction in private land open to public use has taken place. When large land parcels are subdivided and then owned by many individuals, some percent of that land frequently ends up posted against trespass and hunting.

In order to satisfy the community's desire for trails, it should be expected that community groups such as snowmobile clubs, riding clubs, ski clubs, and hiking clubs will need to form where they do not already exist in order to work cooperatively and voluntarily with land owners. An example of such groups is the recently formed Upper Valley Trails Alliance and its member organizations as well as the Cross-Rivendell trail currently being developed.

These organized groups will work on issues such as trail location, trail maintenance, and supervision of the public. With this assistance in place, it is anticipated that community minded landowners would continue to allow use of their land. In fact it is this approach which is most likely to provide wildlife preserves and nature trails. For example, New London has had a community group working with landowners on establishing public footpaths through special natural areas. The group helps maintain and supervise the footpaths and leads public nature walks. Their program can be a model for Orford.

Owners of land in current use who opt not to post their land against hunting and fishing are eligible for an additional 20 percent reduction in current use value and thereby lower property taxes.

**Goal:** Support the development of hiking and ski trails in Orford.

**Implementation:** The Planning Board, Conservation Commission, and the Parks and Playground Committee implement a trails task force to assess next steps for developing a trails network on public and private land in Orford. The task force will address issues such as landowner liability, signs and trail guides. The task force will work with voluntary groups such as riding clubs, snowmobile clubs, nature clubs, etc. in an effort to identify landowners who will voluntarily allow trails. The clubs will help provide trail maintenance and supervision. The Grantham recreation trail model is an example for consideration.

**Goal:** The goal is to assure sufficient availability of private land that is open for public recreation including hunting and fishing.

**Implementation:** The Planning Board, Conservation Commission, and the Parks and Playground Committee will work to identify open space land which can be



acquired with the help of a land trust. Orford's Conservation Fund and New Hampshire's Land and Community Heritage Investment Program (LCHIP) could facilitate this effort. Also, 50%/50% matching grant money may be available for outdoor recreational facilities or for the acquisition of recreational land from the federal Land and Water Conservation Fund. These town committees are seeking volunteers who are able to write effective grant applications.

The Planning Board should let subdividers know that recreational use of land is important to the community. Subdividers may voluntarily see opportunities to provide for trail easements or to transfer open space to the town or a public organization. One tool that will be encouraged is that of concentrating development in order to preserve open space.

The selectmen will periodically remind landowners in current use about the tax incentive to keep land open for public use.

## **10. CONSERVATION AND PRESERVATION**

### **10.1. CRITICAL WILDLIFE HABITAT AND PLANT COMMUNITIES**

The relatively small impact of human population, the diversity of Orford's terrain, fields which have been kept open by agriculture, large areas of uninterrupted forest cover, wetlands, ponds, bogs, streams, rivers, floodplains, elevation which ranges from 400 to 2900 feet, and other historic environmental features in combination have provided Orford with important populations of diverse plant and animal species. This natural landscape and its ability to sustain diverse species is viewed by the Planning Board as a valuable resource which must be protected as Orford grows.

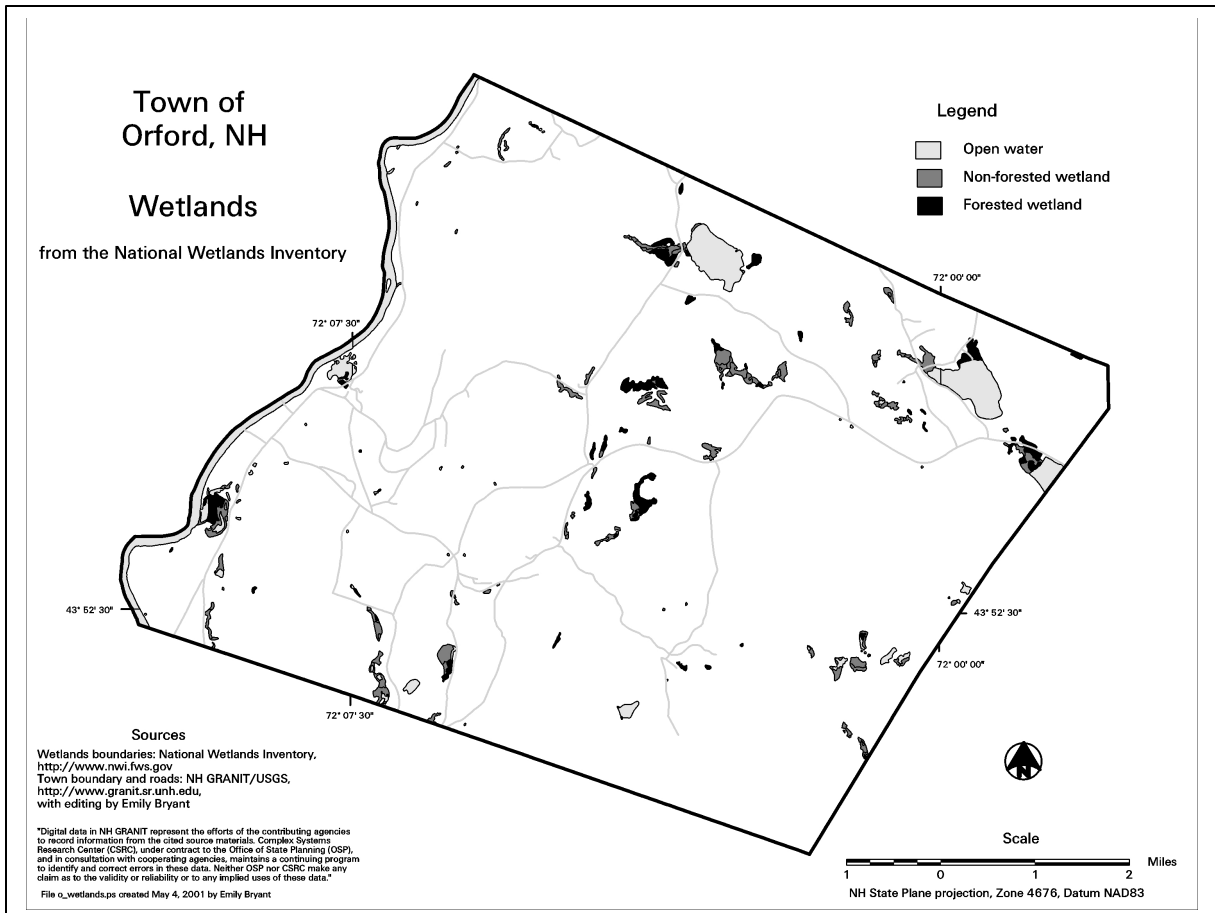
**Goal:** Sustain bio-diversity. Critical Wildlife Habitat and Threatened Plant Communities should be identified and conserved.

