Newbury Town Plan

Adopted on April 17, 2024

Written with assistance from the Two Rivers-Ottauquechee Regional Commission, funded by a Municipal Planning Grant from the Department of Housing and Community Development

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I. Introduction

A. About Newbury

The Town of Newbury, Vermont, is situated along the Connecticut River midway between White River Junction approximately 35 miles to the south and St. Johnsbury 25 miles to the north. Interstate 91 and U.S. Route 5 provide long distance and local parallel transportation corridors north/south through the town.

> *"Vermont is a land of hills and Newbury has its full share."*
>
> History of Newbury, Vermont 1704-1902

Town history is told in terms of its people, the settlers whose names are still amply woven among the current 2,293 inhabitants, and its place, on the most famous oxbow along the 320 mile reach of the Connecticut River. This river corridor and the lands riparian to it constitute a most precious natural resource.

Newbury has long held the cultural traditions of an agrarian community. Even today, much of the town's economy is based in agriculture and silviculture with approximately seventy percent of the town's lands in forest parcels of 20 acres or more. Newbury, more than 60 square miles in area, is a mixture of diverse villages and hamlets, each one distinct with its own set of characteristics. For the purposes of this Town Plan, these areas have been identified as follows:

Wells River – An incorporated village and a town center area, including a historic district, is at the northern limits of Newbury forming the commercial/retail nucleus of the town. A town center contains a concentrated mix of uses at a high level of density. They are areas where central public utilities for water and/or sewer are available and where there exists a central location for commercial activities, schools, and cultural and civic activities for the town and the surrounding communities. Wells River is linked via east/west Route 302 to Woodsville, New Hampshire, directly across the Connecticut River, and north/south through Route 5. This link provides access to a broadened commercial/retail pool; however, economic viability in the business sector of Wells River is fragile and complex because of the different tax structures of Vermont and New Hampshire. Herein exists a major challenge to the Village as well as the Town at large.

Newbury Village – An incorporated village centrally located on the north/south axis of the town along U.S. Route 5 and adjacent to the Connecticut River, Newbury Village's Historic District and Village Common harken back to the typical New England village green. It was here in 1833 that the Newbury Seminary was chartered and until 1868 this institution provided education to an estimated 7,000 young men and women. Many of the buildings remaining in this Village have historic significance.

South Newbury – an area of the town, designated hamlet, which includes a number of Newbury's active farms. The farmlands are carved out of river valley bottom land to the east of U.S. Route 5, and south to the Bradford Town border. South Newbury farms produce dairy, fruits and vegetables, beef, emu and poultry for both retail and wholesale. This area is slightly unique both for the diversity of production and for the fact that all the farmland is contiguous.

West Newbury – Located to the west of Interstate 91 and approximately 7 miles southwest of Newbury Village, West Newbury is hill farm country. Today the center of the hamlet is comprised of large farmhouses, barns and associated outbuildings. The

West Newbury Congregational Church, the old schoolhouse now housing the Historical Society, the West Newbury Village Hall, and the post office provide counterpoints to the farms. It is a very scenic area with pasturelands opening to spectacular views east and south.

Boltonville – Located in the northwest corner of Newbury along State Route 302, the Boltonville hamlet is a small area dominated by the wetlands and dramatic drop of the Wells River, which enables hydro-production, is a favorite of kayakers and recreationists, and is an access point for the Cross Vermont Trail.

This is Newbury with its differing and geographically diverse sets of community interests, values and functions, for which the Planning Commission is charged with the task of planning.

Newbury's Town Plan has been prepared as provided for under Section 4382, Chapter 117, Title 24, Vermont Statutes Annotated, known as "The Municipal and Regional Planning and Development Act." This law requires the Planning Commission to attempt in-depth analysis and comprehensive planning. However, in our meetings with citizens around the town, we have heard "keep it simple." The following plan is an effort to meet both requirements.

We have spent months thinking about Newbury. We have talked to as many people with as many different interests as would respond to our questions. We have asked you about business: Where, what kind and how much? We have asked you about forestry and farming. We have asked you what you want your villages to look like. Your answers have helped to shape this plan and have had a direct influence on the future directions Newbury may choose to follow.

B. General Plan Goals

The Newbury Planning Commission engaged in extensive community outreach efforts throughout 2023 to gather input and comments from residents on the Town Plan revision process. In March of 2023, the Planning Commission put out a community survey to invite public comment and participation. The survey was open from February 25th through March 31st. There were 181 responses via an online survey through Survey Monkey as well as through hard copies distributed through the Town Office and local libraries.

In that survey, the majority of respondents were from Newbury Village and West Newbury. Of concern, there were a comparatively low number of responses from Wells River. This would indicate that greater attention should be given to engaging Wells River residents in the town planning process and promoting greater connection between Wells River and the broader Town of Newbury community. Over 50% of respondents indicated that they had been residents of the town for twenty or more years. Over 86% owned their home or property, and the majority of respondents were also households comprised of adults 65 or older.

When asked why residents chose Newbury as their home, a high number of respondents cited the rural character of the community (86%), and the natural beauty of the area (79%). These responses were followed by sense of community (57%); proximity to outdoor recreation (40%), and the presence of family and friends in the community (34%).

The community survey process was followed up by a series of community forums organized by the Planning Commission to solicit direct feedback from the public and have conversations about concerns, questions, and priorities from the community. Three community forums were scheduled in September of 2023, including a forum in West Newbury, the Village of Newbury, and the Village of Wells River. Additionally, the Planning Commission hosted a table at the "So

Long Summer, Hello Fall Festival" in Wells River to give residents another opportunity to comment on the plan. The discussions at these community forums were useful in informing many of the proposed substantive revisions to the Town Plan, particularly in the Land Use and Housing sections of the plan.

The following goals are set forth to achieve these important values:

1. Plan development so as to maintain the historic settlement pattern of Newbury's town center, villages, hamlets and surrounding rural countryside.
2. Ensure the availability of safe and affordable housing to all Newbury residents.
3. Provide Newbury with a strong and diverse economy that provides rewarding job opportunities while maintaining high environmental standards.
4. Encourage and strengthen agricultural and forestry industries through vocational education, economic development and land use management techniques.
5. Protect and preserve important natural and historic features of Newbury.
6. Preserve the quality of air, water, wildlife and land resources in Newbury.
7. Provide for the wise and efficient use of Newbury's natural resources including lands used in solid waste disposal and earth resources extraction and facilitate proper site restoration and preservation of the aesthetic qualities of the area.
8. Encourage efficient use of energy and development of renewable energy resources.
9. Plan for, finance, and provide an efficient system of public facilities/utilities to meet future community needs.
10. Broaden access to educational and vocational training opportunities with special emphasis on adult literacy.
11. Provide for safe, convenient, economical, and energy efficient transportation systems that respect the integrity of the natural environment.
12. Maintain and enhance recreational, cultural and artistic opportunities for Newbury residents and visitors.

II. Demographics

A. Population

Between 2000 and 2010 the town's population grew from 1,965 to 2,216, and in 2020, Newbury's population increased to 2,293 (3.47%). This is similar to the 3.72% growth experienced by Orange County between 2010 and 2020. Vermont's growth rate was higher for that decade, at 5.63%.

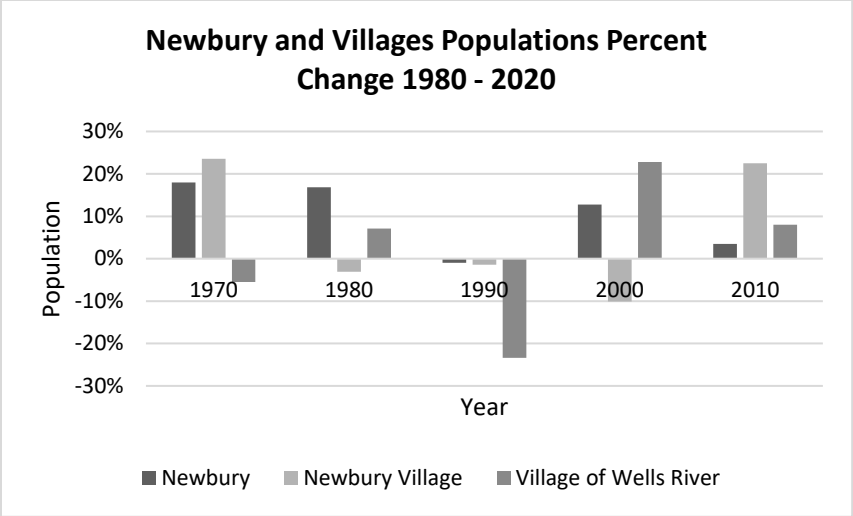


Figure 1. Population of Newbury Town and Villages percent change from 1980 to 2020 (Source: US Census Bureau Decennial Census)

Like much of Vermont, Newbury's population of older adults is increasing. When 2020 Census data compared to data from 2010, Newbury experienced a 39% jump in the number of residents aged 55 and up. In that decade, Newbury also experienced a dramatic decrease in the number of residents aged 35-45 years old, with a decrease of over 50% during that decade. Conversely,

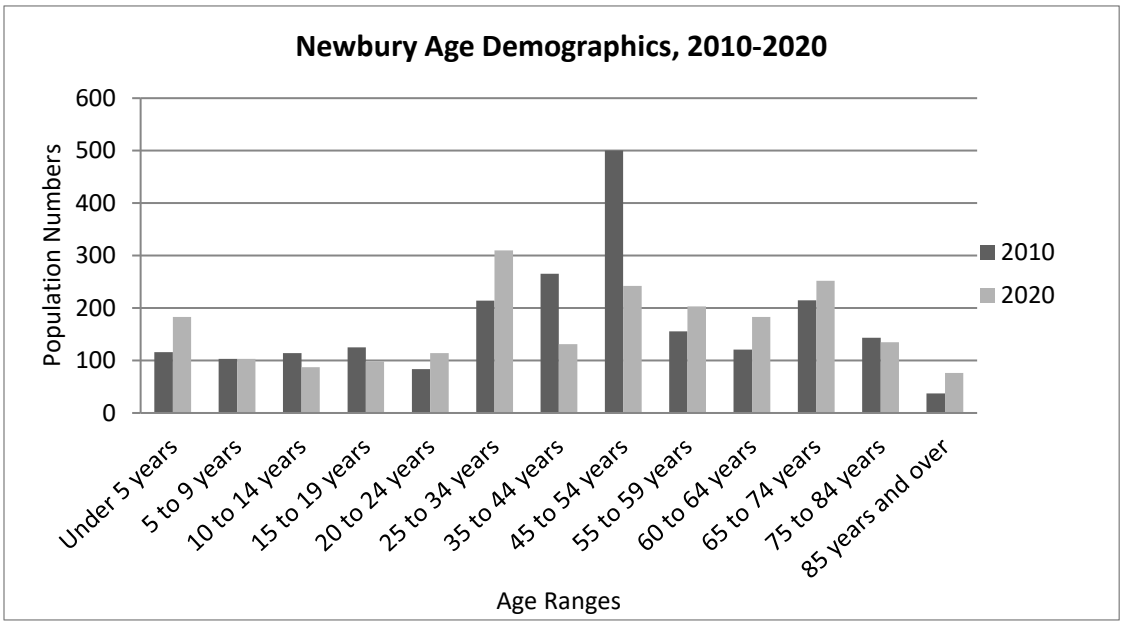


Figure 2. Newbury age groups in 2010 and 2020 (Source: U.S. Census Bureau 2010 and 2020 American Community Survey 5-Year Estimates)

Newbury's population under 5 years of age increased by nearly 60% from 116 to 183.While it is likely that during the decade between 2010-2020, some residents moved out of Newbury, the high increase in age groups 55 and up likely indicates a steady in-migration of older residents.

In 2020, Newbury's median age was 47.5, compared to Orange County at 46.7, and Vermont at 42.8.

The population projection scenario outlined in Figure 3 indicates that Newbury will continue to experience increases in population into 2030.

C. Growth Policy

The population projection scenarios outlined in Figure 2 indicate that Newbury will continue to experience increases in population. The pace of those increases will depend largely on the state of the economy. In order to properly plan for changes that may be necessary due to increased population, a Growth Policy for Newbury is recommended as follows:

Year	Newbury Population	Population Change	Newbury Pop. % Change
1990	1,985	0	0
2000	1,955	-30	-1.5%
2010	2,216	261	13.4%
2020	2,293	77	3.5%
2030	2,408	115	5.0%

Figure 3. Newbury population from 1990 to 2020, with a projected population for 2030. (Source: U.S. Census Bureau)

- Continue to grow deliberately;
- Retain and/or encourage more young people to migrate to the town;
- Continue to consider the elderly population's needs;
- Create a nurturing and supportive community environment for Newbury residents of all ages, including young working people and the elderly.
- Discourage growth in the Rural and Conservation Districts.
- Retain the rural community character of the town.

The following policy statements reflect the opinions of Newbury residents as expressed at area town meetings and are an effort to restate attitudes of the community regarding growth.

1. Encourage an economic base in Newbury that will offset the cost of services to town residents.
2. Provide more amenities for younger adults by developing commercial areas, farming incentives and recreational facilities, and encouraging economic opportunities and our young people to stay.
3. Offset potentially severe impacts of any single development which in and of itself meets or exceeds the town growth rate per year by phasing.
4. Manage growth in Newbury so that undue hardship will not be experienced by the residents nor impact the environment through the following implementation measures: continually updating the Town Plan, Zoning Regulations and Subdivision Regulations, and by creating a Capital Budget Program.

III. Economic Development

The Town of Newbury is geographically the fourth largest town in the state with two incorporated villages, a significant agricultural base and rugged forested landscape. Retail enterprises are centered in the Village of Wells River with a few in Newbury Village. The industrial park and mixed-use zones are located near and around the interstate exchange for I-91 and State Route 302. The remainder of the business activity in town is of a more personal and home-based nature consisting of professional offices, home occupations and home-based business with some value added agricultural. This is in keeping with the historical landscape of the town and a wish to maintain the historical integrity, especially in the villages.

Over the last decade, there has been an increase in those personal types of enterprises but little expansion of retail or industrial activity. Most retail activity has been change of use in existing space, such as a gift shop converting to a chiropractor's office or a bakery to a used furniture store. There have only been a couple of new spaces creating new retail business.

The Town of Newbury is home to a large retired and non-working population, estimated at around 41% of individuals in the community, but 2020 Census data also shows that 58.9% of the population is currently within the labor force. Unemployment is low, at 1%. This is distinct from the figures on the non-working population, as the unemployment level is based on individuals who are actively seeking employment but cannot find it. It is therefore a much lower figure.

Workers primarily commute outside of the area for their employment – with 72% of workers commuting as single passengers in vehicles, and an average commute time of 26 minutes. Only 15% of workers worked from home according to the 2020 Census numbers. In expanding economic development opportunities, residents emphasized a desire for increased opportunities for home-based businesses. Economic development that increases local employment and reduces commute times would also be beneficial to the community.

Given both the size and the topography of Newbury and the state and regional planning goals, there are limited opportunities and few parcels conducive to new business of a retail or industrial type. Attracting employment centers thus remains a challenge. Until recently the industrial park was built out and no space was available for new enterprise. The disposition of Newman Lumber in the park is still an unknown.

One thing has become clear; citizens come to the Town Offices to seek information about how to start a business, not just for information regarding zoning regulations related to a specific site and its allowable uses. Adjacent communities, such as Woodsville, New Hampshire, and Bradford to the south, have been more successful at capturing new local business and entrepreneurship start-ups, even by residents living in Newbury. The Town of Newbury must have a more proactive economic development plan to make the most of the limited business, retail and industrial space available within the town, and to create opportunities for local and home-based employment.

A. Encouraging Economic Development

In 2012 there seemed to be some interest in creating a local economic development committee charged with identifying the needs of the townspeople and providing direction and information about business creation, licensing, etc. Efforts to establish that committee fell short. It was at the same time that the Planning Commission revised the zoning bylaws to include establishment of

home-based businesses to allow property owners to increase their income from their own home sites.

At past neighborhood meetings, the emphasis on “keeping Newbury Village looking like Newbury Village” has spurred investigation of ways to limit formula retail, possibly through design review or form- based code to accomplish the desires of the people while still allowing for commerce.

In the 1990’s the Wells River Action Program (WRAP) sought and received funding for village improvements, including HUD grants, rehab of commercial buildings, and several transportation enhancement grants. Today, WRAP's mission is to "enhance the quality of life in Wells River and its immediately surrounding villages and towns by promoting affordable and accessible housing, supporting and developing business and economic development, preserving the rural and historic character and ambiance of Wells River.” In partnership with Evernorth, the Baldwin Block and Stevens Block, which house multi-unit apartments, senior and workforce housing, the Wells River Post Office and retail development have had work done to both modernize and restore their historic value. Meanwhile, there are many locations of historic significance that would benefit from a renewed revitalization effort. Likewise, the three-story building which houses the former “Happy Hour” restaurant would benefit from investments to allow full use of the second and third floors. Work is needed for sidewalk, curbing, and crosswalk repair and establishment.

To facilitate continued improvements, the Town of Newbury, the Village of Newbury and Village of Wells River will continue to keep both villages enrolled in the Vermont Village Designation Program. This program offers tax credits for the revitalization of buildings within designated areas, which would be highly beneficial to existing commercial landowners within the designated area.

Newbury residents also identified the town’s scenic beauty, natural resources, and recreational amenities as a significant factor adding to the town’s quality of life and attractiveness. The work done to develop multi-use trails, educational features, and other recreational opportunities on Tucker Mountain Town Forest, including the family friendly StoryWalk™, add value to the Town and attract visitors to the area. The planned route for the Cross Vermont Trail will also connect the Village of Wells River to broader regional multi-use recreational trail system, and the State of Vermont’s effort to create a bicycle friendly corridor along State Route 5 will also bring additional recreational users to the community. Newbury should position itself to benefit from the economic opportunities around recreational- and tourism-based business that these efforts may bring.

Within the context of compact settlement with large open spaces the Planning Commission makes the following policies and recommendations:

Policies and Recommendations

Policies

1. The Town supports businesses in appropriate locations as identified in the Zoning Bylaws.
2. The Town should work with area organizations to further economic development especially focused on agricultural enterprises, home-based businesses, and recreation.

Recommendations

1. Re-establish the Hamlet zoning designation around Boltonville along Route 302 in order to provide opportunities for commercial and mixed-use development that may include primary retail projects.
2. The Selectboard should establish an Economic Development Committee that will interact with Two Rivers-Ottauquechee Regional Commission, Green Mountain Economic Development Corporation, and the Cohase Chamber of Commerce to identify the needs of current and future businesses.
3. The Planning Commission should redefine retail in keeping with the regional plan allowing for small businesses to continue operating along the main Route 5 and Route 302 corridors without creating commercial sprawl.
4. The Planning Commission should review agricultural value-added businesses and ensure that the zoning bylaws will allow for activities such as agritourism and agricultural retail beyond a farmstand.
5. The Planning Commission should update definitions in the zoning bylaws to reflect changes in types of businesses now as compared to when the bylaws were first enacted.
6. The Town of Newbury Planning Commission, Conservation Commission, other boards, and citizens will work together to bring the Newbury Zoning Regulations into accordance with the Town Plan. The Town Plan emphasizes the recreational and economic potential of the Wells River and its adjacent Route 302 corridor. The Wells River and the Cross Vermont Trail serve as gateways to the Town of Newbury and are tremendous resources for citizens and visitors alike. Long-term protection of the Wells River is vital to the economic and environmental future of the town.
7. The Selectboard and Village Trustees (with assistance from the Planning Commission) should continue enrollment of Village of Wells River and Newbury Village in the Vermont Village Designation Program for the purposes of providing assistance to existing businesses and commercial developers in the villages and to implement the goals of this Plan.
8. The Town should work with area organizations to further economic development, especially focused on agricultural enterprises, home-based businesses, and recreation-oriented businesses.

IV. Natural, Cultural, Scenic and Historic Resources

A. Natural Resources

Natural resources may be defined as those natural elements relating to land, water, air, plant and animal life of an area or community and the interrelationship of these elements. Newbury's elevation ranges from approximately 400 feet above sea level along the floodplains of the Connecticut River to almost 1,700 feet at the summit of Woodchuck Mountain and along to Tucker Mountain. A wide variety of vegetation provides habitats for a multitude of wildlife species.

