# **Barnard Town Plan**

Adopted March 31, 2010

Amended February 1, 2012

# Prepared by the Barnard Planning Commission with assistance from Two Rivers-Ottauquechee Regional Commission www.trorc.org and funded by a Municipal Planning Grant from the VT Department of Housing and Community Affairs

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# INTRODUCTION

The Planning Commission has developed this Plan based on the premise that the majority of the citizens of the Town wish to preserve the rural, small town character of Barnard. A well-grounded Town Plan is the foundation for ensuring appropriate development and conservation of the community's resources. Effective town planning and subsequent implementation of policies and recommendations will reduce conflicts arising from change. This Plan is a statement of how the Town has reached its present state, the current situation, a description of elements of the Town that should be preserved, recommendations for future growth and development and a blueprint for how those recommendations should be implemented.

The Barnard Town Plan provides a framework to be used for accomplishing our community's aspirations over the next five years. It gives specific guidance while retaining enough flexibility to be useful when faced with unforeseen circumstances. It will need to be reviewed and revised in five years to ensure it is still an appropriate vision for the Town.

This Plan should be viewed as a whole, with goals, objectives and recommendations viewed as an integrated, interdependent system of statements. For example, this Plan supports development in certain areas and the preservation of undeveloped areas, but these apparently contradictory desires must be read together and it will become clear that in different areas of town some desires take precedence over others.

The Plan aims to help the citizens of Barnard better define and direct the future of their community. It is a planning tool that provides a vision of what the community should be over the next five to ten years. The Plan is to be used by the Town Boards, Commissions, Departments, residents, developers and businesses in a number of ways:

- 1. Provide a framework for planning the future of the Town;
- 2. Assist in the development of a capital budget and program;
- 3. Direct the formulation of departmental policies and strategies;
- 4. Serve as a basis for responding to Act 250 permit requests;
- 5. Guide decision making in site plan review and conditional use review;
- 6. Present a framework for developing Zoning Bylaws and subdivision bylaws;
- 7. Supply data and solutions to planning issues;
- 8. Recommend future planning studies to be carried out.

Each Plan section will begin with relevant background information, and then have goals, objectives and recommendations. *Goals* are long-range aspirations which serve to establish the Town's future direction, and may describe the end conditions that are sought. *Objectives* are general strategies designed to address the goals. *Recommendations* are specific courses of action designed to achieve objectives and usually able to be implemented within the next five years.

The general goals of this Plan are to:

- 1. To protect the rural character of the Town;
- 2. To continue Barnard village and East Barnard village as town centers;
- 3. To promote safe and healthful housing for all segments of the population;

4. To promote environmentally sound development practices.

The general objectives of this Plan are:

- 1. Establish land use goals that provide adequate space for needed types of land use, both public and private, in locations that minimize the adverse impact of one land use on another:
- 2. Protect and allow for the judicious use of the Town's soils, minerals and stone, forests, agricultural lands, waters and other natural resources;
- 3. Support the adequate and economical provision of transportation facilities, schools, parks and other public requirements in relation to development; and
- 4. Protect the Town's historic sites which are significant contributors to the Town's essential character.

The recommendations to meet these objectives are found throughout the Plan in more detail in specific chapters, but two general recommendations of this Plan that are not related to any one chapter's area are:

- 1. Publish a pamphlet for new landowners acquainting them with Town goals and objectives.
- 2. Coordinate Barnard's Zoning Bylaws and other ordinances to match the Town Plan.

# HISTORY of BARNARD/HISTORIC PRESERVATION

Barnard, chartered as Bernard on July 17, 1761 and later misspelled Barnard, was named in honor of Sir Francis Bernard who was the governor of the Massachusetts Bay Province. New Hampshire, New York and Massachusetts all sought to control the area, with Vermont gaining its independence in 1791.

The plot of land, approximately 49 square miles in area, was properly called a hill town. The geographical center, Silver Lake, covers approximately 84 acres and was originally called Stebbins Pond after the owner of the land where the village now stands. The region was a virgin forest of beech, birch and hemlock with scarcely a trail except for those of the surveyors. There is no evidence that Indians ever occupied any part of the Town, although it is probable that it was part of their hunting grounds.

Although chartered in 1761, Barnard's first settlers, hailing from Old Hardwick, Mass., cleared land and built their crude log cabins in 1775. The first settler, Thomas Freeman, purchased 450 acres at the head of Broad Brook for 60 cents an acre. Early settlers were hardy, industrious, Godfearing men and women who had to work hard to make a living from the inhospitable land.

Church and town meetings were one and the same, providing about the only social life for the early settlers. Raisings, huskings, quiltings and apple parings were other forms of entertainment. Fort Defiance was built after the 1780 Royalton Indian raid when the population of men, women and children had reached 300. Barnard residents have served unselfishly in all wars beginning with the Revolution.

Barnard enjoyed a variety of commercial ventures in addition to farming. Sawmills were an early industry, the first one being built at the outlet of Stebbins Pond (now Silver Lake) in 1784. There was a carriage maker's business opposite the present Universalist Church, tanneries, a gravestone business, carding machining, several distilleries and a printing and publishing business. Lime was necessary for making plaster, chimneys, ovens and fireplaces for the new frame houses that were replacing the log cabins and was processed by several businesses in the Lime Pond area around 1816.

Early settlers supported church and state through taxes by law until 1801 when the law was modified to allow any voter to certify for himself that he did not "agree in religious opinion with a majority of the inhabitants of the town." Early settlers were orthodox Congregationalists with the Universalists and Methodists being granted permission to build in 1802.

Early settlers in Barnard did not have the same need for roads as people of today. One of the first roads referred to in town records was in 1803 when a Mr. Miles was instructed to blaze a road to Stockbridge and to begin at the northwest corner of Fort Defiance. Two other early roads, now abandoned, connected the Creek with the North Road. In 1800, the Woodstock and Royalton Turnpike Company petitioned to build and maintain a turnpike from the courthouse in Woodstock to the meetinghouse in Royalton. Two gates were erected and tolls collected--"for every four wheeled carriage drawn by one beast, thirty cents--for every wagon or cart drawn by two beasts, twelve cents--for all horses, mules and neat cattle led or driven, one cent each". The road did not prove to be a paying investment and was later taken over by the towns.

There were several hotels, taverns and accommodations for travelers in town. Probably the most famous was the Aiken Stand located on the regular stagecoach run on the turnpike where, in 1817, President Monroe stopped and, in 1825, General Lafayette stopped on his way to Montpelier. The village always provided the chief trading center, but the village at East Barnard administered to a section of three towns and, until recently, did a considerable business. Barnard General Store has been in business since 1832, with many other stores opening and closing throughout the years. During the 1830 census, the population reached its high point at 1881 people. There were 17 school districts then, with approximately 90 students each in South Barnard, East Barnard, Village, Creek and Chateauguay, for a grand total of 446 school children that year.

The present Town Hall was the new Methodist meeting house dedicated on December 27, 1837 and sold to the Town in 1867 for \$500. Realizing that Barnard residents lacked the "opportunity for culture" available to larger areas, Charles B. Danforth gave the town \$500 in 1903 to found a Free Public Library. (The information above was taken from the "History of Barnard, Vol. I & II" written by William Monroe Newton, Copyright 1928, Vermont Historical Society)

Barnard, being a town settled for well over two hundred years, has a wealth of history from its buildings and stone walls to its human stories. While many individuals do their part to preserve the Town's rich heritage, the Barnard Historical Society, organized in 1977, exists for this purpose. The Society meets four times a year and maintains a Historical Museum. The purposes of the Society, as stated in its charter, are to "seek out, collect, preserve, record and restore whatever materials, records, artifacts, etc.., that are related to the history of Barnard, Vermont; to disseminate information and conclusions through records, publications, meetings, displays, etc.., to emphasize the value of such materials and to encourage their careful preservation for the future."

#### Goal

1. To preserve the historical assets of the Town.

#### **Objective**

1. Preserve historical structures/sites in Town through prudent town planning.

- 1. The Town should map historically significant properties in Town, including cemeteries, meeting houses and schools and identify previous locations of these or similar historical structures or areas of Town. Landowners should be made aware of these locations to assist in their preservation.
- 2. The Town should keep the Danforth Library, Town Hall and East Barnard Community Hall buildings in good condition and respect their historical character.
- 3. The Town should seek National Historic Site designations for old schoolhouses and their exteriors should be preserved in their historical shape.
- 4. Permit review should consider development's impact on historic structures or sites.
- 5. Both Barnard and East Barnard villages contain a concentration of historic structures; the Town should consider historic district regulations to preserve them.

# **CURRENT and PROPOSED LAND USE**

Barnard is a primarily forested and hilly town with elevations that fall from west to east, starting at just over 2,400 feet in the undeveloped Chateauguay-No Town forests in the southwestern part of town and dipping under 1,000 feet on the town's eastern side. Barnard sits astride the watershed divide between the White River to the north and the Ottauquechee River to the south. Neither river flows in Barnard, just rocky tributaries to them, including Locust Creek and Broad Brook flowing north and Gulf Stream flowing south.

While most of the town is moderately steep, the largest areas of relatively level open land are in the northern half of the town along VT Route 12, the North Road, Royalton Turnpike and along Broad Brook. Silver Lake, the largest waterbody in town, is located very near the geographic center of town (and surprisingly near the watershed divide) and has long been one of the main economic engines for our town. Barnard Village, our main village, is located at its outlet. The only other sizable village in Barnard is East Barnard, almost on the town's northeast border with Pomfret and Royalton. There are smaller hamlets in town including Newcombsville, Mountain Meadows and Fort Defiance. Besides Silver Lake, the only other sizable body of water is Lakota Lake. Development is almost all residential or agricultural with a few businesses scattered about town and in the villages.

Barnard's outstanding beauty and peacefulness derive largely from its rural character and from its residents' collaboration with the land and their respect for its resources.