**Implementation:** The Planning Board and Conservation Commission will work to implement a comprehensive inventory of the natural resources of Orford. Mapping Orford's natural resources using GIS techniques and the information already available in the New Hampshire GRANIT system is viewed by the Conservation Commission as a high priority. UNH Cooperative Extension is available to give guidance to this work.

When the broad resource mapping is completed, it may make sense to accomplish "on the ground", more intensive inventories of certain critical areas. A recent model for this "on the ground" inventory effort is the project currently underway in Hanover, New Hampshire. In Hanover, grants have been won from conservation organizations that allow professionals to be contracted for natural resource inventory work.

Even prior to completion of this comprehensive inventory, some critical areas were identified and mapped by NH Fish and Game (Figure 7 - Map of Wetlands, Figure 8 - Map of Deer Wintering Areas and Beaver Wetlands, and Figure 9 - Map of Aquifers). The Planning Board and Conservation Commission will work to protect the natural resource values of known critical areas.

**Figure 7 - Map of Wetlands**

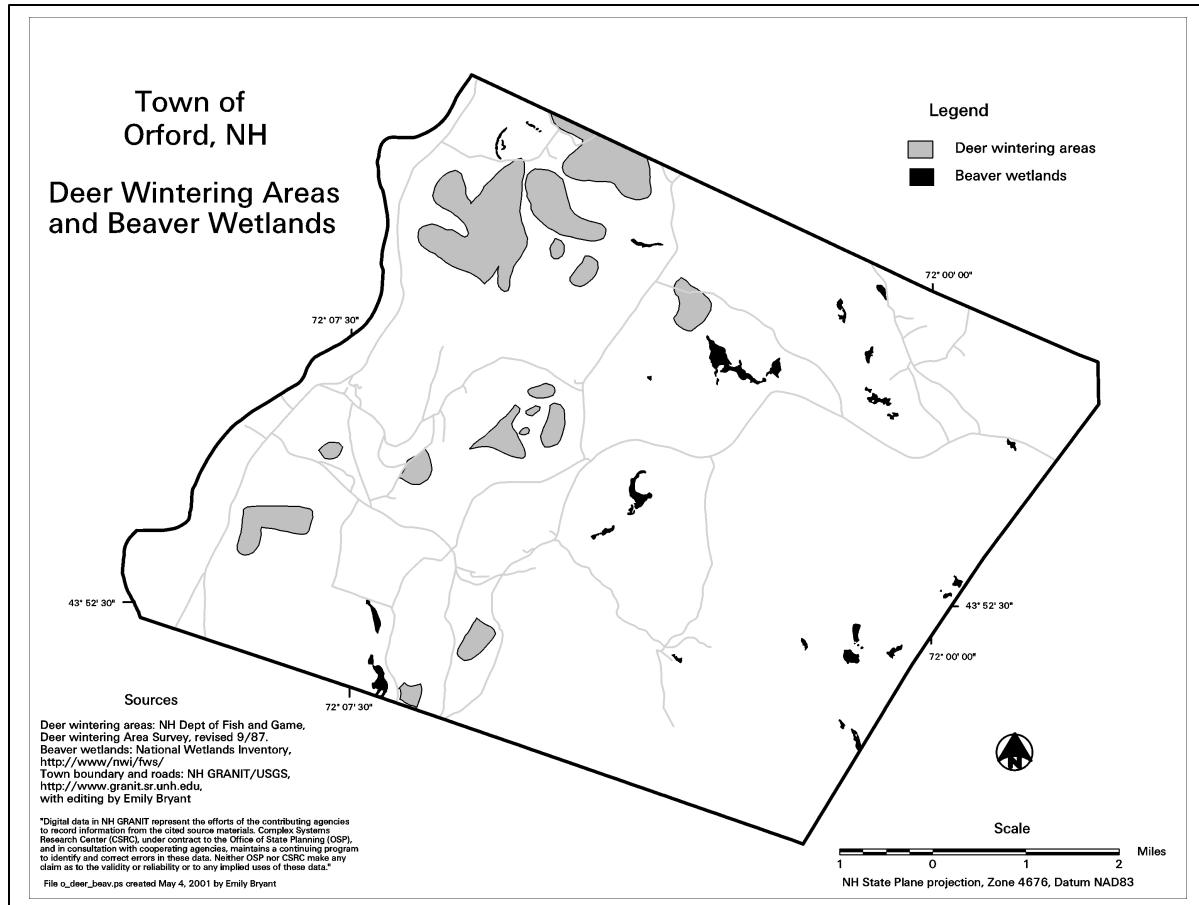


One of the benefits of inventorying and mapping natural resources and critical areas is the resulting opportunity to educate landowners about their specific resources. Key to resource protection is landowner education and cooperation since landowner decisions have major impacts on natural resources.

Subdividers may be asked to voluntarily provide specific site location of development or to concentrate development in order to minimize adverse impacts on plant and animal species.

Invasive species are a threat to the diversity of plants and animals. Current examples of threats include purple loosestrife in wetlands and Eurasian milfoil in ponds. Orford's Planning Board, Conservation Commission, and Selectmen will support efforts to control invasive species.

**Figure 8 - Map of Deer Wintering Areas and Beaver Wetlands**



Decisions about the way that land is managed have significant impact on bio-diversity. Again, landowner education is key to helping landowners to provide for the natural resources of their land as they make land management decisions. The Conservation Commission shall work to assure landowner education regarding natural resource management.