Water

The Wells River flows along the northern boundary of Newbury, and in the past its steep gradient provided ample waterpower to drive the mills along its borders. The Wells River joins the Connecticut River at the Village of Wells River. The Connecticut River forms the eastern boundary of the town and its flood plains provide much of the rich agricultural soils for Newbury's farms along U.S. Route 5. Both rivers have Vermont Fish and Game access points.

Wetlands

There are significant wetlands (1,765 acres), bogs, streams, vernal pools and brooks throughout the town. Scenic waterfalls include those in Newbury Village and Starch Factory Falls behind the West Newbury Hall. Halls Lake is the largest body of water in the town; others include Round Pond, Long and Muddy Ponds, Fish Pond, Harriman Pond and Tenney Pond. The majority of these pond and lake areas are zoned as shoreland districts in the Newbury Zoning Regulations.

One cannot mention the Connecticut River and the Town of Newbury in the same breath without bringing to mind the famous oxbow just north of Newbury Village. The oxbow holds a fascination both as a landform and as an archaeological site of Native American culture.

Riparian and Wetland Buffers

Vegetative buffers located adjacent to rivers, streams, vernal pools and wetlands protect these resources by maintaining the chemical, physical, and biological integrity of the water; removing pollutants; reducing erosion; stabilizing stream banks; impeding flood waters; maintaining water temperatures and desirable aquatic organisms; providing wildlife habitat; and furnishing scenic views, open space, and recreational opportunities.

Wildlife

Wildlife habitat is a valued resource in Newbury, and there is broad support in the community for the protection of important habitats as well as wildlife corridors and linkages. The variety of terrain provides cover and browse for wildlife such as deer, moose, black bear, snowshoe hare, grouse, woodcock and wild turkey. The northwest corner of Newbury is a part of Pine Mountain Wildlife Management Area along with Topsham and Groton. A portion of this area along the town line and Route 302 was placed in the Conservation District to preserve wildlife connectivity between Newbury and these regional resources. There are 6,058 acres of wildlife habitat identified as Deer Wintering Areas.

Other Land Resources

Among its natural resources Newbury has several gravel and sand pits. One of the more notable gravel deposits is along the Wells River just outside of the Village. Other areas exist along Peach Brook and Scotch Hollow Roads. The value of these lands lies not only in their inherent physical properties, but also because they are resources that directly provide for "public good." Prudent management and use of these resources is essential. Planning associated with these particular natural resources must include a land restoration and site rehabilitation component. Methods for reclamation should include plans for timing and phasing for the restoration, soil replacement, re-grading, landscaping and re-vegetation.

Policies and Recommendations

Policies

1. The Newbury Selectboard, Conservation Commission and Planning Commission shall always be represented at Act 250 hearings on major projects in the town. The ten criteria of Act 250 provide ample opportunity to review, comment on, and develop protection strategies for natural resource issues.
2. Lands or water bodies which are valued because of their natural beauty or pristine condition should not, as a matter of public policy, have that value put at risk by increased human contact. Rather, access should be carefully defined and in some cases limited. Enhancement strategies should lead to better, not necessarily more exposure.
3. Protection efforts to set aside land around water supplies which may become part of a public water supply shall continue, as in the case of lands around the Newbury Village Reservoirs on Moore Hill and the Wells River Reservoir on Roystan Ridge.
4. Opportunities for environmental education both public and private should be encouraged for Newbury's people to learn about stewardship of land, water and wildlife.
5. The Town of Newbury seeks to protect all lakes, perennial streams, rivers, and their adjacent wetlands and floodplains by requiring that riparian and wetland vegetative buffers be calculated into development plans.
6. The practices and procedures contained in the Riparian Buffer Guidance (dated December 2015) should be followed in Newbury. Providing appropriate riparian buffers maintains the integrity of these areas while allowing the use and enjoyment of the town’s natural resources.
7. The Town of Newbury supports land use planning tools and incentives for private property owners to protect important natural resource values in the Town.

Recommendations

1. The Planning Commission, with the Conservation Commission and any other relevant department, agency, or commission of the town, should coordinate and collaborate on any planning initiatives which involve Newbury's natural resources.
2. Zoning and subdivision regulations for the town should reflect preservation strategies. These regulations should control or restrict development of such key natural features as ridgelines and/or high elevations, slopes over 15%, designated wildlife habitats, rare plant

and animal communities, wetlands, prime agricultural and forest lands, views and vistas. Such controls should also provide for adequate open space.

3. The Conservation Commission should consider a complete Natural Resource Inventory for Newbury. Much information currently exists, but it is in piecemeal form. A formal inventory would aid in preservation of these natural assets and offer valuable information on which to base decisions regarding development intensity, environmental impact and potential imbalances between development and the environment.
4. Newbury should selectively, as part of the inventory above, identify existing access points to the Connecticut River and other valuable natural areas, and protect and expand access opportunities for recreational, agricultural or forestry use. Often, natural resource planning includes a recommendation to "improve and/or increase opportunities for public access to riparian lands or remote, scenic highlands." The extensive network of "legal trails" that presently exists throughout the town provides access to otherwise remote areas.
5. Appropriate development should be sited in such a way that negative effects on rare plant or animal communities are avoided.
6. The Town must evaluate major Act 250 project applications affecting Newbury and to offer testimony at hearing, as appropriate.
7. The Town of Newbury Planning and Conservation Commissions will work together to:
    a. assist landowners with desirable riparian buffer maintenance practices;
    b. promote Acceptable Management Practices (AMP) and Best Management Practices (BMP) for maintaining water quality by farmers, loggers and landowners;
    c. establish guidelines for nature, recreational, and educational trails.

B. Flood Plains and Flood Resiliency

Floods are inevitable and uncontrollable natural events which occur sporadically and affect lands adjacent to watercourses. It is therefore in the public interest to plan for floods, and to implement land use strategies which will protect these areas and minimize the risks to public health, safety, and property. Floodplains, lands adjacent to watercourses (rivers, streams and brooks), are periodically inundated by heavy rains or during spring thaws. They are porous and can absorb considerable water before reaching flood stage. Floodplains make excellent agricultural land but are poorly suited for development, both because of their propensity for flooding and because of their proximity to watercourses, which creates the potential for pollution. A total of 2,216 acres in Newbury are within the floodplain area, which is 6% of the total land in the community. Vermont has experienced more than thirty statewide and regional floods since 1973. All but one of these were declared federal disasters, and economic losses were significant. Damage was not limited to designated floodplains, but often occurred along unstable river systems and steep streams and in areas where stream debris was excessive. Public interest dictates that every reasonable attempt should be made to avoid or reduce such exposure to flood damage.

National Flood Insurance Program (NFIP)

Under the provisions of the National Flood Insurance Act (1968), the Federal Emergency Management Agency (FEMA) has conducted a series of evaluations and hydrologic engineering studies to determine the limits of flood hazard areas along streams, rivers, lakes, and ponds expected to be inundated during the 100-year base flood, meaning that the flood level has a 1% chance of being equaled or exceeded in any given year. The calculations do not take into account the impact of ice dams, debris, or climate instability and may, therefore, actually underestimate the areas which are subject to flooding damage. FEMA has prepared a Flood Hazard Boundary Map for the Town of Newbury, which includes flood hazard areas for: Connecticut and Wells Rivers as well as Scott, Peach and Halls Brooks, wetland off Fish Pond Road and along Harriman Pond. The Connecticut and Wells Rivers have flood elevations as determined by NFIP.

This map is on file at the Town Office and at the Two Rivers-Ottauquechee Regional Commission. The Flood Hazard Area is indicated on Map #2, Future Land Use. If in doubt when developing, contact the Newbury Zoning Administrator. FEMA also administers the National Flood Insurance Program, which provides flood hazard insurance at subsidized rates for property owners in affected areas. In order to qualify for federal insurance, towns must adopt and retain a by-law to control land development within these areas. Minimum standards must be included and approved by FEMA. Coverage is only available to landowners if a Town elects to participate in the program.

Two Rivers-Ottauquechee Regional Commission has determined that there are 46 buildings in the special flood hazard area with 7 flood insurance policies. Mortgage lending institutions require as a prerequisite to financing that flood insurance be purchased on property subject to flooding. The Federal Emergency Management Agency (FEMA) began implementing Risk Rating 2.0, a new methodology for setting premiums for the National Flood Insurance Program (NFIP). The new methodology substantially improves ratemaking by aligning premiums with the flood risk of individual properties. The result of this change is that premiums for previously underpriced areas will rise until actual risk rates are reached. The increase is capped by statute to 18% maximum per year.

River Corridor Areas

Much flood damage in Vermont is associated with stream channel instability, also known as the fluvial erosion hazard (FEH) or river corridor area, as opposed to inundation related losses. This is a reflection of Vermont's natural geography and its man-made landscape consisting of steep, relatively narrow valleys with agricultural land uses, highway infrastructure, private residences and commercial properties located in close proximity to stream channels. River channels that are undergoing an adjustment process as a result of historic channel management activities or floodplain encroachments oftentimes respond catastrophically during large storm events.

Historically, landowners and local government have relied on the standards and the flood hazard boundary maps provided by FEMA though the National Flood Insurance Program (NFIP) to determine areas within river corridors susceptible to flood damage. The maps are also used to delineate the allowable (floodway) limits of river corridor encroachments and human land use investments. However, the NFIP maps address only inundation issues by applying a water surface elevation-based standard. For this reason, the NFIP maps are often inadequate as an indicator of flood hazards, especially erosion. The NFIP standards do not recognize the danger present in unstable channels which may be undergoing a physical adjustment process. The

stream bed may be eroding, or it may be actively aggrading due to erosion occurring upstream. The NFIP standards often allow for significant encroachment within floodplain areas and river corridors that may prevent the stream from ever reestablishing its stability. Special mapping and geomorphic assessments can identify FEH areas along rivers, more comprehensively defining high-hazard areas. FEH (or RCA) data is now available statewide.

Flood Resiliency

Since the 1990s, the number of federally declared disasters has increased substantially in Vermont. Between 2000 and 2010 there were 17 federally declared disasters, 9 of which were severe flooding events. Between 2010 and 2020, Vermont experienced 18 federally declared disasters, all but four were severe flooding events. An additional 6 disasters were declared between 2020 and 2023. The extreme severity of 2011's Tropical Storm Irene and the flooding of July 2023, which inundated some parts of Vermont with heavy rains and severe flooding, has made it clear that Vermont's communities need to plan for flood hazard events. It is important to recognize that severe flooding hazards do not always occur within the area mapped by FEMA as flood plain or fluvial erosion hazard areas. Instead, flood waters can do substantial damage along upland brooks. These upland stream valleys are common locations for rural roads, which puts them at risk of damage during such an event.

Communities can plan for improved flood resiliency in several ways:

- **Build infrastructure to withstand severe flooding events** - This can be achieved through road design and by increasing the size of culverts and bridges so that they can accommodate large quantities of water. This can also include moving roads when possible or abandoning redundant bridges.
- **Encourage a strong emergency response** - A municipality can put hazard response plans in place to be better prepared to help its citizens in the event of a severe hazard event. These are discussed in more detail in chapter XX, Health and Emergency Services.
- **Reduce the amount of development within the Floodplain** – Newbury's current policy to prohibit new development within the floodplain continues to maintain the community's flood resilience.

Flood Hazard Regulation

Newbury's adopted Flood Hazard Regulations prohibit new development within the mapped floodplain which is stronger than the minimum standards allowed by the NFIP. While a limited amount of Newbury is located within the Flood Hazard Area (FHA), there are benefits to maintaining these regulations. Clearly, protecting development from future harm is a priority for any community. But, it should also be noted that communities with stronger FHA regulations are eligible to receive greater Emergency Relief Assistance funding from the state in the event of a disaster declaration.

Goals, Policies, and Recommendations

Goals

1. Enhance and maintain use of flood hazard areas as open space, greenways, non-commercial recreation and/or agricultural land.

2. Ensure no net loss of flood storage capacity in an effort to minimize potential negative impacts. These impacts include the loss of life and property, disruption of commerce, and demand for extraordinary public services and expenditures that result from flood damage.

Policies

1. The preferred uses for flood hazard areas shall be for open space, greenbelts, pastureland, recreational and agricultural uses.
2. Any land use activity (filling or removal of earth or rock) within flood hazard areas which would result in net loss of flood storage or increased or diverted flood levels or increased risk to adjacent areas shall be prohibited.
3. Utilities or facilities serving existing development (e.g. water lines, electrical service, waste disposal systems, roads, and bridges) may be located within these areas only when off-site options are not feasible and provided that these utilities or facilities meet the flood proofing requirements in Newbury's Zoning Regulations.
4. The Town shall recognize that upland areas adjacent to unstable rivers and to steep streams may be at risk of erosion during floods.
5. No new structural development (except development exempted by state law, such as agriculture) shall occur in the Flood Hazard Area.
6. Newbury will engage in measures to ensure proper road and drainage construction, as well as limiting development in flood-prone areas to achieve flood hazard mitigation goals and protect life and property during flooding events.

Recommendations

1. The Planning Commission should update the Newbury Zoning Regulations to ensure that it meets or exceeds the standards required by the Federal Emergency Management Agency so that Newbury may continue to participate in the NFIP.
2. The Planning Commission should maintain the Newbury Zoning Regulations prohibition on new development within the floodplain, considering only recreational and agricultural uses.
3. The Town shall maintain its membership in the National Flood Insurance Program.
4. The Planning Commission should consider adding River Corridor Area protections to mapped areas and unmapped upland streams.
5. The Selectboard should update the Local Emergency Management Plan at least once a year or when key emergency management personnel change.
6. The Selectboard and an appropriate committee should update and adopt a Local Hazard Mitigation Plan with assistance from the Two Rivers- Ottauquechee Regional Commission on an appropriate timeline.
7. Newbury should consider enacting river corridor protections which would enable Newbury to receive the largest amount of Emergency Relief Assistance Funding available from the State.

8. 'To achieve flood hazard mitigation goals and protect life and property during such events, Newbury will engage in measures to ensure proper road and drainage construction, as well as limiting development in flood-prone areas.

C. Historic Districts and Resources

According to the Vermont Division of Historic Preservation, the Town of Newbury provides one of the most numerous and diverse combinations of historic districts, structures and relics in the State of Vermont, including the former Newbury Seminary, the first Methodist Theological School in America, from which sprang Boston University and Vermont College in Montpelier, VT. The formally designated districts are:

Figure 4. Newbury Seminary complex, 1866.
Source: UVM Land Use Change Program

- Newbury Village Historic District
- The Farnham Atkinson Historic District (The Little Plain)
- Bayley Historic District
- Oxbow Historic District
- The Village of Wells River Historic District
- West Newbury Village
- South Newbury Village

These districts are spread along US Route 5 and the first four are within the village limits of Newbury Village. The Wells River Historic District provides examples of early 19th century commercial architecture. The bridge in Wells River that spans the Connecticut River to New Hampshire is the longest Pratt truss structure remaining in Vermont.

Figure 5. Main St. in Wells River, 1880s.
Source: UVM Land Use Change Program

Though too numerous to list here, most of Newbury's historic treasures are catalogued in the town histories. Recorded with pictures and descriptions are not only the districts named above, but also sites and structures throughout the town in Newbury Center, South Newbury and West Newbury.

The Town Goals section of Newbury's Town Plan sets forth Newbury's desire to protect, preserve and to the extent possible, restore and maintain the town's historic heritage. The Land Use Section of this plan establishes some specific standards to apply to historic structures in

historic districts. The recommendations that follow are to some degree a restatement of Land Use Plan initiatives.

Policies and Recommendations

Policies

1. Designs of new or rebuilt buildings within historic districts or adjacent to historic buildings should be compatible.
2. Restoration and rebuilding of historic structures should be encouraged providing attention is paid to design characteristics of the building and to the context of its immediate surroundings.
3. The Historical Society, Daughters of the American Revolution, and similar societies should be recognized and encouraged. Newbury has an active Historical Society with an archive of materials and artifacts in West Newbury. The DAR (Daughters of American Revolution) also maintains a small museum in Newbury Village.
4. The maintenance of a photographic record of historic structures should be encouraged, especially of any structures which may be dismantled or altered.

Recommendations

1. The town should incorporate Newbury's archaeological sites, historic districts, and structures in their entirety in the geographic information system (GIS) mapping for the town.

D. Outdoor Lighting and Scenic Impacts

This section of the Town Plan provides clear policy statements for evaluation of lighting installations planned for both public and private property, residential and commercial. Newbury's historic villages and other areas planned for concentrated mixed use will be best served by lighting designs that enhance the rural nighttime atmosphere.

Development in Newbury has brought about an increase in the use of outdoor lighting including: parking lots, brighter street lighting, floodlights on commercial/industrial complexes, lighted gas station canopies, and excessive use of light on residential properties. While increased lighting may be an inevitable result of growth, excessive or poorly planned lighting results in wasteful energy use, contributes to "light pollution", affects the ability to view the night sky and landscape, and creates an adverse impact on the character of historic villages.

With the advent of new lighting technologies in recent decades, sufficient light can be provided without negatively impacting the rural night sky. Newer lighting installations are attractively designed, provide for safe night vision at reasonable levels, and fit well into their surroundings. These newer fixtures eliminate the problems of over-lighting, glare, skyglow, and energy waste.

Necessary light levels vary according to use. Using the minimal amount of light necessary decreases skyglow and avoids escalation of light levels. Skyglow, or reflected light from surfaces, is visible in the night sky over villages or large commercial/industrial complexes, and is a form of "light pollution". Skyglow limits the ability to see stars and other aspects of the nighttime landscape.

Glare is another problem created by excessive brightness, unshielded lamp sources, or misdirected fixtures. Light that is not directed towards the ground or towards the surface to be illuminated can shine into the viewer's eyes, impairing vision and causing potential safety problems.

Policies

1. Outdoor illumination shall be fully shielded and take into consideration the type and density of present land use, the topography, and whether the area has scenic value.
2. Nighttime ambiance and aesthetic qualities of the village and rural areas shall be preserved by illuminating them for safety and convenience in ways that enhance the streets, buildings, and public spaces.
3. Outdoor lighting systems should be creatively and functionally designed to conserve energy and minimize lifecycle costs.

E. Scenic Evaluation Criteria

This Plan refers to the scenic attributes, amenities, areas, views, values, quality, highlands, and byways of Newbury. The Scenic Evaluation Criteria provide a method for defining “scenic”. There are several types of scenic landscapes, ranging from the built environment of the village to sparsely settled rural residential areas and remote, undeveloped ridgelines.

In Newbury, areas of scenic significance that are most likely to be affected by development include the following:

a. Shorelands and riparian areas adjacent to the Wells River and Connecticut River;
b. Prominent ridgelines, mountains or hilltops, or steep slopes which are highly visible from public corridors and other vantage points throughout the town;
c. Agricultural lands, river bottom lands, and areas within or adjacent to natural areas;
d. Historic areas, including Newbury Village, Village of Wells River, and West Newbury hamlet;
e. Other areas recognized by the Newbury community as being of high scenic quality.

Policies and Recommendations

Policies

1. Development in scenic areas should take reasonable steps to minimize its visual impact, such as by screening areas visible from the road with appropriate plantings.

Recommendations

1. When evaluating scenic areas the Development Review Board may use the following criteria as appropriate data are available:
   a. Dramatic Focal Points: natural or man-made landscapes which include clear and dramatic focal points are more sensitive to scenic disruption.
   b. Landscape Diversity: a combination of elements which increases the scenic effect, may include elements of topographic variation, mixture of open meadows and woodlands, water, distant views, mixture of vegetative types.

c. Order, Pattern, Scale, and Design: landscapes should have a sense of order or logic, with a clear progression from the village, to clustered residential settlements, and then to surrounding rural countryside. Order is heavily influenced by scale and pattern of buildings, and architectural similarities of form, size, and design.

d. Intactness: landscapes that have retained traditional patterns or forms, or have absorbed development with minimal disruption, are more likely to add to the scenic quality of an area.