#### PROPOSED LAND USE IN BARNARD

The Town of Barnard has a distinct pattern of settlement which has emerged over time in response to cultural and social attitudes, as well as to natural environmental considerations. This pattern is one of small, localized centers of village and hamlet settlement composed of residential and commercial uses, surrounded by very sparsely settled rural agricultural and forest lands, with limited development along the road network. Over the years this pattern of settlement has demonstrated itself to be of sociological, psychological and aesthetic benefit to the Town, while simultaneously providing a system which is both efficient and economical for the conduct of business and the provision of social and community services.

Even though maintaining the existing settlement pattern of the Town is a fundamental goal of this Plan, development pressure within the Town is a reality. More and more homes are being built in rural areas, particularly in close proximity to maintained town roads well outside of the existing community centers. Maintaining a sense of community and environmental quality, which makes Barnard a pleasant place to live and work, is becoming more difficult due to these recent land use trends. Nevertheless, because the existing pattern of settlement has served the public interest for well over 200 years, it is the purpose of this Plan to maintain and to enhance this pattern wherever possible.

#### **FUTURE LAND USE**

The pattern of proposed development maintains established compact village and hamlet areas with medium density. Commercial operations catering to the public and light industrial development are planned for existing village and hamlet areas and existing commercial areas with future commercial development in the villages, hamlets and existing commercial areas only. Small home occupations and home businesses are appropriate in the rural farm and forest areas with conditions that limit their impact. High density development is not possible in town due to a lack of public sewer or water.

Rural, low density development is proposed to be located in areas without physical constraints, outside of critical areas, and outside of agricultural lands. The development of the largest, contiguous agricultural and forest areas is discouraged, while some small patches of current agricultural areas may be suitable for low density development. The rural, low-density development proposed follows the existing roadways so no new roads need to be built at taxpayer expense.

The very rural, essentially undeveloped Chateauguay area is proposed as a conservation area to be maintained in its undeveloped state hosting only small camps and few permanent housing units or commerce. A smaller section of town west to East Barnard Village is also proposed as a conservation area, but in keeping with its less remote and more settled nature, greater density and home business uses would be allowed. Other areas in Barnard that are steep, not well suited for septic systems and have very limited highway access are not conducive to development and are planned to have little development, instead focusing on providing for conservation of forest, watershed and recreation resources. The neighboring towns of Pomfret, Bridgewater, Royalton and Stockbridge all have forested areas contiguous to Barnard, making this one of the best multitown recreational assets in this Region.

A Future Land Use Map has been produced and is part of this Plan to illustrate the desired future land uses in Barnard. The map can be found at the end of the Plan. Input on the creation of this Map included past planning documents. The delineation of proposed districts on this map may change slightly as this plan is put into action. The Conservation Commission should work especially with landowners in the proposed Barnard Chateauguay and East Barnard Conservation Areas and Prosper Valley to educate them about conservation planning.

To ensure that Barnard's landscape be protected for future generations, eight land-use areas and three overlays are proposed to be established:

- ❖ Barnard Chateauguay Conservation Area
- East Barnard Conservation Area
- \* Rural, Forest, and Farmlands Area
- Barnard Village
- ❖ East Barnard Village
- Hamlet Areas
- Commercial Areas
- Prosper Valley Overlay
- Silver Lake Watershed Overlay and Lakeshore Area

# Flood Hazard Overlay

#### **Overall Land Use Goals**

- 1. To locate higher density mixed use development in the villages and hamlets.
- 2. To encourage both residential and non-residential development only in areas where adequate public services are available or planned.
- 3. To protect and conserve rural areas and their natural resources by promoting conservation and sustainable resource management.
- 4. To discourage development in undeveloped farmlands, forest lands and especially the Barnard Chateauguay Conservation Area. Such tracts are intended to remain predominately as undeveloped or limited development areas for the purposes of conserving existing resource values.
- 5. To insure the future of and protect the following: forestry under sound silvicultural guidelines, wildlife habitat, unique plant or animal habitats, clean air and the ability to see the night sky without the interference of bright lights. Wetlands and watercourses in general are afforded protection under Federal and State rules but should be given special consideration in the Town's regulations.
- 6. To permit development in a way that sustains the Town's rural character.
- 7. To consider scenic values in development and land use decisions.

#### BARNARD CHATEAUGUAY CONSERVATION AREA

The Chateauguay No Town Conservation area comprises approximately 55,000 acres of largely uninhabited forestland located in Barnard, Stockbridge, Killington and Bridgewater between U.S. Route 4 to the south and Vermont Routes 12 to the east, 107 to the north and 100 to the west. (See attached map) This Town Plan proposes a conservation area only within a portion of this area within Barnard.

#### Goal

1. To conserve the Barnard Chateauguay Conservation Area.

# **Objectives**

- 1. Protect water quality, wetlands and watersheds.
- 2. Maintain appropriate recreational opportunities.
- 3. Conserve contiguous forestland and wildlife habitat.
- 4. Continue working with Bridgewater, Killington and Stockbridge to conserve the Chateauguay No-Town area.
- 5. Encourage sound silvicultural practices.
- 6. Encourage the use of small scale non-commercial renewable energy options to power the scarce residences within this area in order to avoid the impacts of power lines.

#### Recommendations

- 1. Explore alternatives in addition to traditional zoning which shall limit development to very low impact uses.
- 2. The Barnard Conservation Commission (BCC) should continue to work with the Chateauguay No-Town Committee (CNT), the Conservation Fund (CF) and the Vermont Land Trust (VLT) to educate and assist landowners with the conservation of their land.
- 3. The BCC will work with the White River Partnership and the State's Water Quality Division on establishing the highest possible management types and classifications for the Barnard Chateauguay Conservation Area that reflect Barnard's goals for the area.

#### EAST BARNARD CONSERVATION AREA

A conservation area is proposed for the section of town west of East Barnard Village. In keeping with the less remote and more settled nature of the East Barnard Conservation Area, greater density and home business uses would be allowed in the East Barnard Conservation Area than in the Barnard Chateauguay Conservation Area.

#### Goal

1. To conserve the East Barnard Conservation Area.

#### **Objectives**

- 1. Protect water quality, wetlands and watersheds.
- 2. Maintain appropriate recreational opportunities.
- 3. Conserve contiguous forestland and wildlife habitat.
- 4. Encourage sound silvicultural practices.
- 5. Encourage the use of small scale non-commercial renewable energy options to power the residences within this area in order to avoid the impact of power lines.

#### Recommendations

- 1. Allow greater residential density than in the Barnard Chateauguay Conservation Area, but less than in the Rural, Forest and Farmlands Area.
- 2. Explore alternatives in addition to traditional zoning which limit development to low impact uses.
- 3. The Barnard Conservation Commission (BCC) should continue to work with The Conservation Fund and the Vermont Land Trust and other appropriate organizations to educate and assist landowners with the conservation of their land.

#### RURAL, FOREST AND FARMLANDS AREA

This area is comprised of all lands not designated in any other area and is meant to be developed in a moderate density manner consistent with a working rural landscape that also provides opportunities for residences and businesses that are compatible with this type of area and not best situated in a village setting.

#### Goals

- 1. To maintain our rural landscape and scenic resources.
- 2. To protect the environmental integrity of forests, fields, wetlands, floodplains and surface waters.
- 3. To protect productive forest and farmland.

#### **Objectives**

- 1. Maintain a pace of development that Town institutions and our road system can sustain.
- 2. Require that density and placement of new buildings in subdivisions be compatible with agricultural use and desired land use patterns.
- 3. Promote forest products and recreation as well as alternative and traditional farming.
- 4. Preserve wildlife habitats and the corridors between them.
- 5. Deter "sprawl" by evaluating subdivision of land.
- 6. Protect steep slopes and ridgelines from inappropriately sited development.
- 7. Provide for low density residential development, with home businesses whose impacts are limited so that they do not detract from the rural nature of the district and are in keeping with residential areas.

- 1. The Planning Commission and Selectboard should evaluate the ability of Town services and infrastructure to accommodate growth.
- 2. The Planning Commission should work on a soils and productive farms overlay map and use it to identify the most important farmlands in town.
- 3. For larger subdivisions, the Town should consider allowing a rural version of cluster development with shared access to open spaces.
- 4. The Town should adopt subdivision regulations for the division of large parcels of land into smaller ones, along with provisions to avoid forest fragmentation, and consider maximum density provisions such as only allowing one building per 5 acres, while allowing smaller minimum lot sizes.
- 5. The Planning Commission should investigate regulations on exterior lighting.

- 6. The Town should work with landowners to encourage access for recreational activities on land
- 7. The Selectboard should adopt access management techniques (see Transportation section).
- 8. The preservation of stone walls and old stone foundations should be reasonably accommodated during the design of developments.
- 9. The Planning Commission and Conservation Commission should study the idea of transfer of development rights and tax incentives to promote "smart growth" and encourage through incentives the preservation of working forests and farms on large parcels.
- 10. The Planning Commission should consider special provisions for ridgeline development to lessen scenic and environmental impacts.
- 11. Encourage grazing and mowing arrangements between farmers and property owners.
- 12. The Conservation Commission should identify and report on revisions to the Zoning Bylaws that would encourage the preservation of working forests and farms on large parcels through incentives.

#### VILLAGE AREAS

#### Goal

1. To strengthen the existing 'sense of place' in Barnard and East Barnard Villages by encouraging development in these Town centers.

# **Objectives**

- 1. Designate the villages of Barnard and East Barnard as village centers.
- 2. Retain the post office in Barnard village.
- 3. Consider historical land use patterns and buildings in Barnard and East Barnard when evaluating proposals for new construction.
- 4. Encourage higher density in the village centers consistent with those in traditional Vermont villages and allow for expansion areas adjacent to built up areas.