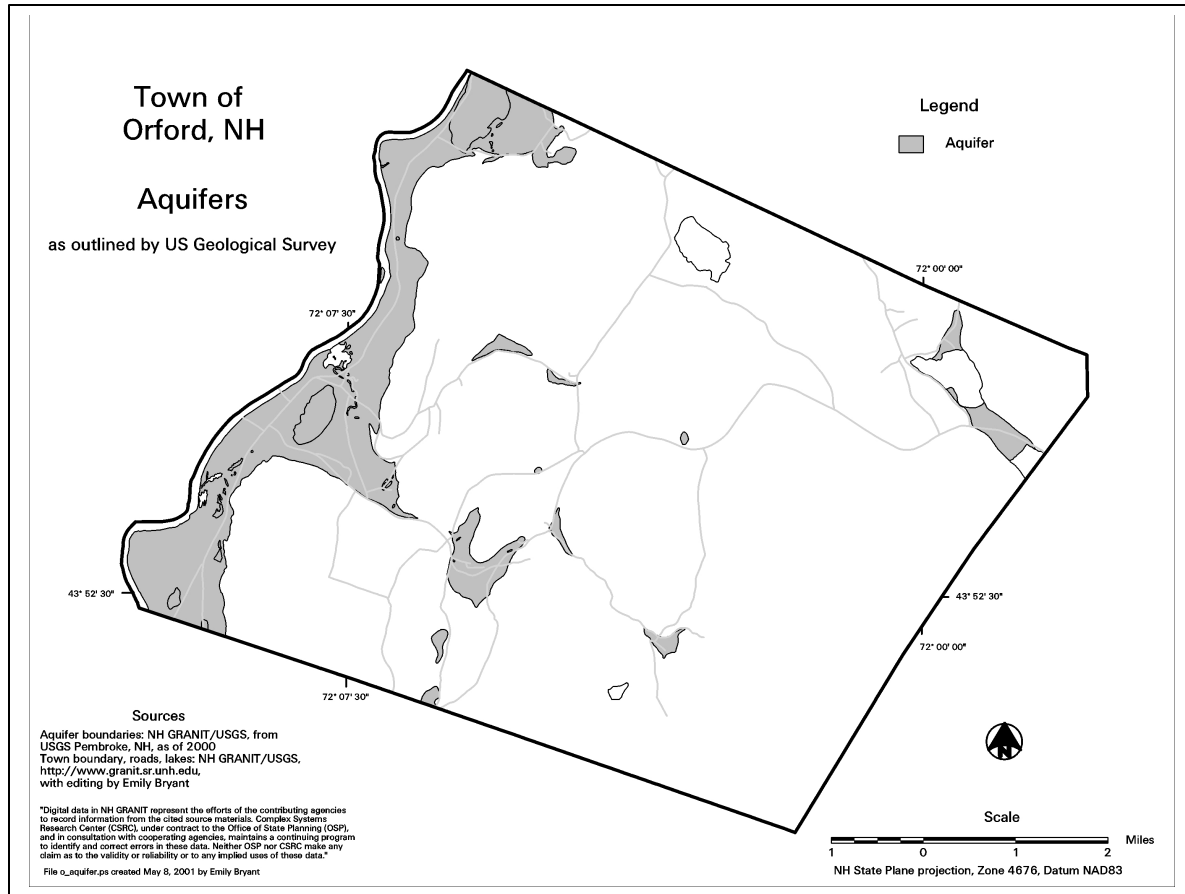
## **10.2. CONNECTICUT RIVER**

New Hampshire's "River Management and Protection Act" regarding the Connecticut River places the responsibility for protecting the river and its shoreline with each community that fronts on the river. Many communities have now enacted protection measures that are appropriate for their shoreline. However, Orford has not yet enacted an ordinance. Therefore, Orford's riverbank and areas directly adjacent to it are unprotected from unplanned development and adverse uses.

In November of 1997, following a public hearing, the Orford Planning Board adopted the "Connecticut River Corridor Management Plan" (CRCMP) as a reference document for the Orford Master Plan. CRCMP is advisory in nature and was developed by the Upper

Valley River Subcommittee of the Connecticut River Joint Commissions with participation from riverfront towns in both New Hampshire and Vermont.

**Figure 9 - Map of Aquifers**



This Master Plan continues to reference that CRCMP. The CRCMP recognizes the Connecticut River as a unique and invaluable resource and provides a coordinated approach for local residents and municipalities to practice good stewardship of the river for future generations. Its recommendations concern bank erosion, water quality, recreation, agriculture, fisheries, habitat and wildlife, and future land use.

The Planning Board has been informed that the only effective way, under state law, to protect the Connecticut River shore land with enforceable measures is by enacting an ordinance.

**Goal:** Implement effective measures to protect the natural resource values of the Connecticut River.

**Implementation:** The Conservation Commission will initiate an education program with shore land property owners relative to issues of good stewardship. The Planning Board will review the river protection ordinance enacted by other

communities. The Planning Board will consider bringing a Connecticut River protection ordinance to the Orford voters.

### **10.3. JACOBS BROOK**

Jacobs Brook is an important natural resource with a rich history of use by mills during the 1800's. In recent years there are examples of new residential development building very close to the shoreline. This development within what might be described as a reasonable buffer zone to the water has possible detrimental affect on wildlife and water quality.

**Goal:** Provide for the protection of Jacobs Brook.

**Implementation:** The Planning Board will consider bringing a Jacobs Brook protection ordinance to the Orford voters.

### **10.4. FLOOD PLAIN DEVELOPMENT ORDINANCE**

Orford has a Floodplain Development Ordinance that allows development in the flood plain in a way that creates access to flood insurance. However, the ordinance does not protect the natural resource values of the flood plain.

**Goal:** Protect the natural resource value of floodplains.

**Implementation:** The Planning Board will consider bringing a revised floodplain ordinance to the Orford voters that protects the natural resource values of the floodplains.

### **10.5. SCENIC VISTAS**

Many Orford residents have indicated pleasing scenery as an important part of the quality of life. Trips to everyday activities may include wonderful scenic pleasures from a very long list. Here are some outstanding examples. The complete list is much longer.

- The seven Ridge homes with their architectural purity framed by their beautiful lawns and the undeveloped hill behind them.
- The town common and cemetery.
- The uninterrupted woodlands along Archertown Road.
- Tillotson Falls.
- The shoreline of Indian Pond as seen from the town beach.
- Beautiful fields above the Ville.