2. The Selectboard should consider surveying the town for significant archeological, scenic, and historical areas.

F. Agricultural Land and Farming

Located in the Connecticut River Valley, Newbury is a town with an agricultural heritage. Agricultural land use will continue to influence the pattern of development in Newbury and the elements necessary in agrarian life (farmers, farm equipment, manure, livestock, etc.) must be respected by residents and businesses. For the purposes of this plan, the category of lands falling under agriculture and forestry uses cross reference under three planning headings: Land Use, Natural Resource, and Community-Economic Development. As have many other Vermont communities, Newbury recognizes the value of its agricultural lands and historic agricultural structures. However, like many towns, Newbury has limited financial resources to commit toward the conservation of these lands, the open spaces they provide, and the preservation of farms under active operation. As of 2023, 19,385 acres in Newbury were enrolled in the Current Use Appraisal Program. This represents nearly 40% of Newbury's total land mass of 41,302 acres. As of 2023, 6,154 acres were also conserved via conservation easements with the VT Housing and Conservation Board (VHCB) through Upper Valley Land Trust (UVLT) and Vermont Land Trust (VLT). This represents 14.9% of Newbury's total land mass.

Diversified Agriculture

From forage crops to sheep to dairy, Vermont farmers have adapted to changing markets over time. Today, many are adapting again, diversifying their farms to include uses ranging from farm cafes to "pick your own" operations and from agritourism to hosting weddings. Adding these kinds of "agri-preneurial" activities to a farm's operation can help bolster farm viability, keep land open and in production, and maintain or enhance a community's sense of place through the farm's contributions to the community and the landscape. Existing farms with underutilized infrastructure (such as barns) may be able to add to their income and increase sustainability if they are able to re-purpose these facilities for agritourism or agri-preneurial activities. It is in the best interest of Newbury to support these on-farm activities provided that they are consistent with the character of the area.

Land Protection Strategies

Methods of protecting significant lands are varied. In general, there are two ways to encourage the preservation of culturally and naturally significant areas: regulatory & voluntary. Voluntary methods include:

- Preserving land by placing restrictions on its use, through such tools as conservation easements or mutual covenants.

- Transferring land to a conservation organization (such as the Vermont Land Trust or The Upper Valley Land Trust) through donation.
- Selling or donating land with conditions attached, like deed restrictions or conditional transfers.

Newbury could become an active participant in land conservation through the creation of a conservation fund.

It is safe to assume that there will never be sufficient funding for land protection strategies to acquire conservation easements or ownership for all of the unprotected identified areas of value. Regulatory methods use zoning and/or subdivision rules to regulate the location, density and design of development within selected areas to minimize harmful impacts while allowing for a reasonable level of development.
Regulatory methods include:

- **Overlay Districts** - The creation of overlay districts is the most common method of regulating specific areas for the purpose of protecting cultural or natural resources. Overlay districts can be used to exclude development on or to impose resource protection or conservation standards within overlay areas. These districts can be used to protect many types of resources.
- **Resource Protection Districts** – These protect resource and open space areas or resource-based uses such as farming, forestry, recreation from incompatible development.
- **Large Lot Zoning** - Large lot zoning refers to the designation of a very large minimum lot size within certain zoning districts to accommodate resource-based uses, such as farming or forestry, or to require a pattern of very scattered, low-density development to limit, for example, impervious surfaces and protect surface and groundwater quality.
- **Fixed Area & Sliding Scale (Density-based Zoning)** - Fixed area and sliding scale zoning are two zoning techniques (typically applied in association with subdivision regulations) that are used to differentiate allowed densities of development from district lot size requirements.
- **Conservation (Open Space) Subdivision Design** - This is a subdivision design process wherein subdivisions are intentionally designed to protect rural character and open space.

Each of these methods has its own set of benefits and pitfalls, and all of them should be thoroughly evaluated before they are implemented. However, there are many examples of successful regulatory land protection strategies in Vermont. The key to success is to ensure that the community on a whole supports the regulations.

Goals, Policies, and Recommendations

Goals

1. Maintain and expand Newbury's traditional and alternative elements of agricultural industries as a prime economic base.
2. Support the development of value-added farm and forestry products.

Policies

1. All non-agricultural development projects should be carefully reviewed to minimize the impact on Newbury's natural and cultural resources.
2. Rare and irreplaceable natural areas, species, and communities of flora and fauna identified by local, state, or federal agencies or committees should be protected through careful planning.
3. Public investments shall be planned to minimize pressure on agriculture and forest land.
4. Diversified agricultural operations that include uses generally not considered agricultural in nature such as food manufacturing, event hosting, farm stays and on-farm education should be encouraged provided that they do not have an undue adverse impact on the health, welfare or safety of nearby residents.

Recommendations

1. The Town should investigate methods of permanently preserving open lands.
2. The Town should promote opportunities for local buyers to utilize locally produced farm products.
3. The Town should promote a better understanding of the farming and forestry practices and natural resource management in general; the agricultural industry, conservation organizations, public schools and the tourism and recreation industries should sponsor continuing educational opportunities to the public.
4. The Town should support increased availability and use of locally grown foods.

V. Land Use

Preface

It should be noted here that prior to undertaking its review, the Planning Commission for the Newbury Town Plan researched other town plans in Vermont as well as our own region's plan drafted by Two Rivers-Ottauquechee Regional Planning Commission. This review of the literature was conducted to aid the Planning Commission in constructing what it felt would be the most appropriate format for the Newbury Town Plan Land Use Section.
The Planning Commission decided to use the Regional Plan as the model for format and language for three reasons:

1. It provided useful background for our decisions;
2. It provided continuity between Newbury's Plan and those of our immediate neighbors;
3. The format is clear and logically developed.

The Land Use section that follows has been drafted with considerable input from the community at large, data collected from interest groups, and vigorous debates within the Planning Commission. The concepts and recommendations presented in the Land Use Plan are intended to address the stated concerns of the citizens and landowners of Newbury about the future of the town.

Background Issues

The character of Newbury is a composite of its landscape, people, institutions, and history. The people of Newbury believe that the town can continue to grow culturally and develop economically. The special character of Newbury's landscape and quality of life can only be retained through the concerned involvement of its citizens and solid local planning.

The Future Pattern of Settlement

First in importance in formulation of the proposed land use pattern for Newbury is consideration of the existing settlement pattern. The town has already been settled into areas of residential uses and other activities in the form of villages and hamlets surrounded by rural areas of lower densities. This existing settlement pattern has demonstrated itself to provide a system of centers both efficient and economical for the conduct of business enterprise and for the provision of social and community facilities and services. This pattern should, therefore, be protected and enhanced. The continued use of this existing pattern in guiding future development of the town should be adopted as policy.

Due to severe physical site limitations and the relatively high costs associated with land development in certain areas, much of the town is not readily available for intense development. Accordingly, major growth or investments should be channeled into, or adjacent to, existing or planned settlement centers and to areas where adequate public facilities and services are planned or are available. These growth areas, including both villages and hamlets, should include plans for open space for parks, recreational areas, and similar uses. Land development adjacent to and surrounding such areas should be at low and moderate densities to provide diversity in the landscape and a range of choice in rural living environments. Concurrently, owners of lands not suitable for intense development should be encouraged, through public and private means, to maintain valuable resource lands in productivity or for conservation. The land use goals outlined

within this section are of primary importance to this Plan. They represent the foundation of the planning and development program for Newbury and are intended to be applied uniformly throughout the town.

The goals outlined within this section are as follows:

Goals, Policies, and Recommendations

Goals

1. Protect and preserve agriculture, forestry and natural resources;
2. Encourage full use of existing and designated future growth centers;
3. Maintain and improve the accessibility and economic viability of existing built up centers;
4. Protect the character of rural areas and their natural resources by avoiding scattered development and incompatible uses;
5. Provide for concentrated development only in areas where adequate public services and facilities are available or planned to adequately support such development;
6. Protect the natural environment by wise use of natural resources;
7. Promote and protect the town's historical heritage and unique features;
8. Continue to research and develop mechanisms for local regulation on issues of local concern; and,
9. Identify and evaluate appropriate locations for future light industrial uses.

Policies and recommendations in this section are foundational to the planning and development program for Newbury and are intended to apply uniformly to all zoning districts within the Town and are as follows:

Policies

1. Major growth or investments should be channeled into, or adjacent to, existing or planned settlement centers and to areas where adequate public facilities and services are planned or are available.
2. Growth areas, including both villages and hamlets, should include plans for open space for parks, recreation areas, and similar uses.
3. New development shall not be permitted if it would place undue burdens on municipal facilities, utilities, and services, including transportation systems.
4. Hardware-secure facilities, such as prisons, detention facilities, or secure treatment facilities and which include physical structures designed and designated for the confinement of occupants, are only appropriate where there are adequate emergency services access, public access, water for fire suppression, and public services and infrastructure to support those facilities. Such facilities shall only be allowed in or adjacent to identified growth areas.

5. The actions of the private sector (such as the construction of homes and businesses, land conservation, and the recreational/agricultural use of land), must relate positively to the goals and policies as set forth in this Plan.
6. As a means to mitigate potential financial hardship such a density might cause to landowners, a density bonus percentage for Planned Unit Developments (PUD) should be included in the zoning regulations. This would reward developers using PUDs with the bonus of additional, above what is defined by the density requirements of the district, but with smaller lot size requirements, thereby allowing for both development and preservation of open space or actively farmed areas. Instead of a ten-acre requirement per dwelling, a Planned Unit Development density bonus would allow for a recommended lot size of 1 acre leaving the 9 remaining acres in open land.
7. State facilities shall only be accessed by a paved state-maintained road.

Recommendations

1. The Zoning Regulations and Bylaws should be reviewed against current state guidelines resulting from passage of S. 100.
2. Owners of land that is not suitable for intense development should be encouraged, through public and private means, to maintain valuable resource lands in productivity for agriculture, silviculture, or for conservation uses.
3. The Town, via the Selectboard, should review the process of disclosure to the public about any large-scale public or public/private partnership project proposal or application that may have the potential to impact the overall quality of life and character of the Town and is therefore likely to be of wide interest to residents.

A. Future Land Use Areas

For the purposes of this Plan, a basic framework has been adapted to fit the situation as it presently exists in Newbury. Several types of land use settlement areas have been identified as defined by the Two Rivers-Ottauquechee Regional Commission. These areas have certain existing characteristics that identify them within the town. These areas are:

1. Town Growth Center - Wells River Village Area.
2. Village Settlement - Newbury Village.
3. Hamlet Areas - West Newbury, South Newbury, and Boltonville;
4. Rural Areas - R1, R2, and R5 Areas.
5. Conservation and Resource Areas - Con 10.
6. Interstate Interchange Area (I-91 at US 302) and Mixed-Use Commercial Areas.
7. Industrial and Mixed-Use Commercial Areas - those that are existing and others that are yet to be identified and designated.

A growth center is an area that has been identified as having the capacity to accommodate additional growth based on the availability of water and centralized sewer system infrastructure.

Wells River Village Area (WRVA)

The purpose of the Wells River Village Area is to provide a location for a dense mix of commercial, civic and residential uses that sustain and improve the vitality of the community's core. The Village of Wells River is a growth center, providing central public utilities for water and sewer. It is a location where commercial, cultural and civic activities are available for the town and the surrounding communities. Because parts of Wells River have municipal sewer and water, development density can be increased.

Policies and Recommendations

Policies

1. Wells River supports the broadest mixture of single family, two family, and multiple family structures in the town with those uses occurring at higher densities in the WRVA than elsewhere.
2. Development density should be high in the WRVA where there is access to public sewer and water, roughly ¼ acre lot sizes.
3. In areas of the WRVA not served by both municipal sewer and water, density should be no greater than 1-2 acres depending on the type and intensity of use.
4. Uses that are appropriate in this area include commercial (including primary retail), civic, municipal, and residential.
5. Commercial uses that require a large amount of land for storage of materials or products are not appropriate for the WRVA.
6. Multi-family dwellings are appropriate within the Village Area.
7. The design of development within the village should encourage walkability.
8. The location of buildings on their parcel should reflect the traditional pattern of a Vermont village, which can be achieved by limiting setbacks from pedestrian areas.
9. Encourage conversion of larger older homes, particularly those with historic merit, for new, more economical use to avoid structural obsolescence and deterioration.
10. Encourage commercial uses, small-scale retail sales, restaurants, services, offices, wholesale business, and community facilities and services to locate here and to provide the broadest possible range of employment.
11. Continued maintenance or expansion of such facilities must be encouraged in relation to available tax revenues and reasonable levels of public and private capital investment. A balance of public and private capital investment determines the economic well-being of a town or region. In town centers, intense growth is encouraged when adequate public services such as water, sewer, and highways are available.
12. Primary retail establishments shall be located only in Village and Hamlet Areas to help maintain the rural character of the area, and to minimize the blighting effects of sprawl and strip development along Routes 5 and 302.
13. In Wells River's Historic District, which contains structures and buildings of architectural or engineering significance, new development should be compatible with existing development and not impact significantly the general and special character of the area.

14. In order to maintain the long-term viability of the Wells River commercial district, traffic patterns through the Village should not be significantly altered.
15. No alteration of traffic patterns through Wells River should take place without the approval of both Village of Wells River and the Town of Newbury.
16. Subdivisions should be planned to provide for common open space systems that link to active recreation areas such as playgrounds, playfields, adjacent developments or subdivisions, and natural areas.

Recommendation

1. The Planning Commission should work with Village Trustees to investigate the benefits of reducing lot coverage and setbacks within the Wells River Area.
2. The Planning Commission should consider whether to refine zoning areas to reflect the different densities possible because of differing access to public sewer and water.
3. The Village of Wells River Trustees should investigate the benefits of expanding the public water and sewer systems.
4. The Planning Commission should work with the Trustees of the Village of Wells River to refine the zoning districts within the Village, and make recommendations on where commercial versus residential development should be focused, and reflect the unique access issues in the WRVA, such as Bible Hill, Schaeffer Hill and Tullar Hill.

Wells River Residential (WRR)

The purpose of the WRR is to accomplish a density of rural development that is primarily residential appropriate to the physical limitations imposed by the land and to do so while maintaining residential densities that are compatible with the existing rural character of farms, open fields and woodlands.

Newbury Village / Historic District (NVHD)

The purpose of the NVHD is to encourage a mix of commercial, civic and residential development that is in keeping with the historic pattern of settlement. A Village Settlement is an area that has developed into a small community center and consists of mixed land uses at medium densities. Generally, a village settlement has consolidated groups of structures located on a major regional highway and is not an area usually afforded direct access to the Interstate. Newbury Village fits this category.

Newbury Village has municipal water but no sewer service.

Policies

1. Minimum density in the NVHD should be no less than 1/2 acre.
2. Moderate densities are recommended to reduce any potential for ground and surface water contamination because of a lack of a public sewer system.
3. Uses that are appropriate in this area include small-scale commercial (including primary retail), civic, municipal, and residential.

4. Retail shops and services, tourist businesses, restaurants, lodging, professional offices and public facilities at a small scale with appropriate design characteristics are encouraged.
5. Commercial uses that require a large amount of land for storage of materials or products are not appropriate within the Newbury Village Area.
6. All development within the NVHD should be designed to fit appropriately with the historic character of the area.
7. The design of development within the village should encourage walkability.
8. Newbury Village should support housing types at lower densities than Wells River.
9. Encourage conversion of larger older homes, and particularly those with historic merit, for new, more economical use to avoid structural obsolescence and deterioration.
10. New development in Newbury Village should be coordinated with regard for location of existing structures.
11. To provide for a concentration of land uses and the maintenance of open space, larger or more intense development proposals should be encouraged to locate in areas that have central water systems.
12. Because Newbury Village contains structures and buildings of architectural significance, new development should be compatible with existing development and should have no adverse impact on the historic character of the area.
13. Subdivisions should be planned to provide for common open space systems that link to active recreation areas such as playgrounds, playfields, adjacent developments or subdivisions, and natural areas.

South Newbury, West Newbury, and Boltonville Hamlet Areas (HAM)

The purpose of the Hamlet Areas is to allow for small-scale mixed-use development outside of Wells River and Newbury Village while maintaining the historic pattern of densely populated centers surrounded by open countryside. Hamlet Areas consist of groupings of buildings, smaller in scale than village settlements. They historically have served as the location for single-family homes. Any stores and businesses are typically supported primarily by local residents. These areas generally do not contain a community water supply or sewer system. Minor community facilities and services sometimes are located in these areas. Of the two hamlets listed above, South Newbury is more residential, less defined in boundary, and quieter in terms of non-residential activity than West Newbury.

Located in the northwest corner of Newbury along State Route 302, the Boltonville hamlet is a small area dominated by the wetlands and dramatic drop of the Wells River, which enables hydro-production, is a favorite of kayakers and recreationists, and is an access point for the Cross Vermont Trail. The area is mostly fluvial deposits, with the north end of the hamlet comprised of a deer yard that extends into Ryegate. There is potential for recreation-based business and activities in connection with these resources.

Policies and Recommendations

Policies

1. The Planning Commission will work with the hamlet of West Newbury to do a finer scale review of the zoning for the area and consider possible increases in density within the core hamlet area as well as determine whether the hamlet of West Newbury might be a potential future growth area and/or pursue a path to incorporation as a Village.
2. Density within these Hamlet Areas should be consistent with the historic pattern of development, usually no greater than one to two acres.
3. The density of development in hamlet areas should reflect the existing settlement patterns, physical land capability, and the availability of utilities for expansion.
4. Particular densities for development shall be designated within the Bylaws.
5. Uses should remain primarily residential and home occupations with some appropriately scaled commercial businesses (including primary retail).
6. Commercial development (including primary retail) shall be limited in scale and should not be the dominant type of use in these areas.
7. Major traffic thoroughfares should be planned and constructed around hamlets and should not divide them.
8. Buildings should be sited to encourage open space. Where unusual natural features, soil limitations, or special resources including areas of scenic value or prime agriculture land are identified, (the open areas of West Newbury and the river bottom lands of South Newbury, for example) location and arrangement of structures in relation to the land is especially important to protect such resources from unnecessary or unsightly development.
9. Subdivisions should be planned to provide for common open space systems that link to active recreation areas such as playgrounds, playfields, adjacent developments or subdivisions, and natural areas.
10. Design features which contribute to the aesthetic value of residential areas, including open spaces, trees, natural ground cover, stream valleys, historic landmarks and structures, should be considered in planning subdivisions.

Recommendations

1. The Planning Commission should work with the hamlet of West Newbury to do a finer scale review of the zoning for the area and consider possible increases in density within the core hamlet area as well as determine whether the hamlet of West Newbury might be a potential future growth area and/or pursue a path to incorporation as a Village.

Rural Areas (R1, R2, R5)

The purpose of the Rural Areas is to maintain and enhance the setting of Newbury's rural areas and to ensure the continued economic viability of agricultural uses and enterprises in the zoning district. The rural areas are R1, R2, and R5. Most land in the Town of Newbury lies outside established villages and hamlets. These areas are generally rural in character and consist primarily of a mixed pattern of low-density residential, agricultural, forestry, small service

businesses, home businesses and recreation uses. Traditional settlement patterns have concentrated development in the villages and hamlets with farms or undeveloped tracts of forest located along the connecting roads.

Goals, Policies, and Recommendations

Goals

1. Maintenance or enhancement of the rural environment or setting and sustaining agricultural use and productivity is the primary goal for rural areas.

Policies

1. Residential growth shall be sited to cause minimum intrusion and impact into forest or agricultural areas. [R1, R2, R5]
2. Rural lands which are adjacent to villages and hamlet areas, are readily accessible, and have appropriate soil characteristics should be considered as locations for residential development to a density of one dwelling per acre. Such lands should be close to developed areas and may be viewed as expansion areas for villages and hamlets. [R1]
3. Rural lands away from existing settlements should accommodate residential uses at lower densities. Rural areas located along main town highways but located away from established population centers should have a residential density of one dwelling per two acres. [R2]
4. The special scenic values, identified through a town inventory of such areas, should be protected by maintaining the existing pattern of low-density residential development.
5. Rural roads that are recognized as having exceptional scenic qualities should have residential densities not to exceed one dwelling per five acres. [R5]
6. All rural districts (R1, R2, R5) should be defined based on their perpendicular distance from the centerline of a numbered town highway.
7. Rural areas shall support primarily residential, agricultural, forestry, home businesses and recreational uses. [R1, R2, R5]
8. Primary retail establishments are prohibited in rural areas. [R1, R2, R5]
9. Non-residential uses, including small service businesses, small offices and inns are acceptable land uses for Rural Areas, provided they are relatively small in scale or size, are not primary or dominant uses in an area, do not unduly conflict with existing or planned residential, forestry or agricultural uses, do not unduly affect rural character or have an adverse impact on municipal infrastructure (roads). [R1, R2, R5]
10. Subdivisions should be planned to provide for common open space systems that link to active recreation areas such as playgrounds, playfields, adjacent developments or subdivisions, and natural areas.
11. Development shall not be permitted where adequate infrastructure and public services are not available to support the use.