#### **Recommendations**

- 1. Create Zoning Bylaws that:
  - establish the villages of Barnard and East Barnard as distinct districts,
  - allow mixed uses, home occupations, home businesses, limited commercial uses and residential uses in both villages, and
  - establish higher density in village centers than the surrounding rural areas.
- 2. Institutional and civic land uses shall remain in or adjacent to the Barnard Village area. These uses include: post offices, public schools, banks, civic buildings, the Town Hall, town offices and senior centers.
- 3. The burial of all new utility lines is encouraged when reasonable.

#### HAMLET AREAS

There are smaller Hamlet areas in town including Newcombsville, Mountain Meadows, and Fort Defiance that have, or historically had, a greater density of buildings than the surrounding countryside.

#### Goal

1. To consider allowing denser development than rural areas, given the septic and water limitations, within historic small hamlet areas.

#### **Objectives**

- 1. Allow limited non-residential development compatible with residences.
- 2. Enable a greater density of residential development

#### Recommendation

1. The Town should consider the designation of hamlet areas (as shown on the map) in the Zoning Bylaws as a new district that would allow moderate density and mixed development at a scale between that of the Village areas and the Rural Forest and Farmlands area with performance standards to ensure compatibility with residences.

#### **COMMERCIAL AREAS**

Commercial activities outside of village and hamlet areas have been recognized and allowed within our Zoning Bylaw as a Commercial District for over three decades. Preserving existing commercial areas located outside of village and hamlet areas maintains community vitality and provides services and economic opportunity. The uses allowed in the Rural, Forest and Farmland Area should be allowed within the Commercial Area.

#### Goal

1. To maintain existing commercial areas located outside of village and hamlet areas.

#### **Objectives**

- 1. Preserve commercial opportunities at locations where they have naturally developed over time.
- 2. Deter strip development and sprawl by limiting commercial activities to their existing locations.

#### Recommendations

- 1. Retain the existing commercial areas in future zoning bylaws at the locations that are the existing commercial areas.
- 2. Commercial uses allowed in the Commercial Area shall be conditional uses subject to criteria that limit their size and impact.
- 3. The permitted and conditional uses allowed in the Rural, Forest and Farmlands Area shall also be allowed in the Commercial Area.

#### PROSPER VALLEY OVERLAY

An "overlay" area provides considerations in land use and development in addition to those already in place for whatever areas it covers. The Prosper Valley area of town contains highly scenic views and these views are seen by many due to VT Route 12 following the bottom of the valley. The area also contains working farms and is the headwaters of Gulf Stream and its aquifer which feed wells for the Town of Woodstock. Specific studies have focused on this area and the report, "Where our four towns meet," is the culmination of these.

#### Goal

1. To protect the scenic landscape, agriculture and water quality in a rural setting.

#### **Objectives**

- 1. Preserve agricultural uses.
- 2. Limit the visual impact of hillside and ridgeline development.

#### Recommendation

1. Consider the creation of an overlay zoning district to protect the desired values while encouraging compatible development.

#### SILVER LAKE WATERSHED OVERLAY and LAKESHORE AREA

Silver Lake contributes greatly to the aesthetic and economic value of Barnard making our Town a special place. Though a small lake of only 84 acres, Silver Lake is considered one of the healthiest bodies of water in the State of Vermont. The Town of Barnard, the State of Vermont (its legal owner), users of the lake, abutters and the Silver Lake Association must work together to retain its beauty and health.

Since preserving a healthy and beautiful Silver Lake is in the interest of Barnard citizens and visitors, a Silver Lake Area Overlay area is proposed. In addition to the Zoning Bylaws' regulations already in place in the Lake Overlay District, the Silver Lake Area Overlay focuses on the lake itself in order to protect it from invasive species (Eurasian Milfoil) and excessive motor boat traffic which have destroyed so many of Vermont's other lakes.

#### Goals

- 1. To protect the beauty and environmental integrity of Silver Lake while encouraging its safe and responsible enjoyment.
- 2. To preserve the small town atmosphere that has always prevailed at Silver Lake.

#### **Objectives**

- 1. Minimize lake-side development and retain a naturally vegetated shoreline.
- 2. Abide by the Clean Water Standards and Water Safety Recommendations recommended by the State of Vermont.

- 1. The Conservation Commission should initiate an intense campaign to inform fishermen, boaters and lakeshore property owners about the dangers of milfoil and other invasive aquatic plant and animal species, as well as best management for lawns to reduce nutrients.
- 2. Revise the Zoning Bylaws to change the current Lakeshore Overlay District into a Lakeshore Area and to establish a Silver Lake Watershed Overlay over the lake's watershed to protect from indirect discharges to Silver Lake.
- 3. The zoning administrator should ensure that lakeside conversions of dwellings are having septic systems permitted properly.
- 4. The Town should regulate lakeside development, including lakeshore zoning, that amends the Lakeshore Overlay District to limit structure size or intensity of use, and by requiring minimum lake frontage.

5. The Town should work with the state to explore the creation of a public access point with proper signage to avoid negative impacts to the lake species, as well as best management practices for lawns to reduce nutrient runoff.

#### FLOOD HAZARD OVERLAY

In Barnard there are lands adjacent to streams and brooks which are subject to occasional flooding. These flood-prone areas are natural extensions of these water bodies. They retain excessive amounts of water occurring as runoff during heavy rains and spring thaws, control the velocity of water flow during floods and serve to trap sediment.

Flood-prone areas are unsuitable for development for many reasons: there is a potential for danger to life and property, floods may cause the stream channel to move within the floodplain, and subsurface sewage disposal systems do not function properly when influenced by high water. In addition, flood-prone areas are usually locations of good agricultural land and contain most of the areas of flat land suitable for future use as agricultural areas. These areas can also be used for other human activities which do not pose safety or health problems for the community or for property owners. Barnard's flood hazard areas have been mapped by the Federal Emergency Management Administration (FEMA), but with only limited information and are only approximate in location.

#### Goal

1. To prevent flood damage and retain flood storage capacity.

#### **Objectives**

1. Preserve floodplains and associated risk areas in a state where they can handle flood flows without damage to property.

#### Recommendations

- 1. The Town should maintain regulations for the management and protection of flood-prone areas for a 100-year flood.
- 2. Only compatible land uses of agriculture, recreational and open space should be permitted in flood hazard areas.
- 3. The Town of Barnard should regulate flood hazard areas through an overlay district and consider going beyond federal minimums in order to protect public safety.
- 4. The Town should work with FEMA to do a more detailed study of its flood areas.
- 5. The Town should determine areas subject to streambank erosion hazards in consultation with the state's River Management Program and consider regulations for these areas.

#### CRITICAL NATURAL AREAS

An analysis of the natural features, processes and formations which comprise Barnard is an important part of developing the Town Plan. Critical natural areas encompass natural heritage areas that support rare species and important natural communities that are an assemblage of species. Critical natural areas are irreplaceable and function in the maintenance of the environmental health and quality of the Town. They are often small and do not lend themselves to accurate mapping at a town scale and are therefore difficult to create a district for; however, they require special conservation and protective measures. The nature and importance of these

critical areas are described below with recommendations which constitute an environmental conservation policy for the Town.

#### Goals

- 1. To protect critical natural areas from environmental damage.
- 2. To ensure the town and the public do not incur costs associated with development in unsuitable areas.

# **Objective**

1. Develop regulatory and non-regulatory ways to protect the special qualities of critical natural areas.

#### Recommendations

- 1. The Zoning Bylaws should be revised to ensure that development avoids building in natural heritage areas or outstanding natural communities.
- 2. The Conservation Commission should inventory critical natural areas.

#### STEEP SLOPES

The steepness or slope of the land is an important physical factor directly affecting the natural processes of water runoff and erosion. This in turn influences other natural processes such as the formation of soils, as well as those related to human occupation and use of the land. Generally, as the slope increases, the suitability of the land for development decreases. Steep slopes are more susceptible to erosion caused by high rates of runoff, and when vegetation is removed for the construction of roads and buildings severe environmental damage can take place. Steeper slopes also have a higher landslide risk. The proper installation and functioning of subsurface wastewater disposal systems is severely limited on steep slopes. In addition, development on steep slopes can be costly to the Town when erosion causes increased sedimentation of surface water bodies or impacts town culverts. Access by emergency vehicles on steep driveways is also a concern with development on steep slopes.

#### Goal

1. To ensure development on steep slopes is not harmful.

#### **Objective**

1. Consider the creation of steep slope standards.

#### Recommendation

1. Slopes greater than 25 degrees in steepness should remain predominantly in forest cover. Development on these areas should be permitted only if it can be demonstrated that development will have safe access and not be detrimental to the environment.

# **HIGH ELEVATIONS**

Because Barnard is located in the foothills of the Green Mountains, the tops of Barnard's hills tend to be relatively high. On these higher elevations the rainfall is greater, air and soil temperatures are lower, soils are more shallow, poorly drained and low in nutrients, slopes are usually quite steep and there are fewer plant species. Increased rainfall on steep slopes, shallow

soils and disturbed ground cover create the potential for serious erosion problems. Once erosion has begun it is hard to stop because the few existing natural species of plants grow quite slowly and cannot establish themselves quickly enough on steep slopes where erosion forces are greatly accelerated.

Mountain soils absorb large quantities of water which come from the high rainfall and fog moisture collections from forest trees. The water filters through the thin soil and adds to stream flows, springs and eventually ground water supplies in the valleys. An abundant supply of clean potable water is one of the most vital natural resources.

#### Goal

1. To protect high elevation areas.

#### **Objective**

1. Ensure that the unique qualities of high elevation areas are protected.

- 1. The Conservation Commission should identify and map the delicate ecosystem of higher elevations to protect them from detrimental development or development that would interfere with their function as a continuing source of clean water for both surface and ground water supplies.
- 2. Future revisions to the Zoning Bylaw should consider using elevation in restricting development.