- The expansive and dramatic vista toward Mount Moosilauke as seen from Route 25A.
- The forested higher elevations of Sunday Mountain, Cottonstone Mountain, and Mount Cube, as seen from many outlooks.
- The beaver bog on Orfordville Road.
- The forested eastern shore of Upper Baker Pond
- Up and down the Connecticut River from Orford/Fairlee bridge.
- Route 10 from the Lyme line to the Piermont line has been designated as a part of the Connecticut River Valley Scenic Byway. Orford is currently seeking "Scenic Byway" status for Route 25A from its intersection with Route 10 west to the Wentworth, NH town line.

While it is unreasonable to expect vistas to remain unchanged as Orford grows, awareness of their importance to the quality of life of the community and a program to provide for special vistas will help protect this important community resource.

Scenic vistas may be lost when either buildings are constructed or fields revert to trees and views are thereby blocked. Scenic vistas may also be lost or "ruined" by the development that appears in the view. The introduction of communications towers is a recent example of development that has sparked community debate about communication benefits versus negative impacts on scenery.

**Goal:** Protect the visual/vista resources of Orford.

**Implementation:** The Planning Board will make it understood to subdividers/developers that protection of scenic vistas is important to the quality of life in Orford. Subdividers/developers may be asked to voluntarily provide for specific site location of development combined with conservation easements to minimize the impact on important scenery. They may also be asked to voluntarily concentrate their development in order to preserve scenery and open space.

## **10.6. CONSERVATION EASEMENTS**

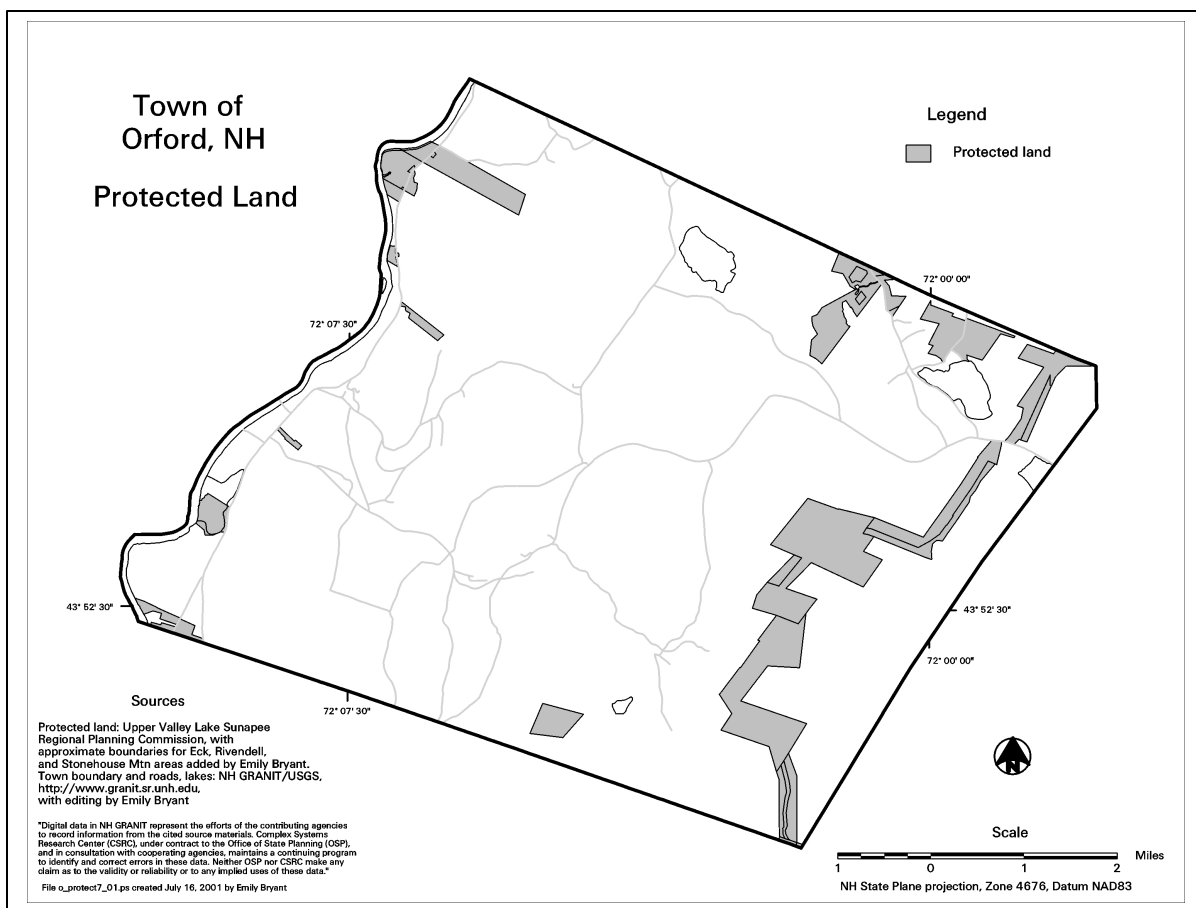
During the past 20 years conservation easements have become a powerful tool for open space land protection. The conservation easements are a contract between a property owner and a land trust that in effect extinguishes the property owner's right to develop the land. In some cases property owners donate conservation easements as a charitable gift. In other cases property owners may be compensated for some portion of the value of the development rights being transferred. Also, the Planning Board may require some subdivisions of land to include conserved open space as a quid pro quo for approval.

The Orford Conservation Commission considers conservation easements, once deeded, as possibly the best way to protect and ensure open spaces for the future.

A number of local, regional, and national land trusts exist with an interest in open space protection. Many sources of possible funding also exist including federal and state programs and private foundations. The Upper Valley Land Trust (UVLT) has an interest in working with Orford property owners and has expertise in working cooperatively with other land trusts and in accessing funding. Also, UVLT seeks the help of community members who are interested in working as volunteers on land protection projects.

Some Orford property owners have already shown leadership in land protection. Figure 10 - Map of Protected Lands shows currently conserved lands in Orford. The Planning Board and Conservation Commission commend property owners for their participation with open space land protection through conservation easements.

**Figure 10 - Map of Protected Lands**



## 10.7. CURRENT USE TAXATION

This master plan recognizes the state's current use taxation laws as a valuable tool in helping preserve open space. The Town should continue to actively support this



mechanism and the Conservation Commission should provide annual public and landowner education regarding the current use taxation program.

#### **10.8. CONSERVATION COMMISSION**

Implementation of the conservation portion of this master plan will require many volunteer hours. Consideration should be given to increasing the size of the Conservation Commission from its current five members to seven members.