Recommendation

1. The Town should convene public discussions to reevaluate the suitability of established zoning districts.

Conservation and Natural Resource Areas (CD10)

Forests are an important part of Newbury and have traditionally been used for recreation, wildlife habitat and a source of firewood, maple syrup and lumber. Roughly seventy percent (70%) of the total area of the town is made up of parcels of forestland that are twenty or more acres in size. Large tracts of undeveloped land are found throughout the town and have an impact on the character and appearance of the landscape. Parcelization of large tracts of undeveloped land can jeopardize the character of Newbury's conserved and natural areas.

The forest provides a more-or-less unbroken area with many important elements of wildlife habitat, such as food, visual cover, and protection from the elements. Some areas contain dense softwood stands that provide winter cover for deer. Other areas are overgrown pasture lands with aspen, apple, cherry and serviceberry that provide food to many birds and animals. Oaks and beeches provide nuts in autumn that help to fatten animals for the long winter.

Areas that have experienced recent logging often have an abundance of young hardwood trees that are browsed by deer and moose. Parts of Newbury are classified as seasonal bear habitat by the Vermont Department of Fish and Wildlife, and several areas of town are mapped as critical deer habitat. There are at least three locations in town that are recognized by the Vermont Natural Heritage Program as having rare or endangered plant or animal communities.

An extensive system of old town roads and logging trails provide excellent access for outdoor recreation activities such as hiking, horseback riding, cross-country skiing and snowmobiling. (See Transportation Plan)

The eastern portion of Newbury is dominated by forests of hemlock, white pine, oak and red maple. The western part of the town has less oak and more sugar maple, American beech and white ash. All of these species have value and can be sold for pulpwood, firewood or sawlogs to generate income. This ability to draw economic value from forestland has encouraged its maintenance as undeveloped land. This forest resource provides a long-term, stable source of jobs and income to landowners, loggers, foresters, sawmill workers and indirectly to the rest of the community involved in supplying equipment or services to the forest industry.

The purpose of the Conservation and Natural Resources area is to only allow limited low-density development that is primarily agricultural, forestry or residential in nature.

Policies and Recommendations

Policies

1. Density in this area must not exceed the minimum density which is allowed by Vermont statute, unless the developer pursues a PUD.
2. The minimum lot size in the conservation area will remain 10 acres.
3. To prevent forest fragmentation, subdivisions and other development on large lots in the Conservation District shall minimize impacts on forestry potential and habitat values of undeveloped areas by concentrating development at the forest edge near other development and roads; shall use small lot sizes and shapes so that most of the remaining

land is in a large undeveloped tract; shall minimize clearing forest; and shall avoid the creation of additional roads or power lines that would further future development into interior areas.

4. Significant commercial or residential development is not allowed in Conservation and Natural Resource areas. [CD10]
5. Subdivision of existing parcels shall be reviewed to assure that new parcels are accessible and have reasonable configuration to allow long-term, productive use of the land.
6. Due to their critical ecological importance, significant wetlands (including vernal pools) shall not be drained or filled.

Recommendations

1. The zoning bylaws for the Conservation District should be reviewed against current state guidelines resulting from passage of S.100.
2. The Planning Commission shall review the size, boundaries, function, and impact of the Conservation and Natural Resource areas.
3. Important wildlife habitat and habitat connectors shall be protected from development in order to maintain healthy and diverse wildlife populations.
4. Development shall allow for at least the state recommended buffer between development and streams, rivers, ponds, lakes, wetlands, and vernal pools.

Agricultural Land and Farming

The purpose of this land use is to preserve Newbury's traditional agricultural elements as a key visual and economic base. For the purposes of this plan, the category of lands falling under agriculture and forestry uses cross reference under three planning headings: Land Use, Natural Resource, and Community-Economic Development.

As have many other Vermont communities, Newbury recognizes the value of its agricultural lands. However, like many towns, Newbury has limited financial resources to commit toward the conservation of these lands, the open spaces they provide, and the preservation of farms under active operation.

Located in the Connecticut River Valley, Newbury is a town with an agricultural heritage. Agricultural land use will continue to influence the pattern of development in Newbury and the elements necessary in agrarian life (farmers, farm equipment, manure, livestock, etc.) must be respected by residents and businesses.

Policies and Recommendations

Policies

1. The Town should encourage the maintenance of Newbury's traditional elements of agricultural industries as a prime economic base.

Recommendations

1. The Town of Newbury should investigate methods of permanently preserving open lands.

Mixed Use Commercial Area (MXU)

The purpose of this land use area is to provide a location for a mix of uses that will benefit from access to Route 5 and Route 302 while discouraging the types of commercial uses that will have a negative impact on the economic viability of Newbury's villages and hamlets.

Policies and Recommendations

Policies

1. Appropriate uses include commercial (excluding primary retail) and residential uses.
2. Commercial primary retail uses that require substantial space for outdoor storage, such as lumberyards or tree sales, could be considered appropriate for this area, but only if their development pattern does not encourage sprawl.
3. Professional offices, light manufacturing, service businesses, home businesses and secondary retail are encouraged in these areas.
4. Density should be a minimum of one acre.
5. Home occupations and home businesses are encouraged in this area.
6. New commercial development within the Mixed Use Commercial Area should be designed in such a fashion that it:
    - creates compact and densely developed projects which utilize land efficiently;
    - reduces the impact of parking and integrates landscaping;
    - provides pedestrian and vehicular links between developments;
    - utilizes screening between the project and the street to reduce visual impacts and to diminish other impacts such as noise, including use of large trees;
    - discourages strip development and sprawl;
    - includes signage that effectively communicates the desired message without being inappropriate.
7. Sound access management techniques, including shared access points, should be incorporated into all commercial developments to ensure traffic safety and to minimize the number of curb cuts.
8. Primary retail establishments (excluding those that require a substantial amount of outdoor space for storage of materials) shall be located within Newbury's villages and hamlets.

Recommendations

1. The Planning Commission should draft clear standards (possibly including performance standards) with regard to the types and sizes of appropriate light industrial and commercial development and access management for conditional use reviews.
2. The Planning Commission should consider amending the Newbury Zoning Ordinance to provide guidance as to how landscaping can be used to maintain the character of the Mixed Use Commercial Area.

Industrial Area (I)

The purpose of this area is to house manufacturing or product-assembly businesses, to accommodate expansion of commerce, and to facilitate commercial needs generated from Interstate 91. Newbury has one industrial site located off Route 302 near the I-91 interchange. This Industrial Park is fully tenanted.

Policies and Recommendations

Policies

1. Appropriately scaled light industrial and manufacturing is the preferred use within this area.
2. Services, professional offices, trucking and traveler's services are appropriate within the Industrial Area.
3. Primary retail development is not appropriate within this area.
4. Corporate offices, service businesses, renewable energy generation and small-scale commercial or light industrial companies are appropriate in the Industrial Area.
5. The visual impact of any businesses located in this area should be minimized, such as by use of appropriate design and scale, and/or landscape and screening of buildings, parking areas and storage.

Recommendations

1. The Planning Commission should consider other areas which might be appropriate for light manufacturing.
2. Locations to consider for light manufacturing should be on a paved state highway.

G. Other Land Use Areas

Public Lands

The State of Vermont owns approximately 491 acres within Newbury and of those, 336 are attributable to the Pine Mountain Wildlife Management Area. The Town of Newbury has approximately 796 acres, including four town forest tracts. Village of Wells River owns approximately 86 acres; Newbury Village, 218 acres, 188.4 of which are reserved for the Newbury Village Water Protection District, mentioned under the section in this plan for Community Facilities and Utilities.

Shoreland Areas

Among Newbury's natural resources are several lakes and ponds. These areas are detailed under the section on Natural and Cultural Resources. The lands around these water bodies are subject to shoreland regulations in Newbury's Zoning Regulations.
Protection strategies should be continued to preserve the quality of these important and tenuous land areas. At the north end of Halls Lake, a recommendation calls for the road to be moved from its current path bordering the existing beach area and relocated behind the existing cabins.

Recommendation

1. The Selectboard, with the Town Highway Department, should review the configuration of Halls Lake Road and consider alternatives.

Reservoir Protection Areas

The purpose of this district is to maintain a quality source of public water for the Villages of Newbury and Wells River. In addition, it is the purpose of the District to accommodate development and use of such land and waters in ways as not to diminish the value and availability of water for public use and to protect the public investment in the water system. Uses that are appropriate for these land use areas are limited exclusively to low impact recreation such as hiking, cross-country skiing, wildlife sanctuaries, hunting and similar activities.

Flood Hazard Areas

It is the purpose of this land use area to:

- Avoid and minimize the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding related inundation and erosion;
- Ensure that the selection, design, creation, and use of development in hazard areas is safe and accomplished in a manner that is consistent with public wellbeing and does not impair stream equilibrium, flood plain services, or the stream corridor;
- Manage all flood hazard areas designated pursuant to 10 V.S.A. Chapter 32 § 753, the municipal hazard mitigation plan; and make the Town of Newbury, its citizens, and businesses eligible for federal flood insurance, federal disaster recovery funds, and hazard mitigation funds as may be available.
- Protect the environmental and recreational value of Newbury's rivers and streams.
- Some lands adjacent to the Connecticut River as well as its tributaries are subject to periodic flooding. Floodplains and Fluvial Erosion Hazard Areas are unsuitable for development because of the high loss potential for life and property as well as the limited ability of septic systems to perform adequately during periods of high water. For more specific information about the function of Floodplains, see Chapter 5B, Flood Resiliency.

Policy

1. Uses that are appropriate within the Flood Hazard Area include agriculture, forestry, outdoor recreation, wildlife refuges and appropriately designed mineral extraction operations.

VI. Transportation

It is the intent of this transportation planning element that there be close correlation between road development policies and the land use plan element policies to ensure appropriate and well directed growth throughout the town. Present service is good and there is room for growth on existing roads. The town does not anticipate the need for creation of any new significant roadways.

The Transportation Plan for Newbury is based on two primary goal concepts:

Goals

1. People and goods can move freely, safely, and efficiently. This includes consideration of highways, railroads, back roads, pedestrian and bicycle routes, trails and public transportation.
2. That plans for transportation routes through Newbury will have a major impact on guiding growth to appropriate locations. Growth management can occur by directing construction or improvements of roadways into areas favorable for growth and away from environmentally sensitive areas.

A. Roads

Interstate 91 bisects the town on a north/south axis roughly paralleling Route 5. A segment from the 1971 transportation plan reads as follows: "The impact of I-91 will not only be one of heavy generation of traffic but also will affect the land use. It is therefore envisioned that Route 302 will be subject not only to considerable improvement, but realignment as well, accommodating the White Mountain traffic coming from Interstate 91." The above statement remains true, although resulting impacts have been slower to evolve than were envisioned. In 2015, as stated above and in sections of the land use plan, Interstate 91 has had and will continue to have a major effect on traffic and land use planning concerns in the Town of Newbury. The street and highway network serving the Town of Newbury and its villages consists of 85.88 miles of class 2 and 3 roads, and 21.81 miles of State and federally owned highways.

Surface conditions on roads in Newbury vary by type of road, they include:

- Town Highways – Dirt and improved gravel
- State Aid Highways #2 & #3 – Complete with hard surface.
- State Aid Highways #1 and #4 – Part hard surface/part improved with gravel. #4 is due to be hard-surfaced as funding becomes available.
- State & Federal Highways 5 & 302 – Hard Surface

Tyler Farm Road, Swamp Road, Scotch Hollow Road, and Boltonville Road are considered regional connectors. These roads have that designation because they provide a direct conduit to adjacent municipalities.

Road Maintenance

Apart from education costs, public roads have been and will continue to be Newbury's largest town asset requiring significant financial investments paid through municipal taxes. Transportation funding sources come from numerous combinations of the local tax base, state

and federal gas tax receipts, state and federal allocations and registration fees. The most significant funding resource comes from the federal transportation bill, which passes through the State of Vermont and is distributed to towns by the Agency of Transportation. The federal and state government pays a percentage of project costs and the community pays the remainder. This funding applies only to Class 1-3 roads. Maintenance of Class 4 roads is funded exclusively by the community. The Two Rivers-Ottauquechee Regional Commission has compared programs throughout the region and recommends a program of early intervention using preventative maintenance because such a program has proven to be 75-85% less costly than larger reconstruction work after significant deterioration has occurred.

Class of Roadway	Length in Class
Class 2	22.24
Class 3	63.64
TOWN TOTAL	**85.88**
State Highway	11.748
Interstate	10.061
STATE TOTAL	**21.809**

Figure 6. Roads in Newbury & Villages
Source: VTrans

Proper and timely road and drainage system maintenance can help protect systems from most severe weather events. Maintaining a reliable and up-to-date inventory of existing culverts and structures, coupled with a short- and long-range plan for replacement and upsizing, is essential. Replacing deficient culverts and bridges also helps protect water quality – installing appropriately scaled and designed structures that can handle flood events, stormwater runoff, promote fish passage, and minimize the discharge of road sediment. These upgraded culverts and bridges, operating in greater harmony with the natural environment, will also be less likely to fail during storm events.

Access Management

Access management planning and regulation can preserve the public's investment in town and state roads, and ensure that private investment in property results in the most desirable land use for the Town. Through the design and control of access cuts or improvements on Newbury's major roads (mainly Routes 5 and 302 and Class 2 Town highways), traffic flows and the carrying capacity of the road can be better managed. Research shows that there is a direct correlation between the number of access points onto a highway and traffic related crashes.

The greater the degree of access on a road, the higher the number of accidents. This not only includes motor vehicles, but pedestrians and bicyclists. Using accepted management techniques for new development makes for safer and more efficient travel. In addition, it provides a responsible way to link transportation access with land use. Regulatory authority for access on state highways rests with the Vermont Agency of Transportation and with the Selectboard for town roads.

Vermont highway law (19 V.S.A. Section 1111) requires access permits for any private or public access connecting to any State or Town highway. The law provides that permits must be granted to access property. The Town access permit policy ensures that the access satisfies the test of reasonableness and is compatible with a locally adopted access management plan. Accordingly, it is the primary objective of this section to provide transportation and land use goals and policies that will guide the Agency of Transportation, Planning Commission, Selectboard, and project designers in planning for development that involves highway access in Newbury.

Scenic Roads

Newbury town roads extend through rural farmlands, hill country and forest land. Four of these roads have been specifically identified by the Planning Commission and the transportation committee for designation as "scenic" because they all open on scenic panoramas:

- Rogers Hill Road
- Jefferson Hill Road
- North Road
- Wallace Hill Road

Finally, Newbury has several unused highways altered to the status of trails. These trails are not maintained and may be used for recreational purposes. A recommendation is made for identification of some of these trails as an interconnected system of walking trails. The Newbury Conservation Commission and /or other interested groups or persons might assist the Town to accomplish this.

B. Other Transportation

Rail

In addition to the road network in Newbury, the Vermont Rail System provides heavy haul freight rail service to Vermont, New Hampshire, and Upstate New York through its five affiliated short lines: Vermont Railway, Green Mountain Railroad, Clarendon & Pittsford Railroad, Washington County Railroad, and New York & Ogdensburg Railway. Washington County Railroad operates the line that passes through Newbury. While there is presently no passenger service along the Washington County Railroad line nor access to freight service, Newbury recognizes that access to rail could have a beneficial economic effect for local forestry, silviculture, agriculture and individuals. Commuter rail service to job centers in the Upper Valley would be a valuable commodity that might attract new residents and reduce automobile and truck traffic which would help reduce greenhouse gas emissions.

Air

Newbury does not have public airports within its town boundaries. The nearest airports are the Lebanon Regional Airport, Dean Airfield in Haverill, NH, EF Knapp in Barre, VT, and Caledonia County (airport) in Lyndonville, VT. Caledonia County is being bought by a private company for private use. Larger, more frequently used airports are located in Burlington, VT, Manchester, NH, and Boston, MA.

Public Transit

Newbury is fortunate to have access to a small regional public transportation system, Stagecoach, Inc. Stagecoach offers regular transportation to West Lebanon, NH. Their route to West Lebanon (the River Route) begins in Wells River, with a stop in Newbury village as it heads south. The River Route has stops at the VA Hospital in Hartford, and connects with Advanced Transit (which offers service in NH) and Dartmouth Hitchcock Medical Center. Stagecoach also offers limited public transportation in the form of special requests for individuals who need transportation for medical reasons.

Newbury residents can take advantage of Stagecoach's "Ticket to Ride" Program, which helps pay a substantial percentage of the cost of rides for senior citizens (60+) and persons with special

needs when there is not available transportation in the household or the person requesting the trips is unable to drive on the day of the trip. Ticket to Ride is available for a broad array of destinations, such as medical services, shopping, errands, and social purposes.

Given that Newbury's elderly population is growing, the need to maintain an affordable source of public transportation that can bring the elderly to major medical facilities like Dartmouth-Hitchcock and larger commercial centers for shopping is important.

Bicycles and Pedestrians

Many residents bike or walk on town roads in Newbury. Newbury does not have a consistent system of sidewalks within the Town or Village Areas. In addition to sidewalk improvements, there are other ways to encourage expanded economic development within the villages, improve the villages' aesthetics, and to add traffic calming measures that would make the villages more pedestrian friendly. Returning village circulation to its original capacity and improving the quality of design would improve pedestrian and cyclist travel.

Goals, Policies, and Recommendations

Goals

1. Ensure the safety of all highway users.
2. Maintain roads to extend their designed life.
3. Strictly manage access that ensures and supports growth center development.
4. Reduce carbon footprint.
5. Consider safety and input on public infrastructure when reviewing access applications.
6. Encourage public transportation opportunities for all areas of town.

Policies

1. The Town of Newbury shall continue to update its Highway Ordinance.
2. Providing year-round maintenance for Class IV Roads, beyond the boundaries now served is not an option envisioned by the town at this time.
3. Private roads should be constructed and maintained to meet current and future fire & life safety access.
4. Guardrails should be installed wherever there is a serious threat to travelers.
5. The Town possesses rights-of-way over pent roads and legal trails. These shall be retained by the town for the purposes of maintaining a recreational trail system and for agricultural or forestry access.
6. The Town should embrace Complete Streets design concepts especially related to pedestrian and bicycle paths.
7. Newbury supports the development of the Cross Vermont Trail (CVT) through the Wells River Valley. When the CVT is completed, this 75-mile trail will be a safe bicycle and pedestrian route, an alternative to cars, a recreation resource for communities and a contributor to local economies. The Town and the Village should actively participate in the integration of the Cross Vermont Eastern Trailhead into Village of Wells River.

8. Newbury should continue to maintain an open policy towards rail with regard to efficient and more frequent utilization of this mode of transport and encourage the development of commuter rail specifically.
9. The Town should not take on any new roads.

Recommendations

1. The Town should incorporate complete street planning.
2. The Town and the Village of Wells River should investigate unifying all highway districts in the town under one department.
3. The Town should explore public-private partnerships to upgrade existing town roads to meet current and future fire & life safety access.
4. The Planning Commission should examine zoning district frontage requirements with an eye to access impact on Town infrastructure.
5. The Planning Commission should revise zoning and subdivision regulations to ensure that public input and traffic safety is considered when granting road access.
6. The Town should explore Class 1 road designation within the Village centers.
7. The Town should investigate additional park and ride locations.
8. In order to preserve the character and rural nature of the Conservation and Rural zoning districts, the Town should review the highway ordinance and investigate how the Town can discourage the unnecessary paving of dirt roads.
9. The Town should review the highway ordinance and investigate how it can discourage the paving of roads to a single location.