#### SHALLOW AND WET SOILS

Shallow soils are very susceptible to erosion, and once bedrock is exposed the regeneration ability of soils and plants is greatly reduced. Soils that are excessively wet have a seasonal high ground water table, creating severe limitations for development. If subsurface disposal systems are constructed in these areas, pollution of ground water supplies is almost guaranteed. These wet soils, because of their low load-bearing capacity, often do not provide adequate strength for the construction of buildings.

#### Goal

1. To discourage development on shallow/wet soils.

#### **Objective**

1. Regulate development on areas with shallow/wet soils so that they are safe and do not harm water quality.

#### Recommendation

1. In areas where shallow or wet (hydric) soils exist, the Town should consider prohibitions on development or strict performance standards.

#### SURFACE WATERS

The brooks and streams, as well as Silver Lake, which comprise Barnard's surface water resources are perhaps the most important of the Town's natural resources. These water bodies not only provide an important amenity for recreation and scenic value, but also are connected with groundwater, which is the current source of private water supplies and the potential source of future municipal water supplies. The continued use of surface water is directly related to its quality. The State has passed a Water Pollution Control Act regulating the quality of waters in the State. This Act forbids, except by special permit, the discharge into the waters of the State of any waste which reduces the quality of the receiving waters. Agriculture and forestry, when done according to state standards are assumed, by law, not to be degrading water quality; however, many areas of the state are impacted by agricultural runoff.

In Barnard, the threats to water quality include non-point pollution such as sediment from land development, gravel road runoff, streambank de-stabilization, invasive species, thermal modification from riparian vegetation removal and effluent from failed septic systems.

The simplest, most straightforward, and most effective means of preventing nutrient and sedimentation impacts to rivers and streams is to have buffer strips of native vegetation between any land disturbing activity and the top of the stream or river bank. The roots of the trees, shrubs and herbaceous species hold soil in place and help keep the banks stable. Woody vegetation also will help shade the rivers and streams. All the vegetation as well as the uncompacted soil and uneven topography of an undisturbed vegetation community will slow runoff, reducing its erosive force.

#### Goals

1. To protect water quality.

#### **Objective**

1. Protect and enhance water quality through development standards.

#### Recommendations

- 1. For the purpose of maintaining water quality and to control unreasonable or unnecessary adverse affects on the scenic resource of the town's surface waters, land within 50 feet of all streambanks should not be built upon and should remain as natural as possible.
- 2. The waters of the Ottauquechee and White Rivers and their tributaries shall be protected, managed and utilized in a manner so as to meet or exceed the water quality standards for Class B1 waters as set forth under the *Vermont Water Quality Standards*.
- 3. Where water quality currently exceeds the standards of Class B waters, it is not in the public interest of Barnard to knowingly degrade the quality of such waters. All new or increased discharges of wastewater into the Ottauquechee and White River and their tributaries shall not cause any degradation in water quality.
- 4. The Town of Barnard recognizes and seeks to maintain all creeks and brooks as a water resource for the protection and management of fish and aquatic life and for the use and benefit of the public for recreation. Land uses and development which interfere with this principle are not to be allowed.

#### WETLANDS

The wetland areas in Barnard are very important. They provide needed wildlife habitat by serving as feeding or breeding grounds for a select group of species. Water-associated mammals such as muskrat, beaver and raccoon, as well as certain bird species, are associated with wetland areas.

Wetland areas also provide a direct benefit as flood protection areas. In having a high organic composition, a large amount of water occurring as runoff can be absorbed and retained by these areas, thus reducing flood peaks and providing a more constant supply of water. Wetlands, because they are naturally associated with the ground water table, need protection from pollution of various kinds. Whatever is allowed to flow into wetlands may flow into the ground water. They serve also to purify ground water and thus are natural cleansers of this resource.

Vernal pools are ephemeral wetlands that fill with water in the spring and generally dry out during late summer. These pools allow for the birth of amphibians in a non-predatory environment. Vernal pools are breeding grounds for many species of amphibians, including two species of salamander currently on the Vermont list of Endangered and Threatened Species.

#### Goal

1. To preserve the important habitat and water quality functions of wetlands.

# **Objective**

1. Consider the creation of wetland buffer standards in the Zoning Bylaws.

#### Recommendations

- 1. The Conservation Commission should work with the Planning Commission to create regulations to protect wetlands. Vernal pools should be retained in their natural state for provision of wildlife habitats and as retention areas for runoff.
- 2. Development on or near vernal pools and filling or disturbing vernal pool areas is not consistent with this Plan.
- 3. The Conservation Commission and Planning Commission should continue to do more detailed wetland mapping in order to improve upon the current state wetland map for Barnard which may miss small wetlands or vernal pools.

#### CRITICAL WILDLIFE HABITAT

Barnard is host to some critical wildlife habitat areas defined as concentrated habitat which is identifiable by the Vermont Fish and Wildlife Department and is demonstrated as being decisive to the survival of a species of wildlife at any period in its life including breeding and migratory periods, including but not limited to deer wintering areas, important wetlands, habitat for rare or endangered species, black bear habitat, vernal pools and wildlife corridors. Most of these areas, including Natural Heritage Sites (rare and endangered species or habitats) are located in the more undeveloped sections of Town and are mapped by State of Vermont officials.

#### Goal

1. To ensure critical wildlife habitat needs are met.

# **Objectives**

- 1. Preserve critical wildlife habitat in sufficient quantify and location to keep the species of concern vital.
- 2. Preserve examples of natural communities that are rare, unique or threatened.

- 1. New structural development should not be allowed in areas currently identified as deer wintering areas, bear corridors or bobcat habitat without State wildlife officials' concurrence that the maps are inaccurate or that the development is of minor impact.
- 2. Development shall avoid impairing mapped significant natural communities and natural heritage sites.
- 3. Natural Heritage Area mapping should continue.

# TRANSPORTATION FACILITIES

An effective transportation system is an integral part of Barnard's well-being. Barnard residents rely on a functional transportation system to commute to jobs and to access services. Barnard businesses rely on the transportation system to allow them to move products or bring tourists to the area. Ideally, this network should provide for safe and efficient through traffic and access to and from individual properties. Efficient movement and access are not the only concerns, though. Barnard's rural, undeveloped character, as evidenced by its forests, farms and miles of unpaved roads, is the reason most residents want to live here. Therefore, the character of the roads is as important as their efficiency.

The town's transportation system primarily consists of private vehicles on public roads; however, bicyclists also use these roads and there are trails for motorized (snowmobiles and ATVs) and non-motorized (cross country skiing, mountain biking, horseback riding and hiking) forms of transportation. There are no fixed-route transit, rail or air transport systems within town. Transportation by boat for any distance is minimal since there are no major rivers or lakes and the streams are too small, but people do enjoy boating on Silver Lake.

Barnard's land use planning can positively impact transportation planning priorities and costs. Additionally, development policies and Zoning Bylaws can create more incentives for cluster housing on smaller lots, reducing overall transportation costs.

A Current and Proposed Transportation Facilities Map is provided at the end of the plan.

#### **Inventory of Barnard Roads and Trails**

- 1. Regional Highways: Vermont Route 12 is the only state highway in town and it runs north from Woodstock, through Barnard Village to its intersection with Vermont Route 107 in Bethel. This highway serves regional and State travel needs and is not a Barnard Town Highway. In the summer of 1996, Vermont Route 12 was rehabilitated and repaved from Woodstock to Bethel.
- 2. Town Collector Roads: These roads serve the internal needs of traffic in Town and connect to similar roads in surrounding towns. Existing town collector roads include the Stage Road, the East Barnard Road, and the North Road.
  - TH#1, the Stage Road, is a Class 2 Town Highway, asphalt paved, two lanes in width for approximately one third its length, and gravel surfaced, one to two lanes in width, for its remaining distance in Barnard.
  - TH#2, part of Royalton Turnpike and the East Barnard Road, is a Class 2 Town Highway, gravel surfaced except for a short paved section on a hill and one to two lanes in width.
  - TH#3, the North Road, is a Class 2 Town Highway, asphalt paved and two lanes in width its entire length.
- 3. Local Town Roads: All Class 3 Town Highways are gravel surfaced except for short sections leaving other paved roads and generally not a full two lanes wide. These roads are maintained for year-round travel.
- 4. Class 4 Roads: These roads are not required by State statute to be maintained by the Town except for culverts and bridges. Many year-round homes, vacation/recreational

homes and camps are served by these roads. Additionally, they are used for logging, farming, fire access and recreation. The mileage in the chart below only shows roads that the state currently classes as Class 4, but several additional Class 4 roads, or parts thereof, should be added to the state map.

- 5. Trails: Trails are not required to be maintained in any way by the Town but are public rights-of-way generally downgraded from an earlier, more extensive, but poor quality Town Highway system. They are used for logging, recreation and legal access.
- 6. Unmapped Town Roads: Old, disused and often difficult to define Town roads exist, though many of these have deteriorated to impassable or unrecognizable. The parcellocation mapping project has better defined these roads.

Trails and unmapped or untraveled Town roads are extensive, but not part of the measured Highway System. Mapping of the Town's roads and trails is complete and a report has been submitted to the Selectboard.

**Existing Town Highway Mileage:** 

	1,111cuge.
Highway	Miles
State Route 12	9.62
Class 2	15.56
Class 3	43.86
Class 4	13.48

#### **Existing Ordinances**

A Town Road Ordinance currently exists and may be amended by the Selectboard as required. A Traffic Ordinance also exists to regulate speed on Town highways. At this time there is no capital improvement program for road or bridge improvements. Any upgrade of Class 4 roads to Class 3 and construction of new roads is covered by the Road Ordinance and is at the petitioner's expense. The Selectboard may not pave existing gravel roads without voters' permission.

#### SCENIC ROADS

Barnard has numerous roads that are scenic and which exhibit special qualities worth preserving or enhancing. Barnard residents and visitors enjoy our country roads. As development occurs along these roads, the State or the Town oftentimes sees a need to improve them. This could mean the loss of majestic trees, stonewalls, other important roadside features and once pleasant views for the sake of safety and increased carrying capacity.