#### **10.9. HISTORIC PRESERVATION**

Orford is generally considered to be a very beautiful community which continues to enjoy, unspoiled, many of its historic and architecturally significant structures and places. Orford's heritage, reflected in the historic settlements of East Orford, Orfordville, and Main Street, as well as in many other historic buildings and sites throughout the community, is clearly important to our town. The Orford Historical Society's 1997-98 town-wide survey of historical resources identified over 230 historical structures. More recently, at least 40 remaining historic barns were identified. The Samuel Morey Memorial Bridge across the Connecticut River and the Orford Street Historic District, which is comprised of 38 historic houses and other buildings, are both listed on the National Register of Historic Places.

The preservation of structures and places of historic and architectural significance is recognized as serving an important public purpose throughout our State. Efforts should be made to preserve Orford's heritage.

**Goal:** Preserve historic and architecturally significant structures and places throughout the town.

**Implementation:** The next step for the Planning Board is to determine a constructive way to initiate a process regarding historic preservation in Orford.

#### **10.10. EXCAVATION REGULATIONS**

Poorly implemented excavations to remove sand, gravel, topsoil or other materials may result in erosion, contamination of ground water, or other hazards. For this reason the State has authorized communities to adopt excavation regulations. Orford has excavation regulations per RSA 155-E that regulate the operation and reclamation of commercial pits. From time to time these regulations should be reviewed and updated if necessary.

**Goal:** Orford will continue to have excavation regulations that are from time to time reviewed and updated if necessary.

**Implementation:** The Planning Board will periodically review the current Orford Excavation regulations and make any revisions necessary. RSA 155-E as amended will be considered during the update process.

## **11. APPENDICES**

### **11.1. EXHIBIT I - STATUTORY REQUIREMENTS**

The New Hampshire Office of State Planning has provided the following useful summary of the statutory requirement vis-à-vis this Orford Master Plan:

#### **Authority:**

Duties of the Planning Board RSA 674:1-I

It shall be the duty of every planning board established under RSA 673:1 to prepare and amend from time to time a master plan to guide the development of the municipality.

#### **Purpose:**

RSA 674:2 "... to aid the planning board in the performance of its duties."

RSA 674:3 "...The master plan shall be made with the general purpose of guiding and accomplishing coordinated and harmonious development which will, in accordance with existing and probable future needs, promote health, safety, order, convenience, prosperity, or the general welfare as well as efficiency and economy in the process of development."

#### **Objective:**

RSA 674:2 "... to show as fully as is possible and practical the planning board's recommendations for the desirable development of the territory legally and logically within its planning jurisdiction."

#### **Content:**

RSA 674:2 " The master plan shall include, if it is appropriate or if it is specifically required as a prerequisite for the adoption of implementation measures, the following specific sections to be adapted by the planning board to the special requirements of the municipality:..."

- General Statement
- Land Use
- Housing
- Transportation
- Utility and Public Services
- Community Facilities
- Recreation
- Conservation and Preservation
- Appendices

**Preparation:**

RSA 674:3 " I. The planning board in the course of preparing or amending the master plan may make surveys and studies and may review data and information relative to existing conditions and probable future growth of the municipality and its environs...."

RSA 674:3 "II. The master plan shall include, among other things, adequate provision for traffic, the promotion of safety from fire and other dangers, adequate provision for light and air, the promotion of good civic design and arrangement, wise and efficient expenditure of public funds, and the adequate provision of public utilities and other public requirements."

RSA 674:3 "III. ... the board shall inform the general public and solicit comments regarding the future growth of the municipality in order to involve citizens in the preparation of the master plan in a way which is most appropriate for the municipality."

**Adoption and Amendment:**

RSA 674:4 "The planning board may" ....." adopt the master plan as a whole, or may adopt successive sections or parts of the plan. Sections or parts of the plan shall correspond with major geographical sections or divisions of the municipality, or with the functional elements of the plan, and may incorporate any amendment, extension, or addition to the plan."

11.2. **EXHIBIT II - SUMMARY OF ORFORD COMMUNITY MEETINGS**

**“A Vision of Orford”**

Summary of Orford Community Meetings

(June, 2000)

A series of community meetings were held during the week of May 15-20 to provide an opportunity for community input in the preparation of the Master Plan update. These meetings will supplement the results of the 1999 citizens questionnaire sent out by the Planning Board. A total of seventy seven individuals attended the meetings which were held at the town offices, the Social Library and the Orford Congregational Church. Each meeting was led by a facilitator aided by a recording scribe. Participants were posed a series of questions designed to obtain information relevant to areas of the Master Plan.

What is special about Orford?

The small town, rural setting of Orford, with its open, uncluttered feeling, is of major importance. People appreciate the sense of history as expressed in the many older homes and other historic structures. Trails, wildlife and the openness of private land for public use are considered important attributes of the town. Closeness to cultural opportunities, skiing, good highways and other conveniences were important to some participants. The diversity of people in town, their values of hard work, taking care of each other, honesty and pride and small town Yankee values are important to maintain.

Conservation and Preservation

Forests, agricultural land, wildlife habitat, special vistas, waterways and watersheds are all areas that need to be preserved and protected. The town needs to encourage wise use of land in private hands, perhaps even helping landowners learn new ways to produce income from their land through non-traditional crops and niche marketing. (There is already some expertise in town in this area.) Landowners should be encouraged to keep land unpolluted and townspeople need to be respectful of such property when they use it.

Indian Pond, Jacob's Brook and the Connecticut River are waterways that need our attention. Indian Pond is a pristine, mostly undeveloped pond and should be preserved in that state. Jacob's Brook- its headwaters, swimming holes and Flat Rock area in Quinttown- as well as Upper and Lower Baker Ponds are considered special places by many. The N.H. Shoreline Protection Act does not cover Jacob's Brook or the Connecticut River. The shorelines of both are vulnerable to development, erosion and destruction of wildlife habitat. Orford currently has no inventory of natural resources in town; e.g. wildlife habitat, special plant communities, vernal pools etc.

Other natural areas deemed special included Mt. Cube and its trails, Sunday Mt., the Quinttown area, the view from Schwarz's farm along Rt. 25-A, long unpaved,

uninhabited dirt roads , the beaver pond area on Orfordville Rd., numerous Class VI roads and the Appalachian Trail.