VII. Community Utilities, Facilities, and Services

Community facilities are the public's investment and should provide for such services and facilities as municipal buildings, libraries and schools, public water and sewerage facilities, solid waste facilities, fire, police, and ambulance services. The following provides an inventory of Newbury's existing facilities and a plan for future expansions. For the purposes of this section, public water and utilities will be treated first because of their very direct relation to land use planning.

A. Capital Budget and Program

State statutes enable communities to create a Capital Budget and Program (CB&P) for the purposes of planning and investing in long-range capital planning. Although most communities have some form of capital account where they save money, many do not have a Capital Budget and Program as described in state statute (24 V.S.A §4443). A capital budget outlines the capital projects that are planned to be undertaken in the coming fiscal years over a five year period. It includes estimated costs and a proposed method of financing those costs. Also outlined in the Program is an indication of priority of need and the order in which these investments will be made. Any Capital Budget and Program must be consistent with the Town Plan and shall include an analysis of what effect capital investments might have on the operating costs of the community. An adopted Capital Budget and Program must be drafted with assistance from the Planning Commission to ensure consistency with the Town Plan. While the Planning Commission is designated in statute as the "preparer" of the Capital Budget and Program, it is essential that members of the Selectboard and budget committee (if one exists) are part of the team that develops the CB&P. The Selectboard has the ultimate decision as to whether or not such a budget and program is adopted.

When planning for routine major facilities investments, such as roof replacements, foundation repairs, etc., it is important to also consider making energy efficiency improvements at the same time. The cost to replace or renovate a community facility will only be slightly higher if energy efficiency improvements are done at the same time, rather than on their own.

At present, the town of Newbury has not adopted a formal Capital Budget and Program (as described in §4443) to help guide investments in community infrastructure and equipment. The Planning Commission may make recommendations to the Selectboard with regard to what capital investments should be considered annually.

Policy

1. Local capital planning programs and public investment strategies should encourage renovation of and in-fill within existing village or hamlet areas.

B. Water Supply and Sewerage Facilities

Newbury Village and Village of Wells River both have municipally owned water systems. In recognition of the importance of the lands providing water sources for both the Villages of Newbury and Wells River, the Newbury Planning Commission created aquifer protection language in the Newbury Zoning Regulations to address protection of the quality of these water supplies under a district known as the "Reservoir Protection District". For Newbury Village, this protection district has been entered into the G.I.S. Mapping System for the Town. Apart from

these two village systems, landowners throughout the town develop private facilities for water and septage.

Newbury Village Water System

The Newbury Village Water system now consists of an infiltration system located on the Newbury Village property that lies on the north side of Moore Hill Road. There are two lines approximately 200 feet in length which collect the underground water which is then carried to the storage reservoir by a transmission line.

Three artesian wells were added to the system in 2007.

The storage reservoir is an in-ground concrete tank which consists of two cells that can be separated for maintenance. Total capacity is 350,000 gallons. Incorporated into the system is the valve structure which contains metering and valving as needed for operation and also equipment for chlorine and fluoride introduction.

A major upgrade in 2007 included construction of a filter building that provides filtration of infiltration gallery water. Also included in the project was the replacement of approximately 80 percent of distribution lines.

A transmission line connects the present system to an originally installed line through valving thereby making it possible to maintain and use the original open reservoir for emergency standby. The system was put into service in November 1987 and currently serves 214 units.

In 2014 Newbury Village's average daily use was approximately 44,000 gallons. Slightly over one tenth (1/10) or 5,100 gallons of the daily consumption are allocated to agricultural uses within the Village District. The continuing maintenance and upgrading of this system is an obvious priority for the Village. Notably, the Newbury Elementary School is one of the users on the system.

The Newbury Village Trustees hired an engineering and well-drilling firm in the winter of 2005 to evaluate the potential water supply on the Drugach’s property located below the Village. Although a deep channel producing over 1,000 gallons per minute was found, testing proved the water to contain fifty times higher concentration of manganese and iron than allowed by the US EPA, and the arsenic concentration was close to the limit. Otter Creek Engineering advised the Trustees to abandon the idea of using this site as a public water supply because of the complexity of the operating and filtering procedures.

The Newbury Village Water Commissioners will continue to evaluate options for funding the necessary development of a new water source as well as looking into purchasing additional lands for the purposes of watershed protection.

A current initiative involves getting a formal approval of the open reservoir for an additional water source during the historic annual dry period from late August through September. This water will be filtered through its separate designated bank of filters.

At time of writing, the Newbury Village Water Commissioners are working with an engineering firm to develop a Preliminary Engineering Report (PER). This report will include identification of necessary upgrades with corresponding costs. Replacement of the remaining 20 percent of un-upgraded distribution lines will also be included.

Village of Wells River Water System

The Wells River water system was established in 1896. Groundwater from a well developed in 1956 is the current source of supply in this village, delivering a yield of 350 gallons per minute. Water is pumped to a 275,000 gallon reservoir about 180 feet above the Village to the southwest. This reservoir is ledge with a wood frame and metal roof. Distribution is through a 10 inch cast iron main leading from the reservoir to Main Street. A 8 inch main extends south to Elm Street near the southern end of the system. Service to the area north of the Wells River is via 6 inch and 4 inch pipes and pipes of similar sizes branch off the 10 inch main in the central and southern parts of the Village. Fire protection is also provided by the Village of Wells River water system.

Average daily use is approximately 35,000 gallons/day. When the original Town Plan was drafted for Newbury in 1971, it was estimated that the water supply in Village of Wells River was adequate for at least 20 years, to meet both domestic and fire protection uses. In 1979, a new, more efficient pump was installed. An old well, sited near the present water source is available for additional capacity should the need ever arise. Presently the Wells River water system serves about 130 residential and commercial users.

The source and system are thought to be ample and sufficient for any future anticipated demands. However, aging distribution infrastructure is a growing concern as some parts of the system are from the early 1900s. Funding will eventually need to be secured to upgrade these systems.

Village of Wells River Sewer System

In 1983, Wells River began operation of a new sanitary sewer system completely separated from the stormwater system. There are approximately 110 users on the system. Sewage is collected at an underground pumping station located near the Woodsville Bridge on US 302 and is pumped to the Woodsville, New Hampshire Wastewater Treatment Facility.

The Village of Wells River owns 23% of the Woodsville treatment plant's capacity. Presently Wells River only uses 50% of that allotted capacity. The Village is assured a 65,000 gallon-per-day capacity that more than covers the 36,000 gallons-per-day that are pumped through the system. The plant in Woodsville, New Hampshire was designed to accommodate future demand of both communities and is operating at less than 50% of its design capacity. The contract agreement between the two municipal entities provides an opportunity to obtain more capacity if necessary. After the initial hook-ups, there have been few increases in connections to either water or sewer lines because very little land remains available for expansion within the Village.

The Utilities, Facilities, and Education map (GIS mapping) that is required for this section of the Town Plan includes sites showing Reservoir Protection Areas for Village of Wells River and Newbury Village.

Goals, Policies, and Recommendations

Goals

1. Provide adequate services, facilities, and amenities as the Town can reasonably afford.

Policies

1. While the Town of Newbury and its respective villages of Wells River and Newbury are under separate and distinct governing bodies and charters, mutual coordination and

collaboration should be encouraged. Unification of effort in identified areas of service could result in financial benefits to all.

2. 24 V.S.A. Section 4413 states that unless reasonable provision is made for public necessities such as public utility power generating plants and transmission facilities lines; state or community owned institutions and facilities; public or private schools and other educational facilities; churches and other places of worship, convents, and parish houses; public and private hospitals; and regional solid waste management facilities; and hazardous waste management facilities, the town cannot regulate their location. It is recommended that uses of this type which are not specifically covered elsewhere in this plan be located so as to be the most compatible with present and planned private facilities, and that future revisions of the zoning regulations make provisions so these uses can be regulated.

Recommendation

1. The Town of Newbury should begin work on a Capital Budget Program which would aid the town in budgeting for those major expenditures associated with town facilities and services, whether such capital outlay be made for a new playing field, or a new fire engine.

C. Recreation and Open Space

The Town of Newbury has an active recreation department which organizes community events. At many of the past meetings held for the town plan, a common theme was expressed that the town might expand its service in these areas without a great deal of expense and provide some additional amenities for residents especially younger members of the community as an added incentive for them to remain in or come to the community. Such amenities could also add to the town's tourist/recreation economy by preserving the quality of the environment and providing facilities that could possibly generate some income for the town. From this basic theme, the following recommendations are made.

Town/State Owned Properties

- **Tucker Mountain Town Forest** – The Tucker Mountain Town Forest is located to the west of West Newbury and includes Tucker Mountain and the southern half of Woodchuck Mountain. The property is 636 acres, with hiking and multi-use trails, parking areas, and educational and recreational resources that are open to the public. It is managed by a town-appointed committee. The committee raises its own funds as well as expands programs to increase recreational and educational activities. The Town Forest has an especially strong appeal to young families with several easy trails, recreation activities, wetlands, beaver ponds, and a StoryWalk™ designed for children.
- **Newbury Village Watershed Property** – To ensure that Newbury Village maintains clean and safe drinking water, roughly 189 acres of property has been conserved by the town. This area, located on the Southwest side of Mt. Pulaski is open to low-impact outdoor recreation.
- **Pine Mountain Wildlife Management Area (WMA)** – A portion of the State designated Pine Mountain Wildlife Management Area is located in the Northwest corner of Newbury. Direct access to this WMA is available from other communities.

- **Woodchuck Mountain** - This parcel is adjacent to Tucker Mountain Town Forest and is owned by the State of Vermont Department of Forests, Parks and Recreation. It is used for recreational activities.
- **Halls Lake**
    - **Beach** – The Town of Newbury maintains a beach access on Halls Lake which is open to the public during the summer. The beach area is small. There is no room for expansion as it is the only "public" area on the lake. Any expansion would be ill-advised as parking is often inadequate. Again, due to lack of available space. The beach area occasionally requires additional sand and fence repair—perhaps a few hundred dollars.
    - **Veteran's Memorial Park/Picnic Area** – This area is frequently used. Routine mowing is done. The picnic tables are repaired/replaced as needed. Parking is limited but there are no anticipated changes.
    - **Fish and Game Access** – This area includes a public boat ramp and small parking area. It is State-owned.
- **Wells River Conservation Area** – Recreation/educational activities are encouraged. It is linked to the Blue Mountain School and contains trail systems including a section of the Cross-Vermont Trail. At this time there are no plans which will require funding.
- **Jefferson Hill Forest** – Accessibility is limited. It has a forest management plan.
- **Stagecoach Road Forest** – Accessibility is limited. It has a forest management plan.
- **Montebello Conservation Area** – Easily accessible but it has a large area of poison ivy which the Newbury Conservation Commission has tried to control.
- **So-called "Ski-Tow" property** – The property in West Newbury was purchased using federal dollars from the Land and Water Conservation Fund and has a recreational easement attached to it. The land is very sloped. Its original purpose was for skiing but over time, insurance costs made that prohibitive. In the recent past it has been leased for cattle grazing but is largely unused. The community is considering best use of the property going forward.
- **Newbury Boat Launch** – This area is on the Connecticut River is owned by the Town and leased to VT Fish and Game and is their responsibility. The area is frequently used by residents as well as non-residents.
- **Reverend Kenneth W. Berry Memorial Field** – This local recreation resource is owned by the Village of Wells River and currently includes a playground, and a tennis and basketball court.
- **Newbury Common** – Transferred to the Town in 2021.
- **Sewer Pump Transfer Station –** Owned by Village of Wells River.
- **Fire Department Training Site** – Owned by Village of Wells River.
- **"Old Village Dump" –** Owned by Village of Wells River.
- **Village of Wells River Reservoir**

- **Village of Wells River Wellhead**

Recommendations

1. Based on current activity and interest in trail sports (i.e. snowmobiling, cross-country skiing, hiking, horseback riding, etc.) within the town, the Town should develop a system of interconnected trails. Some of the network already exists. Such a system could be used throughout the seasons for various planned events such as ride-ins and educational nature hikes. Such a plan could be implemented through the Newbury Recreation Committee and Conservation Committee.
2. The Town should continue to pursue recreational opportunities.
3. The Town should consider appropriate management plans for public lands.

D. Education and Childcare Facilities and Services

Newbury Town and Wells River are part of two different Supervisory Unions (Newbury Town – SU27, Wells River – SU21), sending their school age children to different schools.

Current childcare facilities include:

- **Town of Newbury After School Program** is located in the Newbury Elementary School, 214 Pulaski Street, serving approximately 16 children ages 3-5; licensed by the State of VT with a rating of 2 stars (out of a possible 5) through the state's STep Ahead Recognition System (STARS) for quality recognition.
- **Blue Mountain Union Preschool**, located in and operated by Blue Mountain Union School, 2420 Route 302, serving approximately 24 children ages 3-5; licensed with a 5-star rating.
- **Butterfly Kisses Childcare Center III,** located at 2284 Route 302, serving infants, toddlers, preschoolers, as well as older children after school.

Of course, many parents arrange childcare with relatives or neighbors or utilize facilities outside of Newbury.

- **Orange County Parent Child Center**, located at 693 VT Route 110 in Tunbridge, provides support and education to families with young children in 18 central Vermont towns with the goal of helping all Vermont families get off to a healthy start, promote well-being, and build on family strengths. This facility is licensed for 60 children and provides a year-round, full-day, early education program for children from 6-weeks to kindergarten.

School-aged children are served by the following:

- **Newbury Elementary School**, located at 214 Pulaski Street, with current enrollment of approximately 129 students (down from 172 in 2005 and 193 in 1993), grades K-6 in multi-age classrooms. The school cites a mission to become "creatively sustainable" with increased community involvement, using reading, writing, and arithmetic to teach students to "practice harmony with self, others, and nature."
- **Blue Mountain Union School**, located at 2420 Route 302, with current enrollment of 65 students from Wells River and approximately 365 students from Ryegate and Groton, grades pre-K-12. BMU's focus over the next few years will be integration of

"proficiency-based learning", using personalized learning plans to help students set goals and direct their own learning paths. Major renovations in 1998 converted the open-classroom design to traditional classrooms and replaced electric heat with a woodchip boiler.

- **Oxbow High School**, located in Bradford, providing secondary education, grades 7-12, for students from several towns; current enrollment from Newbury is 79.
- **Riverbend Career & Technical Center**, located in Bradford, providing vocational programs for the area, with current enrollment of 28 students from Newbury/Wells River.
- There are currently 11 students from Newbury/Wells River enrolled in home study. These students often participate in some school-based courses or activities and may also belong to homeschool networks for some group instruction, field trips, and socialization.

Adult education resources include:

- **Riverbend Career & Technical Center** accepts adult students in vocational day programs and also offers evening and online courses for adults for a fee.
- **Central Vermont Adult Basic Education** maintains a satellite office in Bradford and offers individual and group literacy instruction, including GED preparation, at various other locations in the community.
- **Community College of Vermont** is perhaps the most accessible college-level instructional resource for the area; part of the VT State College system, CCV offers full and part-time enrollment in both 2 and 4 year programs, as well as a certificate program, with courses held at larger urban centers within an hour's drive of Newbury.
- **Vermont State University- Randolph Center Campus** (formerly Vermont Technical College) offers undergraduate- and graduate-level courses in-person, online, and hybrid campus and cross-campus. High school students and adults not pursuing degrees are also welcome to enroll in courses. Vermont State University absorbed Vermont Technical College in July 2023 and has five campuses across Vermont.

Goals, Policies, and Recommendations

Goals

1. Support establishment of affordable childcare facilities to meet the needs of parents.
2. Provide a safe, secure learning environment with quality educational opportunities for all students.
3. Educate our children at the most equitable cost to the taxpayers.

Policies

1. The Town should support private sector efforts to develop adequate childcare infrastructure.
2. The Town should participate in educational reform measures.
3. The Town encourages the growth and development of vocational and adult education learning programs.

Recommendations

1. The Town should encourage the schools to use local foods in school meal programs.

E. Public Buildings

Newbury Village is the site of public administration for the Town. The building that houses the Town Clerk's Office and Post Office is located at the north end of the common. This building also includes the Listers' Office, the Zoning Administrator's Office and a Public Meeting Room used by various town boards. Known as the Town Clerk's Office, the building has undergone renovations to bring it into compliance with Americans with Disabilities Act (ADA) and provide more efficient use of space.

On the west side of the common and annexed to the elementary school is the Town Hall where Town Meeting is held every year. The Newbury Village Trustees hold title to the Horace W. Bailey Club, a small, beautifully restored brick building on the east side of Route 5 just south of the common, providing another area meeting place for official and social groups. Other publicly owned buildings include the old town meeting house in Newbury Center, the DAR building in Newbury Village, the town highway garage, and the Village of Wells River office and highway garage. The Town has three fire stations that house the Wells River, West Newbury and Newbury Village Fire Departments. The Town owns the brick bank building just to the north of the Town Clerk's Office, as well as the Tenney Memorial Library building. The Wells River Welcome Center is owned by Village of Wells River.

- **Town Office** – The Town Office is located in Newbury Village and is the site of public administration for the Town. The building that houses the Town Clerk's Office and Post Office is located at the north end of the common. This building also includes the Listers' Office, the Zoning Administrator's Office and a Public Meeting Room used by various town boards. Known as the Town Clerk's Office, the building has undergone renovations to bring it into compliance with Americans with Disabilities Act (ADA) and provide more efficient use of space. The Office lacks adequate space but circumstances prevent changes. There is a lack of adequate parking village-wide and additional parking is cost prohibitive. For many years the post office has rented space in a section of the building. Town is looking into heat pumps to upgrade the heating and cooling system. No estimates have been received and there is not a timeline for this project at time of writing.
- **Wells River Savings Bank – Newbury Branch** – The small brick building beside the town office is leased to the Wells River Savings Bank. They are able to renew the lease. The Wells River Savings Bank maintains the building. No significant improvements are anticipated.
- **Daughters of the American Revolution (DAR) building** – The Town owns this building in Newbury Village, which is leased to DAR on a 99-year lease.
- **Newbury Center/Town House** – This building has limited amenities. There is no central heat, no bathroom facility, and limited lighting. It is occasionally used for summer gatherings. No plans for changes.
- **West Newbury Fire Station -** West Newbury Fire Station is volunteer-staffed and is located on Snake Road a short distance from the Post Office. Town owns building only. The building is limited in the size of equipment it can house, but there are no plans for

expansion. It needs some minor repairs including work on the roof and improvements to interior lighting. No estimates have been received for that work, but it is high priority and will be completed in 2023 or 2024.

- **Wells River Fire Station –** This Station is volunteer-staffed and located in the center of the Village. The Town leases the building, as it is owned by Village of Wells River. The building is small, which limits the size of fire equipment able to fit. This station has good meeting and training room.
- **Newbury Village Fire Station** - This Station is volunteer-staffed and is located in the center of the Village. Town owns land/building. There are currently plans for a new and larger facility, which will also have meeting and office space to allow for future office needs. Funding will come from ARPA funding, town building fund, and possible bond. Preliminary total estimated cost is $1.2 million. Work is not anticipated to begin in the lifetime of this plan because of the scale of the project. It is high priority.
- **Highway Garage -** Because of the size of the newer equipment, (as well as a few additional pieces) space is inadequate to house all town equipment. Building is outdated. Heating is costly. New building appears to be the best solution. Conversation is just beginning about it so there is currently no timeline and the cost is uncertain, as is funding sources. Medium priority as we can't do fire station and the garage at the same time.
- **Tenney Memorial Library.** The library is overseen by an independent Board of Trustees with one member appointed by the Town. Annually, the town includes funding in the budget to help support the library.
- **Recycling Center** – Located behind the Newbury Village Fire Station. If the Newbury Village Fire Station is expanded or moved to another lot, this recycling center will need to be relocated.
- **Town Hall (Village Hall)** – Located on the west side of the common, this building is annexed to the Elementary School. Transfer to the school was contingent upon the Town being able to hold Town Meeting in the building.
- **Horace W. Bailey Club –** The Newbury Village Trustees hold title to this small, beautifully restored brick building on the east side of Route 5 just south of the common. It is another local meeting place for official and social groups.
- **Village of Wells River Office and Highway Garage** – Owned by the Village.
- **Wells River Welcome Center** – Owned by Village of Wells River.