Improvements that increase road width or sight distances encourage faster speeds, even if not intended to do so, and consequently may not create as much safety as imagined. It is in the interest of Barnard to prudently evaluate the relationship between road improvements for safety or ease of maintenance and the potential loss of scenery.

#### ACCESS MANAGEMENT

One growing concern is access management - limiting access on key corridors to preserve capacity. Access management planning can forestall or prevent costly upgrading or replacement of roads and bridges and promote a more desirable and efficient land use pattern complementing the goals and planning principles set forth in this Plan. Ensuring that access points occur only in safe areas with proper slopes and adequate distances between them will preserve the function of the town highways. Through the control of the location and number of curb cuts on Barnard's collector roads and our only state road, Vermont Route 12, traffic flow can be better managed, avoiding the need for major improvements such as turning lanes. By combining access points, sharing parking and constructing interior road systems between uses, congestion can be reduced, accidents avoided and the function of these roads maintained.

Regulatory authority for access management rests with the Vermont Agency of Transportation for State highways and the Selectboard for town highways. The law (19 V.S.A. Section 1111) provides, in addition to a reasonable safe access test, that compliance be found with the Town Plan and local regulations related to land use. Therefore, use of this Plan in determining the appropriateness of new access onto a highway should be employed.

#### Goals

- 1. To promote and maintain a transportation system that is safe, efficient and complements the other goals and planning principles of this Plan.
- 2. To minimize transportation energy consumption.
- 3. To maintain the historic, scenic and rural quality of roads and trails.

#### **Objectives**

- 1. Maintain or improve roads, bridges and related facilities as necessary to ensure the current level of service in a manner that does not result unnecessarily in a loss of their scenic character.
- 2. Ensure that future development does not endanger, and enhances when possible, the public investment in the Town and regional transportation systems, including highway, bridges, bike and pedestrian facilities, public transit and trails.
- 3. Minimize curb cuts to ensure the proper mobility function and performance of a roadway.
- 4. Promote modes of transportation other than simply single-occupancy vehicles.
- 5. Support and coordinate land use and transportation planning initiatives at the local, regional and State levels.

- 1. Where major modifications are being proposed to a state or town road, planning should incorporate the scenic attributes of the roadway. These improvements should be designed to be compatible with the setting and enhance aesthetic quality whenever practical. Removal of roadside trees must be coordinated with the town's Tree Warden. The public shall have an opportunity to discuss proposed changes with the Agency of Transportation or the Town, as appropriate.
- 2. Before the Town adopts a new road or upgrades an existing Class 4 highway, the property owner(s) making the request should be responsible for the cost of improving

- and/or building the road to town specifications. Final decision regarding the nature of the improvement rests with the Selectboard.
- 3. Given the interest in and benefits from biking, hiking, snowmobiling, cross-country skiing and similar outdoor recreational activities, the Town shall retain existing Class 4 roads and trails for recreational use, or exchange for alternate routes.,
- 4. Significant road improvements shall only be conducted at unsafe locations or on roads leading into areas where the Town desires to encourage development. By keeping remote areas less conveniently accessed, the Town is helping keep future residential and non-residential development where most appropriate.
- 5. Prospective developments should not only evaluate traffic impacts, but also their impacts on other modes of transportation. For example, proposed developments should consider planning for pedestrian facilities such as sidewalks or trails, bicycle paths or transit stops.
- 6. The town road ordinance and other bylaws should be revised to include concepts that should be employed in evaluating access for new developments, such as:
  - limiting the number of curb cuts per parcel or per linear feet of roadway frontage;
  - denying direct access onto a primary road if a reasonable alternative access exists via a secondary road or shared driveway;
  - providing for separation between curb cuts or consolidation or reconfiguring of existing curb cuts to ensure the efficiency and safety of a roadway;
  - require shared access and parking whenever feasible;
  - encourage use of municipal parking areas or flexible parking standards (i.e. shared parking) to reduce the amount of parking required for individual developments; and
  - requiring sidewalks or the reservation of land for future sidewalks/paths along roads in the villages and between buildings and parking areas.
- 7. Any plan for improvements to Route 12 should not unduly compromise the historic, scenic, rural, natural and cultural characteristics of this route. Economic development objectives or new growth creating increased demand for upgrading of this route need to be balanced with the preservation of Barnard village.
- 8. The Town should maintain active participation on the Regional Transportation Advisory Committee (TAC) of the Two Rivers-Ottauquechee Regional Commission.
- 9. A sidewalk or pedestrian/bike path should be built connecting the school and Silver Lake State Park to the village center.
- 10. A park and ride lot should be constructed at the Town Hall lot.
- 11. The road department should regularly survey and inventory Class 2 and Class 3 Town road conditions and drainage systems.
- 12. The Town should maintain gravel roads as opposed to paving existing gravel roads.
- 13. The Selectboard should discourage through truck traffic on TH#3 (the North Road) by way of weight-limit restrictions and encourage Bethel and Royalton to do the same.
- 14. The Selectboard should continue restricting use of uninhabited Class 4 roads and trails by motorized vehicles in mud season and in the fall to prevent abuse and erosion.
- 15. The town should continue to participate in regional and State sponsored initiatives that help mitigate wildlife collisions with motorists, including construction of facilities that encourage safe wildlife passage.
- 16. The Selectboard should amend the Road Ordinance and Traffic Ordinance to incorporate the recommendations of this Plan.

- 17. The Selectboard should work with the Planning Commission to establish a Policy for discontinuance of Town roads to preclude discontinuance of through roads or rights of way.
- 18. The Selectboard should support increased public transit opportunities for residents.
- 19. Any subdivision bylaws should mitigate the transportation system's influence on habitat fragmentation and natural resource degradation.

# **ENERGY**

Vermont planning law provides that municipal plans include an energy program for the community. Such a program is intended to promote efficient and economic utilization of energy. Conservation of energy lessens the demand for new sources of fossil fuels, avoids expensive new electricity generating and transmission capacity and reduces greenhouse gas emissions. While it is recognized that energy supply and demand are directed largely by economic forces beyond the local level, the manner in which the Town plans for future growth can have an impact on our energy use and greenhouse gas emissions. By planning the location of jobs, public services and housing in close proximity each other, the consumption of fuel and the need for additional roads can be reduced. The siting and design of buildings and the selection of energy systems can also greatly influence the efficiency and conservation of energy. Use of the cluster planning concept, where buildings are concentrated in one area of a site with a complementing off-set of open space also encourages energy conservation and efficiency.

According to the state energy plan (*Vermont's Future: Comprehensive Energy Plan*, 1998) which only had data through 1991, the major fuels consumed in Vermont, by BTU, are oil (65%), electricity (17%), wood (8%), LPG and gas (6%), and other (3%). Energy consumption for residential and transportation purposes are the main sectors of usage. Almost 80% of residential energy use is for space heating and domestic hot water. State energy officials estimated in the 1998 plan that simple conservation measures incorporated in new housing could result in a 20% to 30% reduction of energy usage. Barnard has a slightly more diversified residential use of energy than the state, with wood being a significant energy source. According to the 2000 Census, 52% of the housing units in Barnard heated with fuel oil, 23% used LP gas, 22.7% heated with wood and the remaining 2.4% used either electricity, coal or some other fuel.

In Vermont, about half of all energy used is for transportation. Over 50% of this is used by residents' private cars. Public transportation in Barnard is non-existent and most jobs are out of town; as a result there are few, if any, alternatives to the automobile for all-weather commuting to the area's employment centers. Given our local reliance on oil for much of our heating and nearly all of our transportation needs and the recent extreme volatility in oil prices, any local energy planning to reduce our use of oil will benefit the town.

Renewable energy resources such as wind, hydropower or solar can help lessen our use of fossil fuels, reduce greenhouse gas emissions and even produce power locally. Wind turbines and solar panels (both hot water and photovoltaic) are growing in popularity but no published data exist on their use in town. Both offer the prospect of creating an increasing share of electrical production locally with greatly reduced effects on air pollution.

Despite the fact that wind energy is clean and a relatively secure fuel source, the siting of large wind turbines raises questions about aesthetic impacts, noise and effects on wildlife since ridgelines provide the best location for wind power facilities in Vermont. Commercial-scale wind turbines are exempt from local regulation and the state's regulatory system reviews and approves such utility-scaled development. However, the state review does look at this Plan. Smaller wind generation facilities set up solely for owner consumption of power on-site are not regulated by the state and are within the jurisdiction of local zoning regulations.

The use of solar power, both to heat water and to create electricity through photovoltaic (PV) panels is a good use of our cheapest and most abundant energy source. PV has become more attractive in recent years due to dropping prices for this technology, but is still expensive.

Hydropower has the potential to generate electricity with no emissions, but care must be taken to ensure that water quality and fisheries are protected. Hydropower does have the benefit of being a more reliable, steady source than solar or wind. While the technology now exists for microscale hydro plants, current licensing requirements make it expensive to permit hydropower for commercial sale.

#### Goal

1. To use energy more efficiently and with less environmental impact.

#### **Objectives**

- 1. Encourage the development of local renewable energy sources
- 2. Reduce the production of greenhouse gases.
- 3. Require that new town facilities are centrally sited to reduce travel needs.
- 4. Work to have more transit and car pooling opportunities.
- 5. Consider adopting subdivision regulations and zoning provisions that promote less energy intensive patterns of development.
- 6. Promote the location, design and construction of buildings that are energy efficient.