Our heritage, reflected in the historic communities of East Orford, Orfordville and Main Street, as well as many other scattered historic buildings and sites, is clearly important to our town. Efforts should be made to preserve this heritage. Whether such efforts should be left solely in private hands, incorporated into town public policy in some way or effected through some other means entirely are questions that the town has not yet resolved.

### Housing and Commercial Development

Many participants feel we need more business in town while others liked Orford just as it is. Heavy industry is not desired. We should maintain a balance between commercial activity and the historic, small town quality of Orford. Some possibilities of commercial development include home businesses, teleworking, small, non-polluting high-tech industry and restaurants. Some felt that both residential and commercial development would be best if they came from within the town rather than from outside agents. Strip development is to be avoided and any commercial development should be tastefully done, fit in with the rest of the environment, have low impact lighting and buffers between business and residential areas. The town should continue to find ways to encourage the economic viability of forestry and agriculture to help maintain open, undeveloped spaces.

Affordability of housing is necessary to maintain the diversity of people in town. Housing should be built in a way that keeps the open, rural feel of the town. Setbacks, vegetative buffers (for both residential and commercial development) and “country lanes” that curtail visual development along main roads are desired. Cluster development is one option for maintaining a feeling of open space. An assisted living facility or other methods of helping older citizens to continue to live in their own homes would allow closer proximity to friends and family.

Should Orford set aside areas in town for specific purposes; industry, residential, and/or green areas? Do we need to make changes in our infrastructure to support desired growth? What can be done to continue to make Orford friendly to agriculture and forestry?

### Transportation

There are currently some transportation options available in Orford. There is a senior citizen bus run by the Grafton County Senior services, the Stagecoach bus line which stops in Fairlee and some use of the parking lot next to the Fire Station to carpool.

There is a lack of information as to just what services are provided (schedules, routes etc.). Advance Transit bus service comes as far north as Lyme and is used by commuters there. Should we explore the possibility of bringing the service to Orford?

Many mentioned the desirability of light commuter rail service to the Tri-town area via the Fairlee train station. There should be more and better bike lanes and paths in town, especially along the main highways.

Growth will bring more traffic. A better Park-and-Ride facility might encourage more carpooling. Students of all ages should be encouraged to use the school bus. Both of these strategies will help reduce traffic levels. While traffic will continue to increase with growth, there are many who desire existing narrow, curvy, unpaved roads to remain that way.

### Recreation

Orford has a wealth of natural recreational opportunities; ponds, rivers, mountains and much of the town's private land is open to exploration. Some feel that, along with our excellent community fields, this provides sufficient opportunity for recreational activities. Focusing on our natural recreation resources will continue to attract people to Orford who like outdoor, active living.

Others would like opportunities requiring more infrastructure such as an ice skating rink, swimming pool and a community center. There is a need for places that encourage social interaction, a community gathering place. The two libraries fulfill some of this function and a playground where parents could take small children would be another. Adult education/recreation and physical fitness classes are needed and are an important part of community building. The initial plan for the new Rivendell high school/middle school included the creation of a community cafe which might be another gathering place.

Trails are an important recreational asset and could be publicized more. New trails might include a river walk along the Connecticut and nature trails that link with other communities.

### Next Steps

Copies of this summary, the 1989 Master Plan (with amendments) and a summary of the 1999 citizen questionnaire will be available at the Orford town offices, Orford Social Library and Orford Free Library.

Drafting of an updated Master Plan will take place over the summer months and will be followed by public hearings held by the Planning Board at a date to be announced in early autumn.

There will also be further public meetings to discuss what tools and strategies the town can use to implement areas addressed in the updated Master Plan, the 1999 questionnaire and this summary of the May, 2000 community meetings. These meetings will be held in mid to late fall.

11.3. **EXHIBIT III - 1999 ORFORD MASTER PLAN QUESTIONNAIRE**

**TOWN OF ORFORD**

**1999 MASTER PLAN QUESTIONNAIRE**

(Note: If more than one person in your household is responding to the survey please use different colored ink)

**1. Are you a:**

|            |                     |            |            |                       |  |
|------------|---------------------|------------|------------|-----------------------|--|
|            |                     | <b>Yes</b> | <b>No</b>  |                       | <b>(Circle one)</b>                    |
| <b>193</b> | <b>a. Landowner</b> | <u>94%</u> | <u>6%</u>  | If yes, for how long? | <u>2%</u> a. less than 1 year          |
|            |                     |            |            | 22%                   | b. more than 1 and less than 5 years   |
|            |                     |            |            | 27%                   | c. more than 5 and less than 15 years  |
|            |                     |            |            | 29%                   | d. more than 15 and less than 30 years |
|            |                     |            |            | 20%                   | e. more than 30 years                  |
| <b>193</b> | <b>b. Renter</b>    | <u>6%</u>  | <u>94%</u> | If yes, for how long? | <u>0%</u> a. less than 1 year          |
|            |                     |            |            | 45%                   | b. more than 1 and less than 5 years   |
|            |                     |            |            | 45%                   | c. more than 5 and less than 15 years  |
|            |                     |            |            | 0%                    | d. more than 15 and less than 30 years |
|            |                     |            |            | 0%                    | e. more than 30 years                  |

**2. What section of Orford do you live in? (Check One) 187 responses**

Orford Center 35% Orfordville 28% East Orford 14%  
 Other (specify) 23%

**3. How would you rank the following as contributing factors to the high quality of life in Orford? (Please rank 1-5)**

|     |   | Very Important |     |     | Not Important |     |
|-----|---|----------------|-----|-----|---------------|-----|
| 191 | a. private, quiet and rural                             | 79%            | 13% | 6%  | 1%            | 1%  |
| 189 | b. small town atmosphere                                | 70%            | 23% | 5%  | 2%            | 1%  |
| 188 | c. uncrowded living conditions: low population          | 64%            | 17% | 15% | 3%            | 1%  |
| 187 | d. outdoor recreation opportunities                     | 37%            | 26% | 24% | 9%            | 4%  |
| 176 | e. school system  | 26%            | 20% | 30% | 11%           | 14% |
| 179 | f. distance to population center (shopping, employment) | 11%            | 21% | 34% | 17%           | 18% |
| 184 | g. unpolluted environment                               | 73%            | 21% | 3%  | 2%            | 1%  |
| 179 | h. town government                                      | 28%            | 30% | 28% | 9%            | 5%  |
|     | I. other (Please specify) 19                            | 1              | 2   | 3   | 4             | 5   |

**4. The year-round population of Orford increased from 928 in 1980 to 1,008 in 1990, and is projected to reach 1029 by the year 2000. The population increase since 1980 has been approximately 1% per year. In the next ten years would you prefer to see the population growth rate of Orford (Circle appropriate letter) : 179 Responses**

17% a. be slower?  
 71% b. stay the same?  
 12% c. be faster?