Goals, Policies, and Recommendations

Goals

1. Access to town buildings and services meet the needs of residents.
2. Town service locations support the historic development pattern of the Town of Newbury and its Villages and Hamlets.

Policies

1. Public investments in public buildings and services support the historic development pattern.
2. Public buildings shall be ADA Accessible.

Recommendations

1. The Selectboard and Planning Commission should look into funding programs to make the entire Town Office building accessible, such as through an elevator and other improvements.

F. Libraries

The historic Tenney Memorial Library is located in Newbury Village on U.S. Route 5. This library has approximately 13,000 volumes. In Village of Wells River, the Baldwin Memorial Library serves the reading public with over 10,000 volumes. Both libraries are connected to other state educational and administrative programs through a computer link, and both libraries provide neighborhood programs and special reading hours for children. The two libraries alternate open days of service.

G. Fire Protection and Public Safety

Fire Protection

The Newbury Fire Department is a volunteer organization that operates out of three stations: Newbury Village, Wells River, and West Newbury. All stations operate under the same set of by-laws and operate from a single budget. Firefighters receive training in basic fire suppression and scene safety, as well as other topics such as CPR, Hazmat Awareness, etc. This is accomplished through monthly drills, as well as at the annual regional fire school that is held each May at Blue Mountain Union School in Wells River. Firefighters may take advanced courses such as Firefighter I and Firefighter II, which are taught to a nationally recognized curriculum.

Emergency Medical Services

Emergency medical services are provided to the town through the coordinated efforts of the Newbury EMS which provides Basic Life Support (BLS) by responding directly to the scene of a medical emergency within the town and by Woodsville Ambulance that responds from Woodsville, NH and is the transporting agency that provides Advanced Life Support (ALS) to patient at the scene.

Police Protection

Police protection for the Town of Newbury is provided by the Vermont State Police.

H. Emergency Management

Emergency management involves recognizing potential threats and hazards that may occur in our area and developing plans and protocols to address each situation. All plans should be thorough, yet flexible, so as to better respond to the changing nature of an emergency event. All responses will be conducted according to the NIMS (National Incident Management System), using the nationally recognized Incident Command Structure (ICS) to manage an event through its various stages.

Emergency management plans are generally broken down into four areas: preparedness, response, recovery, and mitigation.

- Preparedness includes recognizing potential threats and putting preliminary plans and protocols in place so that a coordinated response will occur should an event happen. This part of the management process involves stockpiling needed supplies in key areas, as well as having a list of available personnel and other resources on hand.
- Response is the initial emergency response to save life and property during and immediately after the disaster. It should be initiated by the local Emergency Management Director (EMD) or their designee according to the Local Emergency Management Plan (LEMP) and should follow the protocols listed according to preparedness plans. Key to the response is the establishment of a Local Emergency Operations Center (LEOC), which will function as the command center for the emergency. This center should have access to strong and resilient access to the internet, an emergency management software that allows communication and coordination with the State Emergency Operations Center (SEOC), which can be a major source of resources from the state level during an emergency event. Again, all response efforts will be conducted according to the Incident Command Structure (ICS). All emergency response personnel, along with governing town officials and department heads should have training in basic incident command structure principles and procedures.
- Recovery is the more long-term process of putting life back to normal, and involves many state and federal agencies, especially the Federal Emergency Management Agency (FEMA) in large disasters. As events like Tropical Storm Irene showed, recovery can take a long time and is hindered if a disaster is severe or widespread.
- Hazard mitigation means any sustained action that reduces or eliminates long-term risk to people and property from natural or human-caused hazards and their effects. Mitigation planning begins with an assessment of likely hazards, and then targets activities to reduce the effects of these hazards. Given that the largest threat in Vermont is flood related, good mitigation measures include proper road and drainage construction, as well as limiting development in flood prone areas.

Local Emergency Management Plan

Newbury, like every town in Vermont, maintains a Local Emergency Management Plan (LEMP). This plan is updated annually to keep plans, protocols and contact information accurate and up to date, so that all components of the town's response have accurate information and clear directions for their response.

Hazard Mitigation Plan

Disaster mitigation covers actions taken to reduce the effects of a disaster. For Newbury, the primary hazard is flooding, with a variety of other lesser hazards, including structure fires, extreme winter weather, and hazardous material spills. A mitigation plan should look into ways that the town can reduce potential damages by proactive efforts to reduce potential hazards before an event happens. As mitigation efforts are often costly to implement, any mitigation plan should have a component that looks for sources of funding from the state or federal level to assist in these efforts.

Emergency Access

Any new property development in Newbury should be designed to allow safe access for emergency services. Poorly designed roads and driveways that are too steep or too narrow can limit access, particularly in the winter, and may represent a safety hazard for the emergency responder. In new subdivisions, the design of roads and driveways should be consistent with town highway and access policy. On major subdivisions, the Selectboard may require the provision of storage ponds and dry hydrants necessary for adequate fire protection.

Goals, Policies, and Recommendations

Goal

1. Ensure the safety and protection of the citizens of Newbury.

Policy

1. The Town of Newbury supports efforts to decrease response times for emergency services.
2. The Selectboard maintains an up-to-date Local Emergency Management Plan.
3. The Town should continue to work with the Two Rivers-Ottauquechee Regional Commission to properly plan for hazard events.

Recommendation

1. The Selectboard should adopt a Hazard Mitigation Plan with assistance from the Two Rivers-Ottauquechee Regional Commission and establish procedures for continued maintenance of the Plan.

I. Solid Waste Disposal

Newbury is part of the Northeast Kingdom Waste Management District, a 49-town Solid Waste Management District. Household solid waste removal is handled by each resident via private contractors and is shipped to waste disposal facilities outside of the region.

Currently recycling is available at depots in Newbury Village and in East Ryegate. This recycling effort should be encouraged and expanded. Presently there is no operating solid waste transfer station or disposal facility in the town. All solid waste is being collected and transported by non-public operators to transfer stations and solid waste landfills in other areas. This is the preferred alternative and is working well at this time.

Goals, Policies, and Recommendations

Goals

1. Reduce the amount of solid waste generated in the town.
2. Increase the public awareness of, and education about, alternatives that reduce the amount of waste. These alternatives include:
    a. Making environmentally sound purchasing decisions; and
    b. Reusing and recycling as appropriate, both individually and as a community through our businesses, school system, and town government.

Policies

1. If it becomes necessary to site a solid waste facility in Newbury, the following considerations should apply:
    A. For disposal of waste generated within the town, Newbury should consider:
        a. Joining with an established district;
        b. Joining with adjacent municipalities to form a new district; or,
        c. Developing a municipal solid waste district or facility for only Newbury.
    B. Strict siting criteria should be established in the Zoning Regulations for transfer stations and solid waste disposal facilities. Conditions for operation as well as siting criteria should be established in the town Solid Waste Implementation Plan. Like provisions of the zoning regulations ought to complement and correlate with conditions and criteria set forth in the town solid waste implementation plan. Any solid waste disposal facility proposed to be located in Newbury, whether privately owned or publicly owned by Newbury and/or a regional district, should address the following considerations:
        a. All facilities should require conditional use approval.
        b. All facilities should require at a minimum, compliance with all state laws and regulations as well as the requirements of any town solid waste implementation plan and, if applicable, the regulations of any regional solid waste implementation plan.
        c. As there is not one magic number that can either be dependably or defensibly applied to different natural features for different types of facilities, siting criteria should be considered on a case-by-case basis with attention to:
            c.i. all impacts, sensory or otherwise;
            c.ii. the specific characteristics of any proposed site;
            c.iii. the specific characteristics of all adjacent land, waters, uses and features which may be impacted by any proposed facility.
        d. Any on-site or off-site studies deemed necessary by the town and its consultants as part of the review process ought to be separately contracted for by the town at the expense of the applicant.

Recommendations

1. The town should encourage Northeast Kingdom Waste Management District to establish a transfer station Wells River.
2. The Planning Commission, the Solid Waste Committee and other interested residents' groups should work to identify, develop, and refine solid waste management options for Newbury through the town's Solid Waste Implementation Plan. It is appropriate that broadly defined conceptual solutions to Newbury's solid waste issues as expressed in this town plan be further expanded and resolved through amendments and revisions to the

existing implementation plan, a document expressly written to enact solid waste management practices for the town.

J. Telecommunications Facilities & Internet

Telecommunications have become increasingly important to the security and economic needs of the residents and businesses of Newbury; this trend will continue. It will play a key role in the Town's economic future, creating new opportunities for relocation and decentralized business operations.

The field of telecommunications is undergoing rapid change. Advancements in this technology will continue to impact growth in the Connecticut River Valley. Under present standards, transmission towers are necessary wireless communications facilities. As land uses, these facilities have raised planning concerns. Most facilities (towers and antennae) are located on hilltops or high elevation areas for optimum transmission signals. Thus, due to their higher visibility from multiple vantage points, conflicts with scenic landscapes have become an issue.

Section 248a

Under Vermont's Section 248a rule system, cellular telecommunications providers may apply for a Certificate of Public Good for any proposed facility that is part of a network. Any application under section 248 is entirely exempt from local land use regulations (such as zoning and subdivision). Major cellular providers are continuously working to expand coverage, particularly along major transportation corridors such as Interstates 91. Under the Section 248a permitting process, the Public Service Board (PSB) must review the environmental, economic, and social impacts associated with a particular project, similar to Act 250. In making its determination, the PSB must give due consideration to the recommendations of municipal and regional planning commissions and their respective plans. Accordingly, it is appropriate that this Plan address these land uses and provide guidance to town officials, regulators, and providers.

For all cellular telecommunications facilities, the following policies shall apply:

Policies

1. **Preferred Locations**: New generation and transmission facilities shall be sited in locations that reinforce the region's traditional patterns of growth, of compact downtown and village centers surrounded by a rural countryside, including farm and forest land.
2. **Prohibited Locations**: Because of their distinctive natural, historic or scenic value, telecommunications facility development shall be excluded from the following areas;
    - Floodways shown on FEMA Flood Insurance Rate Maps (except as required for hydro facilities)
    - Fluvial erosion hazard areas shown on Fluvial Erosion Hazard Area maps (except as required for hydro facilities)
    - Wetlands as indicated on Vermont State Wetlands Inventory maps or identified through site analysis.
    - Rare, threatened or endangered species habitat or communities.

3. **Significant Areas:** All new telecommunications facilities and related infrastructure shall be sited and designed to avoid or, if no other reasonable alternative exists, to otherwise minimize and mitigate adverse impacts to the following:
    - Historic districts, landmarks, sites and structures listed, or eligible for listing, on state or national registers.
    - Public parks and recreation areas, including state and municipal parks, forests and trail networks.
    - State or federally designated scenic byways, and municipally designated scenic roads and viewsheds.
    - Special flood hazard areas identified by National Flood Insurance Program maps (except as required for hydro facilities)
    - Public and private drinking water supplies, including mapped source protection areas.
    - Primary agricultural soils mapped by the Natural Resources Conservation Service.
    - Necessary wildlife habitat identified by the state or through analysis, including core habitat areas, migration and travel corridors.
    - Locally significant areas as identified in other chapters of this Plan.
4. **Natural Resource Protection**: New telecommunications facilities and related infrastructure must be sited to avoid the fragmentation of, and undue adverse impacts to the town's working landscape, including large tracts of undeveloped forestland and core forest habitat areas, open farm land, and primary agricultural soils mapped by the US Natural Resource Conservation Service.
5. **Protection of Wildlife**: Designers must gather information about natural and wildlife habitats that exist in the project area and take measures to avoid any undue adverse impact on the resource. Consideration shall be given to the effects of the project on: natural communities, wildlife residing in the area and their migratory routes; the impacts of human activities at or near habitat areas; and any loss of vegetative cover or food sources for critical habitats.
6. **Site Selection**: Site selection should not be limited to telecommunications facilities alone; other elements of the facility need to be considered as well. These include access roads, site clearing, onsite power lines, lighting, and off-site power lines. Development of these elements shall be done in such a way as to minimize any negative impacts. Unnecessary site clearing and highly visible roadways can have greater visual impacts than the telecommunications facility itself. In planning for facilities, designers should take steps to mitigate their impact on natural, scenic and historic resources and improve the harmony with their surroundings.
7. **Aesthetics**: The developer shall make all efforts to minimize the aesthetic impact of the telecommunications facility or infrastructure on the surrounding landscape. This includes options such as the utilization of "stealth towers," camouflage through paint scheme, or designs that blend into the surroundings such as asymmetrical mono-poles.

8. **Height of Structures**: telecommunications facilities shall be designed to be the minimum height necessary to achieve coverage.
9. **Co-location**: Applicants shall provide reasonable options for sharing space on existing towers or tower sites prior to proposing new towers sites and related facilities. In making such a determination on the feasibility of co-location, proposers should evaluate space available on existing towers, the tower owners ability to lease space, geographic service area requirements, mechanical or electrical incompatibilities, the comparative costs of co-location and new construction, and regulatory limitations.
10. **Resiliency Support:** To support resiliency, applicants should make space available for municipal communication systems to enhance or expand road and emergency service communication networks.

Internet

The State of Vermont estimates that approximately 90% of Newbury has access to some form of broadband internet. While these estimates are likely generous, parts of the community have access to DSL (Fairpoint Communications) and Cable (Charter Communications). Residents in more remote areas are forced to utilize satellite internet provided that they have proper line of sight. Encouraging improved broadband internet access in Newbury is in the community's best interest. With the world economy moving toward a more digital and online model, access to the internet is essential.

Goals and Policies

Goals

1. Preserve the rural character and scenic attributes of Newbury's landscapes;
2. Protect the historic, environmental, and natural resources in Newbury.

Policies

1. Provide standards and requirements for the operation, siting, design, appearance, construction, modification, and removal of telecommunications facilities as set forth in the Newbury Zoning Regulations.
2. Facilitate the provision of telecommunications services to the residents and businesses of Newbury.
3. Direct the location and design of towers and antennae in non-residential areas and away from sensitive areas, including schools and highly scenic areas.
4. Actively participate in the Section 248a process to ensure that all telecommunications facilities are developed in a manner that is consistent with this Plan.

VIII. Housing

A key element in the character of the Town is its housing—the quality, availability and variety of places for its residents to live. Although the provision and maintenance of a town's housing stock is primarily a private sector activity, the growth and development of housing affects the character of the town and the facilities and services it provides or will provide. Housing constructed in the absence of adequate planning for public facilities can overburden schools, roads, and other municipal services. Poorly located housing can pollute a water supply or destroy an important wildlife habitat. Housing that is inadequate to meet the demand in a town or region can strain adjacent towns and make it challenging to find homes in close proximity to locations of employment.

A. Housing Profile

According to the 2020 U.S. Census, there were 1,369 housing units in Newbury (see Figure 7). In 2010, there were 1,287 housing units. This amounted to a increase of 82 units over the ten-year period or an average of roughly 8.2 units per year. A housing unit, as defined by the U.S. Census, includes houses, apartments, mobile homes, and rooms for occupancy. As is the case for most Vermont towns, the bulk of Newbury's housing units are single-family homes (53%).

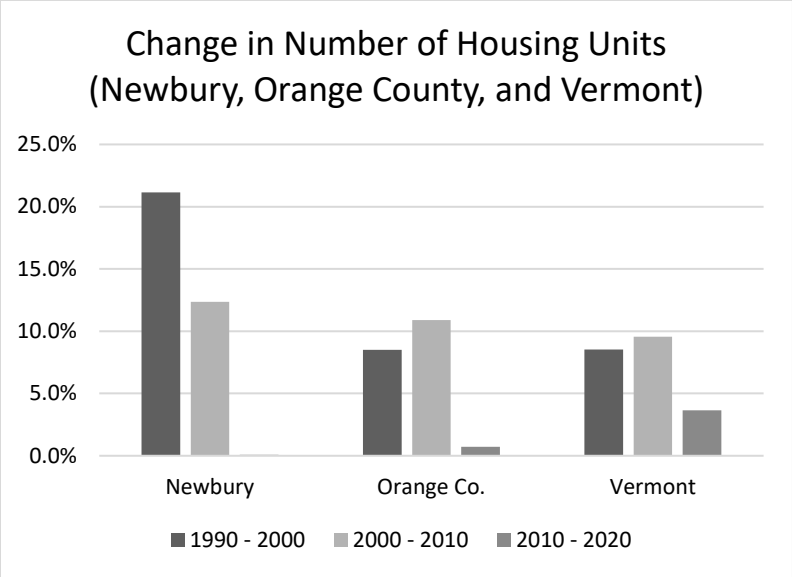


Figure 7. Percent change in number of housing units by decade in Newbury from 1990 to 2020 (Source: U.S. Census Bureau)

When compared to Orange County as a whole, Newbury has a below average percentage of owner-occupied homes (51%) than the county (67%), whereas the percentage of second homes (35%) in Newbury is much higher than the county as a whole (11%). While there are positive tax benefits to vacation homes, there are downsides to having a high percentage of vacation homes. For example, communities which have volunteer fire departments depend on full-time residents to staff their fire departments and a lack of full-time residents can make acquiring staff difficult because the pool of candidates is reduced.

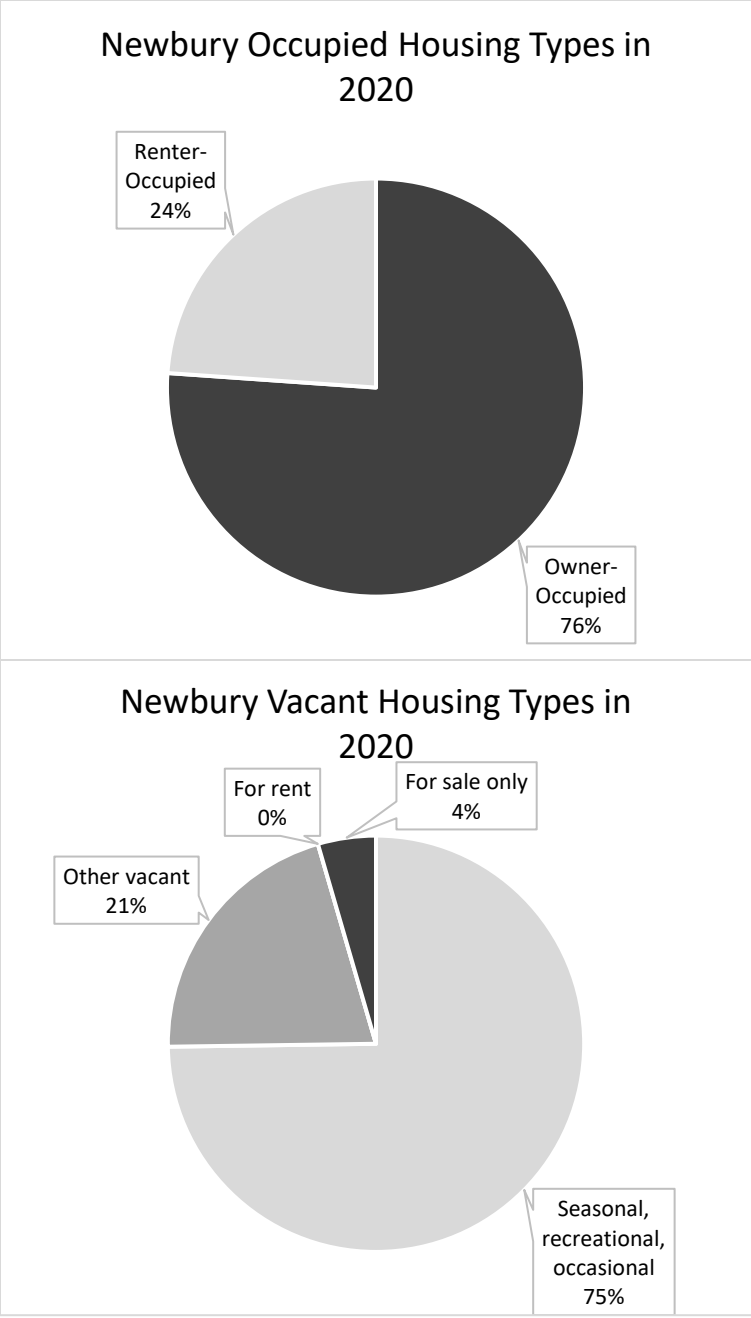


Figure 8. Occupied and vacant housing types in Newbury in 2020 (Source: U.S. Census Bureau American Community Survey 5-year tables)

B. Rental Housing

Newbury's percentage of renter-occupied housing (24%), is slightly higher than Orange County (19%). The tight housing market statewide and lack of unoccupied apartments (less than 1% of Newbury's rental units are unoccupied) continues to drive up rental costs. The low percentage of homes that were unoccupied indicates that in 2020 Newbury continues to experience a shortage of available rental housing stock. Anything below 5% is functionally considered a zero. This low percentage of housing stock is very consistent from town to town throughout Vermont. Vermont, in general, is experiencing challenges with the availability of affordable rental housing connected with the rise in short-term rental properties.