- 1. The Selectboard shall ensure that major public investments, such as schools, public recreational areas, and municipal facilities are situated within or in close proximity to the villages.
- 2. The Planning Commission should update the Zoning Bylaws to permit solar panels and allow residential wind power use as long as proper setback and height limits are met.
- 3. Where land development or subdivisions are proposed, design plans should work toward the goal of locating structures and buildings on the site which reflect sound energy conservation principles, such as solar and slope orientation and protective wind barriers.
- 4. Electric generation, transmission and distribution facilities shall complement the recommended land use patterns set forth in this Plan and minimize their visual impact.
- 5. As alternatives to the automobile, the Town should support the development of bikeways and footpaths in the village areas or other areas of concentrated settlement.
- 6. To reduce the demand for commuter transportation facilities and energy, the development of energy efficient home occupations and small-scale home businesses is encouraged.
- 7. To ensure a sustainable source of fuel wood production and improvement of Barnard's forests at a reasonable rate of return, landowners should be encouraged to enroll in the State's Use Value Program.
- 8. The Town should continue to support State and regional transportation programs serving Barnard to promote energy efficient commuting.
- 9. The Town should consider enacting provisions that encourage innovation of energy conservation and concentrate development in the best locations (e.g., grant density bonuses to projects that employ advanced energy design and efficiency).

- 10. Alternative residential energy sources, including solar, wind and hydropower are encouraged throughout the Town and especially in the Barnard Chateauguay Conservation Area.
- 11. Small-scale run of the river hydro projects on stretches impassable to fish are encouraged.
- 12. The Zoning Bylaws should be revised to include energy standards for buildings and lighting.
- 13. The Selectboard should work to minimize energy use for street lighting and in town-owned buildings.
- 14. The Town should explore the possibility of creating a hydropower site at the lake's outflow.

# TELECOMMUNICATIONS FACILITIES

Telecommunications have become increasingly important to the security and economic needs of residents and businesses. This trend will continue, creating new opportunities for the relocation and growth of decentralized business operations and reducing demands for travel by conventional modes. With an improved telecommunications infrastructure, large amounts of information can be conveniently moved over long distances at competitive rates. The implications for land use are significant, as this technology has enabled people to move into rural areas of the Town and to "telecommute" to other remote or central offices more readily. Barnard has signed on as one of many towns in the EC Fiber project to bring high-speed fiber optic lines throughout town.

Under present standards, transmission towers are the dominant telecommunications facilities. As land uses, these towers have emerged as planning concerns. To ensure adequate transmission of signals in mountainous areas, towers and related facilities prefer to be located on hilltops or high elevation points, often creating conflicts with scenic landscapes. Some of the Town's principal scenic resources are its ridgelines and mountainsides. These areas are significant contributors to the maintenance and enjoyment of rural character. These ridges are predominately undeveloped and provide an unbroken skyline viewed from the valley floor. With proper regulation, the use of ridges for telecommunication towers and related facilities can be minimized, and when done, undertaken in a manner that does not detract or adversely affect these scenic values. Protection of these areas from insensitive development is a matter of public good.

Under Vermont law (24 V.S.A. Chapter 117), municipalities may require that certain standards be met prior to the erection of telecommunication facilities. Local bylaws may regulate the use, dimension, location, and density of towers, however, Federal Communications Commission (FCC) rules are preemptive of local and State law where conflicts exist. Act 250 jurisdiction requires a permit prior to the construction of a communications tower or similar structure over 50 feet in height. Both Act 250 and local regulations are superseded if the tower is part of a network regulated by the Public Service Board. The recommendations of this section serve as a clear written community standard intended to preserve the aesthetics or scenic beauty of the Town of Barnard. Accordingly, it is the intent that this section be utilized by the District Environmental Commission, the Vermont Environmental Board, and the Public Service Board as part of their review for all wireless communications facilities.

#### Goals

- 1. To preserve the rural character and appearance of the Town of Barnard.
- 2. To protect the scenic, historic, environmental and natural resources of the Town of Barnard.
- 3. To enable Barnard residents to access fast and reliable telecommunications.

#### **Objectives**

- 1. Minimize the adverse visual affects of towers and related facilities through careful design and siting standards.
- 2. Encourage the location of towers and antennas in non-residential areas and away from visually sensitive areas, prominent scenic areas and historic areas.

- 3. Provide standards and requirements for the operation, siting, design, appearance, construction, monitoring, modification, and removal of telecommunication facilities and towers.
- 4. Facilitate the provision of telecommunication services to the residences and businesses of the Town of Barnard.

- 1. In order to minimize tower proliferation, applicants must exhaust all reasonable options for sharing space on existing towers prior to proposing new towers and related facilities. The principle of co-location is the favored alternative.
- 2. Towers for wireless service providers and/or broadband shall be required to allow other providers to co-locate on their facilities when feasible, subject to reasonable terms and conditions.
- 3. To minimize conflict with scenic values, facility design and construction shall employ the following principles:
  - a. be located in forested areas when possible, or camouflaged on buildings,
  - b. be sufficiently landscaped to screen related ground fixtures from public vantage points, such as trails, roads or water bodies;
  - c. utilize materials, forms (including asymmetrical tree shapes), color schemes, mass, minimal height and other design elements to promote aesthetic compatibility with surrounding uses and to avoid adverse visual impacts;
  - d. where construction of access roads is involved, it should be situated to generally follow the contour of the land and to avoid open fields or meadows to minimize its visibility;
  - e. towers should not be illuminated by artificial means and not display strobe lights, except when required by the FAA;
  - f. towers shall avoid breaking the silhouette of peaks and ridges by locating downslope whenever feasible, and be sited in areas minimally visible to the traveling public, Silver Lake and the Appalachian Trail; and
  - g. the height for towers, antennae and tower-related fixtures shall be as close to mature tree height as possible while still achieving the coverage objective.
- 4. In planning for telecommunication facilities, due consideration should be given to the environmental limitations of any given site. Impacts of the use on wildlife habitats, soil erosion, forestry and agricultural lands and similar resources should be carefully addressed. Projects that materially impact these resources are discouraged.
- 5. The design plans for telecommunication projects situated on lands owned by the State shall be compatible with current Management Plans for Public Lands adopted by the Agency of Natural Resources.
- 6. Towers, antennae and related fixtures that fall into disuse or are discontinued shall be removed. Local and State land use permits shall incorporate removal of inactive fixtures as a condition of approval.

# **OUTDOOR LIGHTING**

This section is intended to provide guidance and standards to assist in evaluating lighting issues so that our historic villages, other areas planned for concentrated mixed use and rural areas will be better served. Increased development in the Town in recent decades has brought about a corresponding increase in the use of outdoor lighting. While increased lighting can be seen as an inevitable result of growth, excessive and unplanned lighting results in inefficient energy use, contributes to "light pollution" and affects our ability to view the night landscape, as well as creating an adverse impact on the character of our historic villages and hamlets.

With the advent new lighting technologies, commercial enterprises, public utilities and residential development now have the ability to provide good night vision at reasonable levels that complement their immediate surroundings.

The purpose of an outdoor lighting installation should be to enhance the visibility necessary to provide lighting for a given task or need. Using a large quantity of light does not guarantee good visibility, however. Using the minimal amount of light necessary to allow adequate visibility for a site decreases skyglow and avoids escalation of light levels.

Glare is a lighting issue facing communities, including Barnard. Excessive brightness makes it difficult to see. Misdirected fixtures or unshielded lamp sources cause glare. Good visibility can often be accomplished with less light. Light that is not directed toward the ground or towards the intended surface can also shine into the viewer's eyes, impairing vision and even causing potential safety problems if near roads.

"Skyglow" is reflected light from surfaces that is visible in the night sky and is a form of "light pollution". Skyglow contributes to a loss of our ability to see stars and the natural night sky. Techniques to reduce the amount of illumination shining directly into the sky can reduce skyglow and the overall level of lighting to be used.

#### Goals

- 1. To preserve the nighttime ambiance and aesthetic qualities of the village, hillsides and night sky.
- 2. To conserve energy in lighting systems.

#### **Objectives**

- 1. Reduce skyglow and off-site effects of lighting from any large lighting installation, including minimizing the number of streetlights.
- 2. Promote lighting design that utilizes fixtures to reduce glare and save energy.
- 3. Ensure lighting plans entail good design light levels and distribution appropriate for the proposed use of the site and compatible with the character of the neighborhood.

#### **Recommendations**

1. New commercial or subdivision lighting installations shall be designed to minimize glare and skyglow, to not direct light beyond the boundaries of the area to be illuminated or onto adjacent properties, and to minimize lighting levels to that required to safely facilitate activities taking place at such locations. Use of cut-off or shielded fixtures to

- direct light downward or a reduction of the amount of light being generated shall be required.
- 2. For large projects, lighting professionals shall give due consideration to the latest <u>Outdoor Lighting Manual for Vermont Municipalities</u> (Chittenden County Regional Planning Commission, 2008).
- 3. Where high ambient or background lighting levels are adjacent to planned commercial uses, such levels should be considered when evaluating the need for additional lighting.
- 4. Lighting schemes that serve as advertising or to attract attention to these uses are not to be allowed. Excessive pole height is inconsistent with this Plan.
- 5. Illuminated signs may not be lit beyond the hours of operation of the business.
- 6. Facades should only be lit on public buildings and the use of streetlights minimized.
- 8. Lighting standards should be incorporated into future revisions to the Zoning Bylaws.

# **EDUCATION**

Education in Barnard has a long tradition of excellence dating back to the one-room schoolhouses. Since 1959 we have had a consolidated elementary school in the center of Town. An addition was added in the early 1970s and the school took its present shape after renovations and additions in 1990/91. The Barnard Academy, formerly called the Barnard Central School, is K-6 and our only local school. The Barnard Academy is a part of the Windsor Central Supervisory Union which consists of seven elementary schools and one union high school in Woodstock.

#### Goals

- 1. To ensure the educational system stays in step with the growth and development of the Town.
- 2. To maintain an elementary school in Town, if feasible.

# **Objectives**

- 1. Maintain and enhance educational facilities for a variety of academic, athletic, social, cultural and community activities.
- 2. Consider predicted population changes in planning educational decisions.