**5. How many adults in your household are currently 298 Responses**

employed? 72%   retired? 26%   looking for work? 2%

**6. a) Of those currently employed what are their current occupations? \_\_\_\_\_**

**b) If retired, what were their former occupations? \_\_\_\_\_**

**7. Where are the members of your household employed? (number in each area) 207 Responses**

Orford 20%   Fairlee 2%   Bradford 3%   Plymouth 1%   Hanover/Lebanon 37%   Other (Specify) 36%

**8. Where do you most frequently shop for your basic needs? 118 Responses**

Orford 1%   Fairlee 14%   Bradford 6%   Plymouth 6%   Hanover/Lebanon 61%   Other (Specify) 12%

**9. Would you like to have more shopping facilities in Orford? 44% Yes   56% No   169 Responses**

|  |   | Very Desirable |     |     | Not Desirable |     |   |
|--|---|----------------|-----|-----|---------------|-----|---|
| If Yes, what types of facilities would you prefer? |   |                |     |     |               |     |   |
| 101  | a. additional small mom and pop type stores | 27%            | 18% | 20% | 8%            | 28% |   |
| 97   | b. food supermarket                         | 22%            | 14% | 11% | 10%           | 42% |   |
| 98   | c. shopping mall with a variety of stores   | 7%             | 4%  | 14% | 12%           | 62% |   |
| 99   | d. gas station                              | 30%            | 11% | 15% | 5%            | 38% |   |
| 97   | e. fast food outlets                        | 1%             | 1%  | 8%  | 5%            | 85% |   |
|  | e. other (specify)                          |                | 1   | 2   | 3             | 4   | 5 |

**HOUSING**

**10. What type of dwelling do you live in? 182 Responses**

single family house 95%   two family house 0%   apartment house 2%   manufactured/mobile home 3%

**11. Please rank the following types of housing development as appropriate for the future of Orford.**

|     |   | Very Appropriate |     |     | Not Appropriate |     |
|-----|---|------------------|-----|-----|-----------------|-----|
| 182 | a. single family residences   | 82%              | 12% | 5%  | 1%              | 1%  |
| 166 | b. two family dwellings   | 11%              | 27% | 35% | 12%             | 15% |
| 163 | c. multi-family dwellings   | 7%               | 2%  | 22% | 19%             | 46% |
| 172 | d. manufactured/mobile homes on individual lots   | 6%               | 16% | 26% | 22%             | 30% |
| 163 | e. manufactured/mobile homes in parks   | 1%               | 2%  | 12% | 12%             | 72% |
| 172 | f. cluster housing with single family homes on reduced lots with balance preserved as open space. | 17%              | 20% | 23% | 14%             | 26% |
| 171 | g. conversion of large homes to apartments  | 6%               | 12% | 36% | 14%             | 32% |
| 169 | h. condominiums   | 3%               | 5%  | 27% | 18%             | 47% |
| 170 | I. apartment building   | 2%               | 2%  | 18% | 22%             | 55% |
|     | J. other (specify) 15   | 1                | 2   | 3   | 4               | 5   |

**LAND USE**

**12. Would you like to see additional industrial or commercial development in Orford? 187 Responses**

Yes 54%   No 30%   Undecided 16%

**13. If you answered YES to question 13, please rank the following types of non-residential development as desirable for the future of Orford.**

|     |  | Very Desirable |     |     | Not Desirable |     |
|-----|--|----------------|-----|-----|---------------|-----|
| 133 | a. Professional Offices                | 55%            | 23% | 17% | 2%            | 3%  |
| 129 | b. Sawmills/Wood and Timber Operations | 16%            | 19% | 32% | 16%           | 17% |



|     |                                   |     |     |     |     |     |
|-----|-----------------------------------|-----|-----|-----|-----|-----|
| 123 | c. Construction Trades            | 16% | 26% | 35% | 11% | 12% |
| 125 | d. Auto Service and Repair        | 12% | 18% | 36% | 18% | 15% |
| 128 | e. Light Industry                 | 20% | 27% | 27% | 12% | 15% |
| 129 | f. Commercial recreation facility | 16% | 26% | 28% | 10% | 20% |
| 122 | g. Heavy Industry                 | 2%  | 2%  | 10% | 18% | 68% |
| 131 | h. Veterinarian/Dog kennel        | 20% | 24% | 39% | 11% | 6%  |
| 129 | I. High Tech Industry             | 33% | 29% | 21% | 7%  | 9%  |
| 131 | j. Home business/occupation       | 50% | 24% | 23% | 1%  | 2%  |
| 130 | k. Motel/Inn/Bed &Breakfast       | 29% | 31% | 25% | 8%  | 7%  |
| 132 | l. Agriculture/Produce            | 54% | 24% | 17% | 2%  | 3%  |
| 127 | m. Day Care Center                | 41% | 25% | 23% | 6%  | 5%  |
| 129 | n. Restaurant                     | 47% | 28% | 17% | 4%  | 5%  |
| 128 | o. Retail shopping center         | 5%  | 10% | 13% | 20% | 51% |
|     | p. Others (specify) 11            | 1   | 2   | 3   | 4   | 5   |

**14. If you answered YES to question 12, is there a maximum size of industrial or commercial business, in terms of employees, that would you prefer to see in Orford?** **112 Responses**

6% home office(1-5 employees) 22% Small (5-10 employees) 49% Medium (10-25 employees) 22% Large (over 25 employees)