C. Affordability

Affordable housing is defined to be no more than 30% of household income spent on housing costs. For homeowners, housing costs include payments for principal and interest on mortgage, taxes, etc. For renters, housing costs include rent and utilities.

For 2023, the US Agency of Housing and Urban Development (HUD) calculated the fair market rent for a modest two-bedroom apartment in Newbury at $1,125 per month; in 2024, that cost is estimated at $1,244 per month, an increase of nearly 10%. For a renter in Newbury to afford rent for a two-bedroom apartment at this rate, in 2023 they would have needed a household income of roughly $40,500 annually. American Community Survey data indicates that, in 2020, roughly 32% of Newbury's renters are paying 30% or more of their household income toward rent. In comparison, 41% of homeowners with mortgages, and 22% of owners without mortgages are paying 30% or more of their income toward housing.

Newbury, like many communities, has experienced a trend toward fewer home occupants. This trend is unlikely to be reversed. The trend results in an increased demand for housing. The

elderly, single households and other special populations are oftentimes in need of special types of housing including that which is affordable and readily accessible.

Another barrier to affordable housing is the age of homes in Newbury. Vermont's housing stock is among the oldest in the United States. Forty-one percent (41%) of the homes in Orange County, and 41% of the homes in Newbury as well, were built before 1970, before newer energy efficiency technology was available, housing codes were laxer, and the use of lead-based paint was widespread. These factors impact the cost of operating, maintaining, and improving that housing, assuring the health and safety of all residents, and providing access to Vermonters with different abilities. The location of housing plays an important factor in housing affordability. Living near employment or other daily destinations can reduce costs substantially. A commute of 10 miles to employment will naturally cost much less than a commute of 25 miles for a traditional combustion engine vehicle. A reduction in an expense of this nature would allow a household to better afford rent or a mortgage. In addition, a household with a shorter commute is likely to have a more stable future because it is less vulnerable to increases in vehicle fuel prices.

D. Municipal Programs

The role for a municipality in encouraging housing that is affordable for its residents is limited. Zoning regulations can encourage the development of multi-family housing in areas where there is access to sewer and water, as is the case in Wells River. In more rural areas, the community can encourage the use of "planned unit development" and cluster housing to allow greater density with a reduced impact on the rural character of the area. But, much of what makes housing affordable is driven by the private sector.

When opportunities for the community to support the development of new affordable housing units arise, Newbury should provide assistance. Often this is in the form of assisting with grant funding through the Community Development Block Grant Program or through Housing and Urban Development (HUD). Some state and federal programs require the municipality to apply for the funding, allowing it to pass through to the affordable housing developer.

Goals, Policies, and Recommendations

Goals

1. Ensure safe and affordable housing for Newbury residents, including low- and middle-income households.
2. Encourage innovative planning, design, and construction of residential housing that minimizes the cost, energy consumption, and environmental impacts of housing.
3. Preserve historic structures in ways that serve housing needs.

Policies

1. The Town should allow for growth of housing for all income levels and at a rate consistent with the community's ability to provide services in a fiscally sound manner and consistent with the other goals and policies expressed in this Plan.
2. The Town should consider subsidies to preserve maintenance of or access to affordable housing.

3. Where affordable housing projects involve public funds, they shall only be encouraged when these investments result in developments which are affordable on a long-term basis and when a clear public benefit to the community can be demonstrated.
4. The Town should give priority to the preservation and improvement of housing already in existence.
5. The Town should encourage multi-family housing within or adjacent to existing Village Center or Hamlet Areas where municipal services are available.
6. The town should encourage the development of mixed-income housing.
7. Housing for special needs populations, such as the elderly and disabled, shall be encouraged to locate in areas with pedestrian access to town amenities.
8. The town supports the use of accessory dwelling units (ADUs) with pedestrian access to town amenities, especially as a housing option for low-income persons, the elderly, and the disabled.
9. The Town supports sites for mobile/manufactured housing that are in similar locations to those generally used for single-family conventional dwellings

Recommendations

1. Community leaders should work with state housing agencies, non-profit organizations, and lending institutions to ensure the availability of loan or grant funds for Newbury residents to acquire or improve their primary homes.
2. The Town should work with the Two Rivers-Ottauquechee Regional Commission to evaluate Newbury's role in supplying the region's housing stock by assessing its capacity for growth.
3. The Town should evaluate the impact of short-term rentals on housing availability and affordability in Newbury and consider methods of addressing or managing this issue.
4. The Town should investigate the prevalence of recreational trailers, motor homes, or camping vehicles as permanent or temporary dwellings and consider methods of managing such uses.

IX. Energy

A. Background

Concern about our nation's dependence on oil produced in foreign countries has grown greatly since the oil crisis of the mid-1970s. As fossil fuel prices continue to fluctuate, everyday activities such as home heating and travel by car become increasingly burdensome for the average Newbury resident.

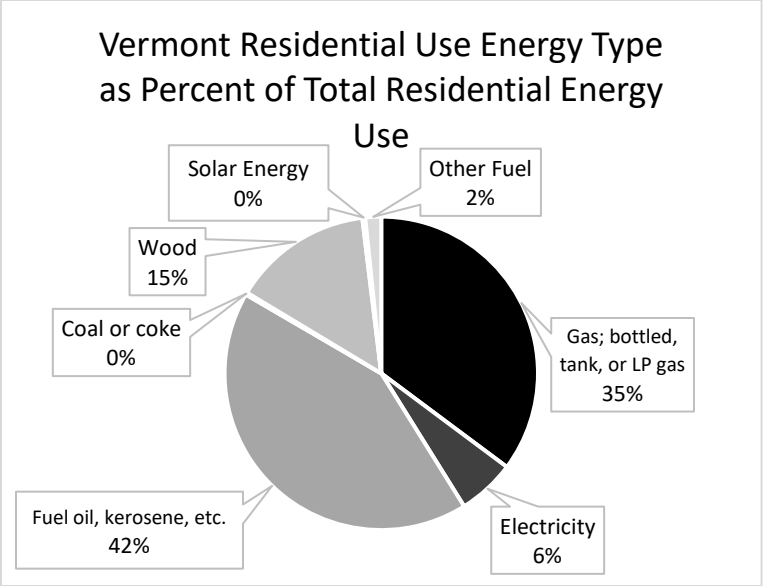


Figure 9. Energy source for residential use as a percent of total residential energy use in Vermont in 2021 (Source. U.S. Census Bureau American Community Survey 5 year tables)

While the Planning Commission recognizes that energy supply and demand are directed largely by economic forces at the state, federal, and international levels, the manner in which Newbury plans for future growth can have an impact on how much energy is needed and used in this community. For example, a highly dispersed and unplanned pattern of land use can waste both land and energy resources. By planning the location of jobs, public services and housing in close proximity to growth centers, 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 influence the efficient use and conservation of energy.

Theories, such as the Hubbert Peak Theory (a.k.a. Peak Oil), suggest that the worldwide consumption of oil will has outpaced the existing supply. Although new technologies may enable energy providers to extract oil from locations that were previously impossible to reach, there is a finite amount of oil, which means that Newbury, like the rest of the world, should prepare for a much less oil-dependent future.

B. Energy Demands

The 2020 American Community Survey indicates that the major heating fuels consumed in Vermont are oil (42%), electric (6%), wood (14%) and LPG and gas (35%). In terms of per capita energy consumption for residential and transportation purposes, Vermont is in 30th and 45th place compared to the rest of U.S. states. In Vermont, almost 35% of the state's energy is dedicated to residential uses, while approximately 31% of the state's total energy usage goes toward transportation.

According to data collected by Efficiency Vermont in 2023, the median household in the town of Newbury spends over $7,600 on energy annually, $3,466 of which is transportation-related. This is near the median for Orange County, in which the median household spends $7,500 on energy annually, $3,350 of which is transportation-related. When compared to other communities of similar population size (such as Bethel, Sharon, and Royalton), Newbury appears to be spending

about the same amount on energy. Energy burden is a metric to understand the impact of energy expenses on the finances of Vermont households. The energy burden percentage is the amount spent on that energy as a percentage of the median household income in that town. Newbury's households face the highest total energy burden of the selected towns in Figure 10.

Town	Thermal Energy Spending	Electricity Spending	Transpo. Energy Spending	Total Energy Spending	Thermal Energy Burden	Electricity Burden	Transpo. Energy Burden	Total Energy Burden
Newbury	$2,883	$1,253	$3,466	$7,602	4.7%	2.1%	5.7%	12.5%
Bethel	$2,448	$1,411	$2,943	$6,802	3.7%	2.1%	4.5%	10.3%
Royalton	$2,368	$1,293	$3,006	$6,666	3.5%	1.9%	4.5%	9.9%
Sharon	$3,158	$1,447	$3,145	$7,750	4.1%	1.9%	4.1%	10.2%

Figure 10. Median household energy spending and burden for Newbury and towns in the Region with similar population sizes in 2023 (Source: Efficiency Vermont 2023 Energy Burden Report)

Of the energy dedicated to transportation, over 50% is used to fuel private cars for residents (as opposed to being used for public transit, road maintenance, or another public purpose). This fact reinforces the need for clear policies that take into account the transportation implications of land use decisions in this community.

C. Energy Scarcity

There are no scarcities of energy foreseen in the eight-year lifespan of this plan. Our electrical providers have plenty of power supply resources either under contract or available to purchase at this time. Total energy demand is likely to shrink modestly in the near term as Vermont's population is not expected to grow much and efficiency is constantly improving. There should be ample amounts of heating and transportation fuels for the life of this plan, but we must encourage a shift away from fossil fuels to meet our goals. Wood is a plentiful local source of heating fuel, and many more cords could be sustainably harvested than are being cut now. Plenty of sun and wind are available if we decide to use them.

That is not to say that plentiful energy will be cheap. Fossil fuels have varied widely in price over the last several years, and the overall trend is for dwindling supplies. Also, whether it is carbon pricing or other methods, fossil fuels will have to increase in cost to disincentivize their use. The cost of energy is an issue for many families but will be less of an issue for everyone if targets for insulating buildings, switching to EVs, using heat pumps, and advanced wood heat systems are met. An EV has lower maintenance costs, because they have no engine or exhaust system, and the cost of electricity to power a car costs about $1.50 per gallon (in today's dollars), much less than current gasoline prices.

For many, the cost barriers are not the daily or monthly energy costs but implementing these changes to the buildings and vehicles we have now. There are rebates and programs available that are income-based, and even for those that do not qualify over time these investments will pay off However, they require getting financing or having considerable savings on hand.

D. Current Energy Sources

Fossil Fuels

Newbury, like most other towns in Vermont, depends primarily on fossil fuels for heating and transportation. As shown in the chart 12, fossil fuels account for 50% of all energy consumed in Vermont, much of which is used in transportation and heating. Nearly three out of five Vermont households use fuel oil, which means a substantial portion of Vermonters are subject to the price and availability instabilities of a reliance on oil. Of the total $885 million spent on residential energy in the state of Vermont, just over half ($445.8 million) was spent on fuel oil, kerosene or Liquefied Petroleum Gas. Vermont's economic system is so closely tied to the availability of fossil fuels that even modest price increases can lead to inflation, a slowdown in economic growth, and destabilized economy. This can have unanticipated adverse impacts at the municipal and residential level in all communities, including Newbury. For example, increasing fuel prices make it more expensive for a town government to provide traditional public services and maintain existing facilities. Additionally, rising prices can also make it difficult for residents to heat their homes and put enough food on the table (the price and availability of food is usually influenced by fuel prices).

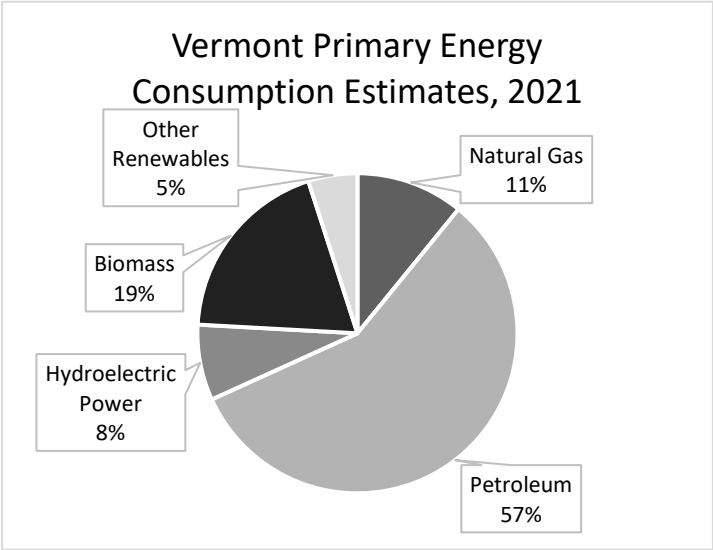


Figure 11. Energy source in Vermont as a percentage of total energy use.

Renewable Energy

Seventy percent (70%) of Vermont's energy comes from renewable resources, a larger percentage than most other states in the U.S. Although the majority of Vermont's renewable energy is generated through Hydro-Quebec (see below), some hydroelectric power is generated in Vermont. Additional sources of renewable energy include several utility owned commercial-scale wind and solar farms, and landfill and on-farm methane projects.

E. Renewable Energy Resources

The 2021 Vermont Comprehensive Energy Plan recommends that Vermont obtain 90% of our total energy from renewable sources by 2050. This is a lofty goal, but one that will benefit all Vermonters if achieved. The term "renewable energy" refers to the production of electricity and fuels from energy sources that are naturally and continually replenished, such as wind, solar power, geothermal (using the earth's heat to create power), hydropower, and various forms of biomass (trees, crops, manure, etc.).

Although initial set-up costs for renewable energy generation systems can be high, these systems can save users money over the long term, and they reduce the consumption of carbon-based fuels, helping to protect our environment and reduce our reliance on centralized energy. In

Vermont, some of these energy sources are more readily available than others, and some are more cost-effective for the individual energy producer.

Commercial scale renewable energy generation systems are a growing business in Vermont, increasing the percentage of locally generated power. However, the energy generated commercially is deposited into the national grid system, which means that the power generated here may not be utilized locally.

Residential scale renewable energy generation systems are generally regulated through the State of Vermont, requiring a Certificate of Public Good from the Department of Public Service. State statute forbids the creation of land use regulations that prohibit renewable energy generation.

Residential energy systems can take advantage of net metering. Net metering allows residential and commercial customers who generate their own electricity from solar power to feed electricity they do not use back into the grid, providing the solar system owner with a credit for the unused electricity generated. Customers are only billed for their "net" energy use. The Vermont legislature updated net metering laws in 2014 with HB 702, with the provision that net metering is available until the cumulative capacity of net-metered systems equals 15% of a utility's peak demand during 1996 or the peak demand during the most recent full calendar year, whichever is greater. Net-metered systems are overseen by the Public Service Board and are not required to get a local permit.

The types of renewable energy found in Vermont are:

Solar Energy

Solar energy has the potential to provide clean, reliable, and safe energy, even in Vermont's climate. Most areas in Vermont have the potential for some solar energy production, at least at the residential scale. Solar energy can come in the form of passive heating and lighting, water heating and electricity generation.

Solar arrays do not need to be located on high ground and are therefore less visually prominent. In addition, these facilities can be located in already developed areas, requiring fewer access roads, requiring less infrastructure and reducing adverse impacts on wild lands. Solar represents one of Newbury's most viable source of renewable energy. Newbury's Municipal Energy Data provided by TRORC finds that the town has the potential to produce 1,472 MWh of electricity from roof-mounted solar, and over 1.6 million MWh of power from ground-mounted solar installations.

Wind Energy

Similar to solar, wind energy is an intermittent resource and its generation fluctuates in response to environmental conditions. The amount of energy produced by a specific wind tower can depend greatly on location, height of the tower, and proximity to other obstructions. Nevertheless, most modern wind turbines (when properly sited) are able to generate electricity 95% of the time. Newbury's topography does not make it a desirable location for large-scale wind energy generation. Instead, it is better suited to small-scale (Class 1) residential wind energy generation.

Biomass and Biogas Energy Generation

The term 'biomass' refers to biologically-based materials such as algae, food or vegetable wastes, grass, wood, and methane. Biomass can be converted into an energy source to fuel vehicles (e.g. biodiesel), heat homes, or even generate electricity.

According to the Department of Forests, Parks & Recreation 2018-19 Vermont Fuel Assessment, those using wood for primary heating consumed about 5.7 cords, while those using wood as a supplementary source used 2.3 cords. In that same year, Vermont households burned about 51,550 tons of wood pellets, with primary-heat-source consumers burning 3.7 tons and supplementary-heat-source consumers burning 1 ton for the season on average.

There are no biomass energy generation facilities in Newbury. Community-scale biomass has the potential to offer cost-effective heating in small, clustered areas. Some towns have implemented combined heat and power systems that run on biomass to heat multiple municipal buildings.

Biofuels

In addition to using biomass for heating, the use of biofuels, particularly biodiesel, is becoming an increasingly popular option for municipalities attempting to cut costs and reduce the environmental impacts associated with vehicle emissions. The Town of Newbury could revisit the possibility of using biofuels in their road crew fleet.

According to the Vermont BioFuels Association, biodiesel is a clean-burning alternative fuel, produced from domestic, renewable resources, such as soybeans, sunflowers, canola, waste cooking oil, or animal fats. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend, which can be used in colder weather. It can be used in compression-ignition (diesel) engines or oil-fired boilers or furnaces with little or no modifications.

Newbury has one existing grower of oilseed, which can be used for biodiesel. There are roughly 1,300 acres of soils suitable for growing crops like sunflower, canola or soybean, which can be used for bio fuel. Growing biomass to use in biofuels may be a viable way to encourage farming or forestry in Newbury as well; however, balance should be sought for land used for energy demands vs. human and animal consumption.

Hydropower

Many locations in Vermont, including Newbury, once depended on hydropower to grind grain, run mills and even supply electricity to homes. But, with the onset of centralized power, most of these small-scale power generation facilities have been replaced by massive hydro facilities, such as those owned by Hydro Quebec. There are three operational hydropower facilities in Newbury, two are located on the Wells River and another on Halls Brook. Collectively, these hydroelectric facilities generate approximately 4,380 MWh of power annually.

F. Permitting Considerations

Energy generation in Vermont is subject to a number of different permitting requirements, most of which are limited to state level permitting. State statute protects residential renewable energy generation systems from regulations that will completely prohibit their development.

Section 248

Distributed power generation facilities, such as hydropower dams, fossil fuel plants, and wind power or solar systems owned by utilities, are subject to review and approval by the Vermont Public Service Board (30 VSA §248). Under this law, prior to the construction of a generation facility, the Board must issue a Certificate of Public Good. A Section 248 review addresses environmental, economic, and social impacts associated with a particular project, similar to Act 250. In making its determination, the Board must give due consideration to the recommendations of municipal and regional planning commissions and their respective plans. Accordingly, it is appropriate that this Town Plan address these land uses and provide guidance to town officials, regulators, and utilities.