- 1. The School Board and Town should work together to encourage additional uses of the school, such as adult education and other community activities.
- 2. The School Board should continue to work with area schools in an effort to keep the school open while constraining costs.
- 3. If the school closes due to too few students, the School Board and the Selectboard should work together to develop alternative uses for the building and site.

# **CULTURAL and RECREATIONAL FACILITIES**

Recreation in Barnard has traditionally been closely tied to the land. Hills, woods, fields, valleys, streams and ponds offer opportunities for many kinds of recreation - bicycling, picnicking, snowmobiling, hiking, hunting, and swimming. Silver Lake has always been a year round magnet for both townspeople and visitors for swimming, boating, fishing, skating and more. The preservation of Silver Lake is one of the highest priorities of the Town.

Town-built recreational facilities include the tennis courts and basketball court beside the elementary school and the ball field behind it. Those facilities are managed by the Town's Recreational Committee. In winter, thanks to those who plow and set up the boards, a portion of Silver Lake becomes an ice hockey rink.

Residents and home-grown efforts have brought culture and recreation to the Town over the years. Barnard is (or has been) the home of writers, artists and musicians who share their gifts and enrich the life of the Town. Plays, variety shows, dances, concerts, fairs, parades and Silver Lake Days have all served to bring people together for culture and recreation. For more diverse or professional events, the Town has relied, and continues to rely, on surrounding towns that offer excellent cultural and recreational opportunities.

Facilities used for cultural activities offered by townspeople or recruited from outside Barnard have included the Barnard Town Hall, the East Barnard Community Club Hall, the Barnard Academy (formerly known as the Barnard Central School), Danforth Library and the Barnard Historical Society. Facilities available within 30 miles include theaters, movies, concert halls, museums and art galleries.

#### Goals

1. To provide access to diversified cultural and recreational opportunities for Barnard residents of all ages.

#### **Objectives**

1. Encourage and honor community participation in local recreational and cultural events.

- 1. Continue town support of the Recreation Committee, including the use of town buildings for functions.
- 2. Residents and local groups should work with area cultural organizations to continue cultural offerings in or near Barnard and to make transportation available for cultural events outside of Town.
- 3. The Town should work with the Barnard Silver Lake Association in its efforts to preserve the Lake.

# **UTILITIES, FACILITIES, and SERVICES**

Utilities serving Barnard include telephone, electricity and cable television. Facilities are buildings or areas managed by the municipality, community, State and Federal governments or non-profit organizations that perform a governmental function. Services may or may not have a physical presence in town, but serve the town's residents in an important way.

At the present time, the following are some of the public and private utilities, facilities and services present in Barnard:

#### **TOWN FACILITIES**

Barnard Town Garage
Barnard Town Hall
Barnard Transfer Station
Danforth Library
Town Forest
Recreational Field

#### PRIVATE AND NON-PROFIT SERVICES OR FACILITIES

Wesbrook Woods
Hawks Hill
East Barnard Community Club Hall
Telephone facilities located:
 intersection THs #3 & #33,
 near THs #2 & #78,
 south of intersection TH #56 & Rt. 12,
 TH #5 on Parcel 225
Helping Hands
Thompson Senior Center
CVPS Sub-Station, East Barnard
Micro Wave Tower
Sonnenberg Water System
Barnard Historical Society

#### **EMERGENCY SERVICES**

Fire suppression in town is provided by the Broad Brook Volunteer Fire Department and the Barnard Volunteer Fire Department. These two departments are assisted by surrounding departments under mutual aid for large fires. Barnard has local members on a regional Swift Water Rescue team. EMS services are provided by the Barnard FAST squad and White River Valley Ambulance. Law enforcement and traffic control is provided by the Vermont State Police and the Windsor County Sheriff. The Town contracts with the Sheriff for a certain number of hours of traffic patrol.

#### **CEMETERIES**

Town Cemeteries include the Ashley, Methodist, Nye, Village, Perkins, East Barnard, Smith Hill, South Barnard, Windward and Silver Lake cemeteries. Private cemeteries in town are the Chamberlain, Boyden, Moore and Eastman Road cemeteries.

#### STATE FACILITIES

Silver Lake State Park Les Newell Wildlife Management Area

#### FEDERAL FACILITIES

The only federal facilities in the town are the U.S. Post Office in Barnard Village and the Appalachian Trail.

In general, Barnard is adequately served by the current town and other area facilities and services. It is not expected that Barnard will need any major new utilities, facilities or services in the near future, except the possible replacement of the Broad Brook Fire Station, the purchase of replacement fire apparatus as planned and the provision for broadband services (high-speed Internet).

#### Goals

- 1. To continue providing adequate utilities, community facilities and services to the citizens of Barnard and visitors in a manner consistent with our rural nature.
- 2. To enable the residents of Barnard to have access to a broad range of health and human services.
- 3. To ensure quality and affordable child care.

#### **Objectives**

- 1. Growth and development shall not exceed the capacity of local and regional facilities and services.
- 2. Any expansion of infrastructure by the Town, State or other entity shall be made so as to support development in the villages and other designated growth areas and to discourage strip development or sprawl.
- 3. Increase community awareness of where and how emergency services can be obtained.
- 4. Continue to have sufficient providers of health and human services.
- 5. Continue support of local emergency services.
- 6. Support local child care providers.

- 1. Short- and long-term management plans should be developed for each public structure in town
- 2. Identify private cemeteries and protect these sites.
- 3. Maintain a U.S. Post Office in Barnard village.
- 4. The Town should provide input to CVPS on placing or replacing utility lines.
- 5. Power companies shall avoid construction of additional power/phone lines in the Chateauguay No-Town Conservation Area.

- 6. The Selectboard should provide information regarding the availability of community services to the residents of Barnard.
- 7. The Town should support the appropriation requests from social service agencies that provide in-home health services.
- 8. The Town supports the creation of sufficient child care providers in town.
- 9. The Selectboard and related organizations should budget to replace and update emergency buildings, vehicles and equipment as needed.
- 10. The Town shall work with telecommunications companies to provide comprehensive broadband services.

# **ECONOMIC DEVELOPMENT**

Barnard, like many small communities, has little commercial and industrial activity and depends mainly on real estate taxes from property for its tax base. Residents may be occupied in agriculture or forestry production, home businesses, construction, seasonal businesses, commerce or industry outside of the community. Economic planning should focus on protection of natural resources, home businesses and farm-related businesses.

The 2000 Census reported that 501 residents were employed; 63.7% percent worked in the private sector, 13.4% worked in the public sector, 22% were self-employed, and 1% were unpaid family workers. Seventy-eight percent of those employed drove alone to work while 4.6% carpooled to work, five percent walked to work, half-a-percent found other means of travel and 11.3% worked at home. The mean travel time to work for Barnard's workers was 25.1 minutes.

Barnard's primary economic in-town activity consists of home businesses. According to the 2000 Census, 56 residents of Barnard used a portion of their home or property for business purposes. In addition to home occupations, the zoning allow Home Business I, Home Business II, Commercial and Commercial Outdoor Recreation. Service businesses represent an important segment of the economic makeup of Barnard. These businesses offer services to residents, provide local employment and add to the tax base. The Town recognizes this and supports regulations that encourage such activity.

Many enterprises undertaken by Barnard residents require outside storage of equipment and materials. Service-oriented businesses such as contractors, earth movers, masons and property managers, and the storage of equipment and materials particular to their service, exist throughout Town and thus are considered an existing element of the character of Barnard. Nonetheless, the Town should strive to balance its rural character with the economic and business needs of residents. Thus, when applied to Zoning Bylaws regulations, such business enterprises should be reviewed for conditional use approval.

The establishment and operation of small entrepreneurial enterprises are consistent with the general purposes of the Town Plan, provided that their size, type, appearance and setting do not significantly or unnecessarily detract from the rural character of the Town. These enterprises should not cause any undue burden on the ability of the Town to provide services, such as highways, fire protection and ambulance service.

# Goal

1. To allow moderate economic growth that is consistent with Barnard's rural identity.

#### **Objectives**

- 1. Maintain the health and vitality of the Town's home occupations and services businesses.
- 2. Encourage economic growth through the creation and expansion of light industries, commercial recreational activities and professions which enhance the rural nature of the Town.
- 3. Encourage the continued operations of agriculture and forestry, and recreational enterprises and that add value to these land-based products.

4. Protect natural resources and the rural character of Barnard while allowing service businesses and farm-related businesses to prosper.

- 1. Establish regulations for Bed and Breakfast operations.
- 2. Review the existing Zoning Bylaws with regard to outside storage of materials.
- 3. Establish specific conditional use guidelines regarding home and service businesses so that these businesses are seen as good neighbors.
- 4. Promote businesses that add value to farm or forest products, or that are based on our rural nature and natural resources.
- 5. Ensure that the villages are vital areas for economic activity.
- 6. Retain the existing commercial areas in future zoning bylaws at the locations that are the existing commercial areas. The permitted and conditional uses allowed in the Rural, Forest and Farmlands Area shall also be allowed in the Commercial Area.

# HOUSING

Barnard, once a logging and farming community, is now a year-round bedroom community for larger, surrounding employment centers including Woodstock, Bethel, Randolph, Hartford, Hanover and Lebanon. 89% of workers in 2000 worked outside the home with an average commute of 25 minutes (US Census). Barnard experiences a sizable increase in summer population, due in part to Silver Lake.

According to the 2000 Census, the population of Barnard was 958, up from 872 in 1990. The estimated population of the town in 2006 (latest available) was 964 (VT Housing Data). There were a total of 629 housing units as of 2000 (US Census). There were 383 occupied units, and 235 seasonal and vacation residences (37% of the total units). This is a high percentage of seasonal units; the county and state percentages of seasonal units are 20% and 15% respectively. Of the 383 occupied units, 16% were renter occupied, much lower than the 28% and 29% renter occupancy figures for the county and state.