**15. Please rank how you would like to see future commercial/industrial development in Orford.**

|     |  | Very Desirable |     | Not Desirable |     |     |
|-----|--|----------------|-----|---------------|-----|-----|
| 172 | a. scattered throughout town   | 9%             | 15% | 13%           | 17% | 46% |
| 167 | b. focused within or adjacent to village centers                         | 15%            | 20% | 20%           | 12% | 33% |
| 171 | c. strip commercial development along Route 10 and Route 25A             | 3%             | 8%  | 9%            | 12% | 68% |
| 174 | d. concentrated in designated commercial and/or industrial areas of town |                | 33% | 28%           | 13% | 10% |
| 17% |  |                |     |               |     |     |

**16. How strongly do you feel that the following resources of the Town of Orford should be protected and preserved? (Please rank 1 - 5)**

|     |                                     | Very Strongly |     |     | Not at all |    |
|-----|-------------------------------------|---------------|-----|-----|------------|----|
| 188 | a. prime agricultural land          | 72%           | 16% | 6%  | 3%         | 3% |
| 188 | b. shorelines of lakes and ponds    | 80%           | 13% | 4%  | 1%         | 1% |
| 186 | c. wildlife habitat                 | 74%           | 16% | 5%  | 3%         | 2% |
| 184 | d. scenic views                     | 70%           | 17% | 8%  | 3%         | 2% |
| 184 | e. wetlands                         | 65%           | 18% | 10% | 3%         | 3% |
| 187 | f. historic buildings and landmarks | 65%           | 20% | 12% | 3%         | 1% |
| 180 | g. steep slopes                     | 43%           | 19% | 27% | 8%         | 3% |
| 181 | h. floodplains                      | 49%           | 23% | 20% | 4%         | 4% |
| 188 | I. shorelines of rivers & streams   | 71%           | 18% | 7%  | 2%         | 2% |
| 187 | j. open space                       | 60%           | 17% | 14% | 6%         | 3% |

**17. Given your ranking in Question 16, would you support an Ordinance for any of the following provisions?**

|     |  | Very Strongly |     |     | Not at all |     |
|-----|--|---------------|-----|-----|------------|-----|
| 173 | a. provision for the encouragement of industrial development in designated areas | 34%           | 20% | 18% | 10%        | 18% |
| 177 | b. provisions for protecting the character of the villages                       | 60%           | 21% | 14% | 3%         | 38% |
| 173 | c. provisions for the protection of residential privacy                          | 56%           | 22% | 14% | 3%         | 5%  |
| 179 | d. provisions for orderly growth and development                                 | 59%           | 16% | 15% | 5%         | 5%  |
| 178 | e. provisions to preserve the rural atmosphere                                   | 62%           | 22% | 10% | 2%         | 3%  |
| 175 | f. provisions for the control of communications towers                           | 47%           | 22% | 20% | 7%         | 5%  |
| 178 | g. provisions for protection of shoreland of lakes, ponds, rivers and streams    | 74%           | 17% | 4%  | 1%         | 3%  |
| 171 | h. provisions for the protection of steep slopes                                 | 42%           | 20% | 26% | 8%         | 4%  |
| 173 | I. provisions for the protection of floodplains                                  | 52%           | 19% | 20% | 3%         | 6%  |
| 175 | j. provisions for the protection of wetland areas                                | 59%           | 19% | 13% | 3%         | 6%  |
| 177 | k. provision for the protection of prime agricultural lands                      | 68%           | 16% | 8%  | 4%         | 3%  |
| 177 | l. provisions for the protection of wildlife habitat                             | 69%           | 14% | 10% | 2%         | 5%  |

**18. What other mechanisms could Orford use to preserve and protect the resources listed in question 16 above?**

(Specify) 63 Responses Zoning 48%

**19. Currently the Town has no way of knowing about new buildings or substantial improvements unless it involves a state septic approval or wetlands permit or state inventory form. Would you support a minimal building permit system for the purposes of assessment?**

52% Yes 21% No 27% Undecided 186 Responses

**COMMUNITY FACILITIES AND PUBLIC SERVICES**

**20. Please rate the following Town services on a scale of 1 to 5, based on YOUR experience.**

|     |                      | Excellent |     |     |     | Poor |
|-----|----------------------|-----------|-----|-----|-----|------|
| 146 | a. police            | 22%       | 32% | 31% | 10% | 5%   |
| 129 | b. fire protection   | 24%       | 35% | 33% | 8%  | 0%   |
| 132 | c. schools           | 9%        | 30% | 36% | 16% | 9%   |
| 119 | d. ambulance service | 29%       | 36% | 31% | 3%  | 1%   |
| 164 | e. road maintenance  | 24%       | 40% | 26% | 7%  | 2%   |
| 109 | f. health services   | 7%        | 21% | 43% | 15% | 14%  |
| 148 | g. refuse disposal   | 20%       | 25% | 30% | 17% | 8%   |
| 137 | h. recreation        | 15%       | 28% | 40% | 13% | 4%   |
| 160 | I. library           | 43%       | 33% | 20% | 3%  | 1%   |
| 159 | j. town government   | 17%       | 32% | 40% | 8%  | 3%   |

**RECREATION**

**21a. The Town currently provides the recreation facilities and programs listed below. Please rate these facilities on a scale of 1 - 5.**

|     |  | Excellent |     |     |     | Poor |
|-----|--|-----------|-----|-----|-----|------|
| 136 | a. Connecticut River Boat Launch             | 19%       | 40% | 35% | 5%  | 1%   |
| 148 | b. Indian Pond Public Beach                  | 21%       | 35% | 32% | 8%  | 3%   |
| 129 | c. Upper Baker Pond Public Beach             | 12%       | 26% | 41% | 12% | 9%   |
| 136 | d. community fields                          | 27%       | 46% | 23% | 3%  | 1%   |
|     | e. ski program                               | 28%       | 34% | 35% | 2%  | 3%   |
|     | f. swimming program                          | 22%       | 28% | 43% | 3%  | 3%   |
|     | g. other community programs (please specify) |           |     |     |     |      |
|     | 10   | 1         | 2   | 3   | 4   | 5    |

**21b. Are there other recreational programs that the community should support? (Circle all that apply) 131 Responses**

28% a. boating access  
37% b. tennis courts  
68% c. hiking trails  
36% d. swimming area  
54% e. cross country ski trails  
4% f. picnic areas  
47% g. ice skating  
19% h. basketball  
I. other (please specify) 11

**Please use the space below to provide additional comments:**

The Orford Planning Board would like to thank you for taking the time to complete the Master Plan Questionnaire.