According to the US Census, there were only 3 vacant units available for rent and 3 for sale in 2000, giving a 1% vacancy rate for the housing market. A healthy housing market is generally considered to need a 5% vacancy rate. Vacancy rates below 5% represent housing stocks where the available units are either substandard or undesirable, and the rents or sale prices of habitable units escalate due to the lack of competition.

The overall market price for homes is high in Barnard and these market prices will continue to change the socio-economic mix in the Town. The 2000 Census reported the median value of primary residences in Barnard to be \$151,200. For comparison, the median prices for all housing in Windsor County and Vermont in 2000 were nearly \$40,000 less (\$112,100 and \$111,200). Still, with median family income in 1999 of \$48,125, the median house in Barnard represented only 3.18 years of income.

These prices were before much of the escalation in house prices seen prior to 2008. By 2007, the median primary home price in Barnard for the seven houses sold that year was \$209,000 (VT Housing Data). The average (mean) price for a home was \$549,000, though, obviously skewed upwards by a few very expensive homes. The median 2007 sales price for a vacation home in Barnard was \$477,000, with the average (mean) price \$720,000. The most expensive residential property ever to be sold in Vermont was sold in Barnard in 2008 for 18.5 million dollars. House price data is not available for the very recent past, but prices have likely moderated for modest homes.

Housing growth is quite small in Barnard. Over the decade of the 1990s, there was an average of 2.2 dwelling units built per year, while the population grew by 8.6 people per year. The fact that the town's population grew faster than homes were constructed to meet these needs was a contributing factor to price increases.

Land use regulations can have a negative effect on affordability of homes, mainly through reducing possible supply by limiting the area where homes can be built, requiring very large lots, or incorporating strict design control. Barnard's current Zoning Bylaws have none of these issues, however, as nearly all of the town is currently zoned Rural Residential which has a 2-acre

minimum lot size and there is no design control. There are literally thousands of potential home sites remaining in Barnard under these regulations. Though the regulation has not been updated to incorporate statutory changes, "accessory dwelling units" (a single bedroom apartment) are now allowed by law whenever a house is allowed provided there is sufficient room to build the unit and it will meet all parking and septic rules.

Multi-unit dwellings are allowed as a conditional use in the Rural Residential district as well. Allowing for the construction of multi-family dwellings lowers housing costs and allows young people, young families, single-parent families and elders to enter or remain in communities in which they have ties or desire to put down roots. There is no restriction on any type of manufactured housing.

Affordable housing is an issue in Barnard because of three main factors: there are limited sites with good soils for on-site septic disposal, often resulting in much more expensive mound systems; the cost of accessible land is high, partly driven by few sales of land and partly by the price sellers are able to get; and there are very few modest homes being constructed. Creating more affordable homes in town will likely take action by the Town or non-profits.

#### Goals

- 1. To promote sufficient availability of decent and affordable primary housing for residents.
- 2. To minimize the cost, energy consumption and environmental impacts of housing.
- 3. To ensure that the impact of new housing construction or rehabilitation does not exceed the community's ability to reasonably provide adequate public facilities (e.g. schools and municipal services).

#### **Objectives**

- 1. Promote the preservation of the existing housing stock, particularly in the village centers of the Town.
- 2. Support public and private agencies involved with planning, financing and developing affordable housing consistent with existing neighborhoods.
- 3. Enable residential development on minimal lots and as dense as feasible near the village and hamlet areas.

- 1. The Town should consider expansion of the village areas in the Zoning Bylaws to allow for dense residential development.
- 2. The Town should revise its Zoning Bylaws to allow minimal lot sizes in village and hamlet areas.
- 3. Given that housing, and in particular affordable housing, is a regional issue, Barnard should assist the Regional Planning Commission with the Regional Plan Policies whenever possible.
- 4. Given the high cost of replacement for housing units, high priority should be given to preservation of affordable housing already in existence.
- 5. Barnard's Zoning Bylaws should be evaluated to determine their suitability in achieving the Town's stated housing goals, including whether incentives should be added for development of affordable housing.

- 6. The Barnard Planning Commission or a town committee could work with State housing agencies, non-profit organizations and lending institutions to insure the availability of loan or grant funds for Vermonters to purchase, acquire or improve their primary homes.
- 7. The Barnard Planning Commission or a town committee could actively cooperate with local and regional non-profit housing trusts to evaluate the need for affordable housing in Barnard, develop new affordable housing and preserve existing housing through mechanisms that assure the perpetual affordability of that housing.
- 8. The Barnard Planning Commission or a town committee could work with the Regional Planning Commission to retain Vermont's innovative publicly financed home mortgage lending and housing assistance programs through which the region's low and moderate income families, disabled individuals and the elderly are enabled to secure affordable housing.

# RELATIONSHIP of BARNARD'S PLANNING ACTIVITIES to ITS NEIGHBORS

Because of inter-town relationships, this section evaluates the plans of adjacent municipalities. This evaluation discusses how development proposals and planning activities and adopted plans in neighboring towns could affect Barnard. Where there are plans that are incompatible with this Plan, it is important to identify them and to seek ways to mitigate conflicts. Barnard is bounded by five towns: Bethel, Bridgewater, Pomfret, Royalton, and Stockbridge.

Bethel's Town Plan was last updated in 2006. It is the nearest town with an industrial base to Barnard. A mid-sized rural community, Bethel's socio-economic center is its village. Two Vermont highways, Routes 107 and 12, pass through the village, with additional direct access to 1-89 and railroad sidings. Bethel's land use recommendations for rural areas coincide with the pattern proposed in Barnard.

The development trends along the boundaries of Barnard shared by Bridgewater, Pomfret and Stockbridge are similar if not identical to Barnard: that is, the gradual development of single-family homes. Other than home businesses, there is little growth of commercial or industrial uses in these areas.

Bridgewater has no bylaws in effect, but has used its Plan in evaluating Act 250 projects. Pomfret has a Town Plan (2007) and bylaws with similar recommendations for growth and land use. Stockbridge has a new Town Plan (2005) which is compatible with Barnard's.

Most of the border with Royalton is similar to the borders with Bridgewater, Pomfret and Stockbridge. A possible concern to Barnard is the lack of bylaws in Royalton and, particularly, what kinds of development might occur in the North Road area.

As Barnard's Town Plan allows for the preservation and continuance of the Town's rural nature, only benevolent effects should result for adjacent towns.

Barnard is within the region serviced by Two Rivers-Ottauquechee Regional Commission. Barnard is one of thirty municipalities that comprise the Region, which covers northern Windsor County, most of Orange County, and the Towns of Pittsfield, Hancock, and Granville. The Commission was chartered in 1970 by the acts of its constituent towns. One of the Commission's primary purposes is to provide technical services to town officials and to undertake a regional planning program. The Commission's Regional Plan, adopted in 2007, will remain in effect for a period of five years. Policies for management of new development within town centers, village settlement areas, hamlets, rural, conservation and resource areas are substantially similar to those set forth in the Barnard Town Plan. It is reasonable to conclude that Barnard's Town Plan and the Regional Plan are compatible and complementary to one another as well as to the goals of the State's Planning and Development Act (24 V.S.A., Chapter 17).

#### Goals

- 1. To work to maintain the natural beauty of the region while allowing for economic growth.
- 2. To develop regional solutions to problems that transcend Town borders.

## **Objectives**

- 1. Work with neighboring towns on areas of mutual interest
- 2. Work to ensure that Barnard's views are known on a wider scale

- 1. The Town should continue to actively participate in Two Rivers-Ottauquechee Regional Commission and exchange planning information and development trend data with neighboring communities.
- 2. The Planning commission should review State Agency planning documents to follow possible impacts on Barnard.
- 3. The Selectboard should explore grant opportunities with Bethel to build affordable housing for the area since sites may be easier to develop in Bethel.
- 4. The Selectboard should work with bordering towns on any inter-town Class 4 road issues.
- 5. The Conservation Commission should work with neighbors in Pomfret and Royalton (Broad Brook Mountain) to preserve wildlife habitats in large areas of contiguous forest in East Barnard.
- 6. The CNT Committee should work with Stockbridge, Bridgewater, and the Vermont Fish and Wildlife Department to expand the proposed Barnard Chateauguay/No Town Conservation Area.

# PLAN IMPLEMENTATION

The Town of Barnard has an array of tools to carry out the goals and objectives of this Town Plan. By the end of 2008, the following local or state growth management tools were in place:

Barnard Town Plan
Barnard Zoning Bylaws
Barnard Road Ordinance
Potable Water Supply and Wastewater Rules
Refuse Disposal Ordinance
Solid Waste Disposal and Recycling Ordinance
Land Fill Policy
Silver Lake, Rules for Regulating Use of
Traffic Ordinance
GIS Mapping
Parcel Maps
Act 250

Many of this Plan's recommendations reference or suggest revisions to one or more of these existing tools. In addition, some recommendations focus on new studies to be conducted by the Planning Commission, citizen advisory groups, Town departments, State and regional agencies and others. There should be continued revising of planning maps and creation of additional maps (dealing with lots, wetlands, soils, trails and roads) to be used for performance-based development. Bylaws and ordinances should continue to be looked at in light of recommendations in this Plan.

#### PROCESS FOR MODIFICATION AND UPDATING

The Town of Barnard first adopted a plan on August 20, 1971 as the Barnard Town Plan and a Town Plan with revisions and updates has been adopted every five years since then. The Town Plan is a dynamic document and represents a process just as much as it does a product. The nature of growth and change quickly dates the data contained within the Plan. The Plan must be readopted at least every five years. At a minimum, updated statistics should be incorporated on these occasions. Of course, other revisions and modifications most likely will be needed to reflect changing conditions. While the Planning Commission is responsible for maintaining the Town Plan, any individual or group may initiate changes. 24 V.S.A. Section 4384 details the procedures to be followed for the adoption of plans and any amendments.