For all commercial energy generation facilities, the following policies shall apply:

Policies

1. **Preferred Locations**: New generation and transmission facilities shall be sited in locations that reinforce Newbury's traditional patterns of growth - compact village centers surrounded by a rural countryside, including farm and forest land.
2. **Prohibited Locations**: Because of their distinctive natural, historic or scenic value, energy facility development shall be excluded from the following areas:
    - Floodways shown on FEMA Flood Insurance Rate Maps;
    - Fluvial erosion hazard areas shown on Fluvial Erosion Hazard Area maps;
    - Wetlands as indicated on Vermont State Wetlands Inventory maps or identified through site analysis; and
    - Rare, threatened or endangered species habitat or communities.
    - The Newbury Town Forests
3. **Significant Areas**: All new generation, transmission, and distribution facilities shall be sited and designed to avoid or, if no other reasonable alternative exists, to otherwise minimize and mitigate adverse impacts to the following:
    - Historic districts, landmarks, sites and structures listed, or eligible for listing, on state or national registers.
    - Public parks and recreation areas, including state and municipal parks, forests and trail networks.
    - Municipally designated scenic roads and viewsheds (see chapter 5, Natural Resources).
    - Special flood hazard areas identified by National Flood Insurance Program maps.
    - Public and private drinking water supplies, including mapped source protection areas.
    - Necessary wildlife habitat identified by the state or through analysis, including core habitat areas, migration and travel corridors.
4. **Natural Resource Protection**: New generation and transmission facilities must be sited to avoid the fragmentation of, and undue adverse impacts to, the town's working

landscape, including large tracts of undeveloped forestland and core forest habitat areas, open farm land, and primary agricultural soils mapped by the U.S. Natural Resource Conservation Service.

5. **Protection of Wildlife**: Designers must gather information about natural and wildlife habitats that exist in the project area and take measures to avoid any undue adverse impact on the resource. Consideration shall be given to the effects of the project on: natural communities, wildlife residing in the area and their migratory routes; the impacts of human activities at or near habitat areas; and any loss of vegetative cover or food sources for critical habitats.
6. **Site Selection**: Site selection should not be limited to generation facilities alone; other elements of the facility need to be considered as well. These include access roads, site clearing, onsite power lines, substations, lighting, and off-site power lines. Development of these elements shall be done in such a way as to minimize negative impacts. Site clearing and roadways can have greater visual impacts than the energy generation facility itself. In planning for facilities, designers should take steps to mitigate the project's impact on natural, scenic and historic resources and improve its harmony with the surroundings.

G. Residential Energy Efficiency

There are a number of ways that the Town of Newbury can meet its local energy demand, first by lowering that demand, and then by working to meet the remaining need with local energy resources.

Decreasing Energy Use by Changing Behavior

Raising awareness to replace wasteful energy behaviors with energy saving ones can reduce energy use and help residents and businesses save money.

Examples include:

- Turning off lights when you leave a room.
- Using a programmable thermostat.
- Use a clothes line to dry clothes.
- Use a cold-water laundry wash.
- Reduce driving.
- Don't make multiple car trips for errands.
- Turn down the thermostat in winter and up in summer.

Decreasing Energy Use by Implementing Energy Efficiency

For those necessary or desired services that require energy, the principles of energy efficiency should be used to ensure that we use less energy to provide the same level and quality of service. Examples include:

- Having a home energy audit done to identify the greatest ways to save energy;
- Implementing the air-sealing and insulation recommendations of the energy audit;

- Not heating unused areas of your home;
- Insulating with high R-value (or heat flow resistance) material;
- Using high-efficiency windows;
- Installing energy efficient, Energy Star rated appliances like refrigerators, freezers, front loading washing machines, gas heated clothes driers and heating systems without blowers;
- Using high efficiency lighting;
- Using gas and/or solar hot water heaters;
- Siting buildings to make use of existing wind blocks and natural cooling patterns derived from the landscape's topography; and
- Siting buildings with maximum southern exposure to capture passive solar energy.

New residential development in the State of Vermont is required to comply with Vermont Residential Building Energy Standards (RBES). Commercial development is subject to similar code regulations. Some examples of the types of development the RBES applies to include detached one- and two-family dwellings, multi-family and other residential buildings three stories or fewer in height, additions, alterations, renovations and repairs and factory-built modular homes (not including mobile homes).

In order to comply with the RBES, a built home must meet all of the Basic Requirements and the Performance Requirements for one of several possible compliance methods. If the home meets the technical requirements of the RBES, a Vermont Residential Building Energy Standards Certificate must be completed, filed with the Town Clerk and posted in the home. If a home required by law to meet the RBES does not comply, a homeowner may seek damages in court against the builder.

Residents may also take advantage of the energy efficiency programs offered by Efficiency Vermont, a non-profit organization funded through the State of Vermont. Efficiency Vermont can provide opportunities for rebates on energy efficiency improvements as well as information and guidance on how to reduce energy.

H. Municipal Role in Energy Efficiency

Although communities are unlikely to have an impact on energy consumption at the global level, they do have an impact at the local level, given their demand for and use of energy. The relationship between a municipality and its energy use creates opportunities to have an impact on local energy use reduction.

Energy Committee

Newbury does not currently have an energy committee, but towns are statutorily enabled to create one. An energy committee (EC) is a volunteer group that is formed for the purpose of establishing and implementing the town's energy goals; the group can act independently or can be formally appointed by the Selectboard. The work that can be done by an EC includes conducting energy audits on municipal buildings, tracking energy use for these buildings, providing outreach to homeowners on energy efficiency and renewable energy generation and

working with the Planning Commission on the Energy Plan. Most importantly, an active EC can help the town and residents save money while saving energy.

Auditing Municipally Owned Buildings

Many towns in Vermont own buildings that are old and inefficient in many respects. For instance, older buildings often have insufficient insulation, wasteful heating and cooling systems, and out-of-date lighting. These kinds of infrastructure problems result in higher energy use with the resulting cost passed onto taxpayers. Municipal officials should consider conducting audits on town buildings in order to determine what improvements are necessary, and which projects would have the highest cost-benefit ratio in terms of energy and financial savings.

Capital Budget Planning

Given the potential expense of energy efficiency improvements, it is essential to wisely budget town funding to cover these costs. State statute enables communities to create a Capital Budget and Program for the purposes of planning and investing in long-range capital planning. Although most communities have some form of capital account where they save money, many do not have a true Capital Budget and Program. A capital budget outlines the capital projects that are to be undertaken in the coming fiscal years over a five-year period. It includes estimated costs and a proposed method of financing those costs. Also outlined in the Program is an indication of priority of need and the order in which these investments will be made. Any Capital Budget and Program must be consistent with the Town Plan and shall include an analysis of what effect capital investments might have on the operating costs of the community.

When planning for routine major facility investments, such as roof replacements, foundation repairs, etc., it is important to consider making energy efficiency improvements simultaneously. The cost to replace or renovate a community facility will only be slightly higher if energy efficiency improvements are done at the same time, rather than on their own.

Policy Making for Change

In addition to reducing the energy use related to facilities, Newbury can implement policies that lower energy use by town staff or encourage greater energy efficiency.

Examples include:

- **Energy Efficient Purchasing Policy** – A policy of this nature would require energy efficiency to be considered when purchasing or planning for other town investments. For example, purchasing Energy Star-rated equipment is a well-documented way to increase energy efficiency. Devices carrying the Energy Star logo, such as computer products and peripherals, kitchen appliances, buildings and other products, generally use 20%–30% less energy than required by federal standards.
- **Staff Policies** - Towns can also implement policies that are designed to reduce wasteful energy practices. Through policy making, local government can set a clear example for townspeople and encourage sustainable behavior that will ultimately result in both energy and financial savings. Please see the goals, policies, and recommendations section for more ideas.

I. Energy and Land Use Policy

The Vermont Municipal and Regional Planning and Development Act (24 V.S.A. Chapter 117) does not allow communities to impose land use regulations that prohibit or has the effect of prohibiting the installation of solar collectors or other renewable energy devices. However, statute does enable Vermont's municipalities to adopt regulatory bylaws (such as zoning and subdivision ordinances) to implement the energy provisions contained in their town plan. Newbury has zoning and subdivision regulations.

Zoning bylaws can be designed to control the type and density of development.

It is important to acknowledge the connection between land use, transportation, and energy, and creating zoning ordinances and subdivision regulations that encourage energy efficiency and conservation. Encouraging high-density and diverse uses in and around existing built-up areas will lead to more compact settlement patterns, thereby minimizing travel requirements. At the same time, zoning bylaws must be flexible enough to recognize and allow for the emergence of technological advancements, which encourage decreased energy consumption, and the increased use of renewable energy.

Zoning bylaws may contain provisions for planned unit developments (PUDs). PUDs are a grouping of mixed use or residential structures, pre-planned and developed on a single parcel of land. The setback frontage and density requirements of a zoning district may be varied to allow creative and energy efficient design (i.e. east-west orientation of roads to encourage southern exposure of structures, solar access protection, use of land forms or vegetation for wind breaks, and attached structures), and to encourage the construction of energy efficient buildings.

Subdivision regulations are one of the most effective tools for encouraging energy efficiency and conservation. Subdivision regulations, like PUDs, involve town review (through the DRB) in the design process. Because subdivision regulations govern the creation of new building lots, as well as the provision of access and other facilities and services to those lots, a community can impose requirements that a developer site their building to maximize solar gain. Likewise, subdivision regulations can require that landscaping be utilized to reduce thermal loss.

J. Energy and Transportation Policy

It is important that communities recognize the clear connection between land use patterns, transportation and energy use. Most communities encourage the development of residences in rural areas, but this rural development requires most of our population to drive to reach schools, work, and services.

Because transportation is such a substantial portion of local energy use, it is in the interest of the community to encourage any new developments that are proposed in Newbury to be located adjacent to existing roads. In particular, dense residential developments should be located within or adjacent to existing village centers or within designated growth areas. Commercial development that requires trucking and freight handling should only be located on roads which can effectively handle the size of vehicle needed.

Goals, Policies, and Recommendations

Goals

1. Promote the development of renewable energy resources and facilities in the Town of Newbury to meet the energy needs of the community.

2. Reduce energy costs, the community's reliance on fossil fuels, and greenhouse gas emissions that contribute to climate change.
3. Encourage a continued pattern of settlement and land use that is energy efficient.
4. Promote the construction of energy efficient residential and commercial buildings.
5. Increase awareness and use of energy conservation practices through educational outreach to the public.
6. Increase public transportation opportunities throughout the community, including park-and-ride access, bus service, biking paths, sidewalks and commuter rail.
7. Promote greater use of existing public transportation services by community members.

Policies

1. Town officials should participate in the Public Service Board's review of new and expanded generation and transmission facilities in the community to ensure that local energy, resource conservation, and development objectives are identified and considered in future utility development.
2. Any commercial energy generation facility proposed in Newbury shall be developed to avoid negative impacts on the rural character of the surrounding area.
3. Developers shall make all possible efforts to minimize damage to important natural areas as identified in the Natural Resource section of this Town Plan.
4. Energy generation facilities shall be located as close to existing roads as possible to avoid any increase in the services provided by the town.
5. Newbury supports the development and use of renewable energy resources – including, but not limited to, wind, solar, biomass, micro-hydro and biofuels – at an appropriate scale; that enhances energy system capacity and security; that promotes cleaner, more affordable energy technologies; that increases the energy options available locally; and that avoids undue adverse impacts of energy development on the local community and environment.
6. Town officials should support efforts to educate homeowners about what resources are available to them for energy efficiency improvements.
7. It is the policy of the Town that energy generation, transmission, and distribution facilities or service areas should be encouraged only when they complement the recommended land use patterns set forth in this plan.
8. It is the policy of the Town that new, significant public investments (including schools, public recreational areas, municipal facilities, and major commercial or residential developments) should be located within or in close proximity to the village areas, and shall utilize existing roads whenever possible.
9. It is the policy of the Town to encourage the use of broadband services to support energy efficient, small-scale home businesses.
10. It is the policy of the Town to promote energy efficient travel by residents by encouraging carpooling, increased use of public transportation, telecommuting, home businesses, and safe bike routes.

Recommendations

1. Town officials and volunteers should work to increase public awareness and use of energy conservation practices, energy-efficient products and efficiency and weatherization programs through educational efforts aimed at local residents and businesses.
2. The Town should consider municipal or community-based renewable energy generation, to include municipal or district biomass heating systems, and the installation of individual or group net metered generation facilities on town buildings and property to serve town facilities. Sources of funding for municipal power generation could include third-party financing, municipal funds, bonds, grants, and available government incentive programs.
3. The Selectboard should reactivate the Energy Committee as a Town committee so that they may develop an Energy Action Plan as a supplement to the municipal plan and to find opportunities to reduce municipal expenses through energy efficiency and energy conservation.
4. The Town should implement energy efficiency measures recommended by the Energy Audits and (if formed) an Energy Committee for existing and future facilities as opportunities arise, and incorporate priority efficiency improvements (e.g., facility retrofits, renovations, and equipment upgrades) in the town's capital budget and program.
5. The Town, with help from the Energy Committee (if formed), should develop municipal procurement and purchasing that emphasize products that are energy efficient (e.g., Energy Star® rated).
6. The Town should develop facility maintenance and operation policies that maximize energy efficiency while maintaining comfort levels for employees and visitors.
7. The Town should consider the benefits and/or drawbacks of using regionally available alternative-fuels, such as biodiesel, in municipal vehicles.
8. The Planning Commission should consider opportunities to expand access to bike paths and multi-use paths for non-motorized uses.
9. The Town should consider appropriate locations to encourage the installation of an electric vehicle charger to further encourage the use of electric vehicles by residents.

X. Relationship to Other Plans

A. Relationship to Municipal Plans

The Municipal Plan focuses primarily on development and policy within the community's boundaries. However, it is important to recognize that how a community grows and changes can be directly impacted by development that takes place outside of the community. For example, many places had large and vibrant villages that were negatively impacted by the location of the railroad in outside areas.

In order to analyze the potential for outside impacts on Newbury, the Planning Commission has reviewed the Municipal Plans and, if available, the land use regulations of surrounding towns for consistency with this Plan. These communities include:

- **Bradford** – The Town of Bradford has had zoning regulations for many years, with the most recent revision in 2019. The Bradford Town Plan was last adopted in 2023. Generally, the areas of Bradford which share borders with Newbury are rural residential in nature and are unlikely to create conflicts.
- **Corinth** – Corinth's Municipal Plan was adopted in 2019. It features only two separate land use designations – village and rural. Uses within the limited area of shared border between Corinth and Newbury are similar and therefore compatible. No conflicts are foreseen.
- **Groton** – Groton's Municipal Plan was last adopted in 2017 and its Zoning Bylaws in 2012. Groton and Newbury share a very limited area of border. All land within the shared border is part of the Pine Mountain WMA, therefore no conflicts will occur.
- **Ryegate** – Ryegate is the community that touches a majority of Newbury's northern border. The community has a Municipal Plan which was last adopted in 2018, and a zoning bylaw adopted in 2017. The Ryegate Plan's Zoning District Map identifies the land use area abutting Newbury as "Low Density." The area is currently mostly rural forest and agriculture, a trend which is likely to continue. It should be noted that Routes 302 and 5 pass through both communities. It is possible, depending on the specifics of how Ryegate regulates development of land use along these roads, that conflicts between land uses where the communities border one another may arise.
- **Topsham** – Topsham's Town Plan was adopted in August 2023. It does not have zoning bylaws but does have a Flood Hazard Ordinance. The Topsham plan's Future Land Use Map identifies all land abutting Newbury as either Working Forest Area or Rural Residential Area. Land in Newbury at the Topsham/Newbury Town line is conserved, Conservation 10, or Rural Residential 1. No conflicts are foreseen.

B. Relationship to the Regional Plan

Newbury is a member of the Two Rivers-Ottauquechee Regional Commission (TRORC). It is one of thirty (30) municipalities that comprise the Region. The TRORC Region 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. All towns in the region are members of the Commission, and town representatives govern its affairs. One of the

Regional Commission's primary purposes is to provide technical services to town officials and to undertake a regional planning program. As is the case in many areas of the State, the extent of local planning throughout the region is varied. Some municipalities are more active than others. Thus, the level of services to each of the towns changes with time.

The Regional Commission adopted its Regional Plan in July 2020. It will remain in effect for a period of eight years. This Plan was developed to reflect the general planning goals and policies expressed in the local plans. It is an official policy statement on growth and development of the Region. The Regional Plan contains several hundred policies to guide future public and private development in the Region. Policies for land use settlement are identified. These areas are: Town Centers, Village Settlement Areas, Hamlet Areas, Rural Area, and Conservation and Resource Areas. Delineation of each land use area is mapped or charted.

Goals and Policies

Goal

1. Work with neighboring towns and the region to encourage good land use and environmental policy that benefits the citizens of Newbury.

Policies

1. Encourage continued communication and cooperation between Newbury and its neighboring towns.
2. Continue participation in the Two Rivers Ottauquechee Regional Commission.
3. Exchange planning information and development data with neighboring communities.

XI. Town Plan Implementation

Title 24, Chapter 117, §4382(7) requires a Town Plan to contain a "recommended program for the implementation of the objectives of the development plan". While it is not required by law that communities implement any of the policies or recommendations in a municipal plan, it is important to recognize that in order to meet the vision of the Plan, it must be implemented wherever possible. Both regulatory and non-regulatory implementation can be approached in multiple ways. They include (but are not limited to) the following:

Regulatory	Non-Regulatory
Zoning & Subdivision Ordinances	Design a Capital Budget & Program
Strengthening Town Plan language to clearly influence Act 250 proceedings (use of direct language, such as "shall")	Advisory Committees (i.e. Conservation Commissions or Energy Committees)
Official Map	Tax Increment Financing
Access Permits - Town Highways Only (Selectboard)	Education/Outreach on important issues
Flood Regulations & National Flood Insurance Program	Purchase or acceptance of development rights

A. Regulatory Implementation

Regulation of land use and development through rules adopted by the voters is one possible method of Plan implementation. Because these regulations are susceptible to legal challenge and must clearly benefit the public, discretion must be used. Well recognized and utilized means include, but are not limited to, zoning bylaws and subdivision regulations. Examples of potential implementation tools include:

Zoning Bylaws

Zoning bylaws are a commonly used method for guiding development at the local level. Zoning may regulate:

- Uses of land,
- The placement of buildings on lots,
- The relationship of buildings to open space, and
- The provision of parking, signs, landscaping and open space.

Newbury has a zoning bylaw which establishes districts or zones that have a different set of uses, densities, and other standards for development. Zoning districts must be reasonably consistent with the Town Plan, and it is the responsibility of the Planning Commission to implement any changes to zoning that are proposed in this Plan. As an alternative to conventional methods, Newbury may opt to implement a set of measurable performance standards for specific uses as opposed to dividing the Town into districts. This technique, referred to as "performance zoning", is designed to be more flexible and to recognize the specific conditions of each site proposed for development.

Subdivision Regulations

Newbury has had subdivision regulations since the 1990s. These regulations are administered by the Development Review Board. Subdivision regulations govern the division of parcels of land and the creation of roads and other public improvements. Furthermore, subdivision regulations can ensure that land development reflects land capability, and that critical open spaces and resources are protected from poor design or layout. It is the responsibility of the Planning Commission to implement any changes to subdivision regulations that are proposed in this Plan.

Flood Hazard Bylaws

Under Vermont law [24 V.S.A., Section 4412], the Town of Newbury is able to regulate the use of land in a defined flood hazard area adjacent to streams and ponds. These bylaws have been established to ensure that design and construction activities within the limits of the 100 Year Flood Plain are designed so as to minimize potential for flood damage and to maintain use of agricultural land in flood-prone areas. As noted in the Natural Resources section of this Plan, property owners are eligible for federal flood insurance on buildings and structures at relatively low federally subsidized premium rates. However, such insurance cannot be obtained for properties in Newbury unless the Town has in effect a Flood Hazard Bylaw which, at present, Newbury has. It is the responsibility of the Planning Commission to implement any changes to Flood Hazard Bylaws that are proposed in this Plan.

Act 250

Since 1970, Vermont has had in place a statewide review system for major developments and subdivisions of land. Exactly what constitutes a "development" or "subdivision" is subject to a rather large and involved set of definitions. Generally, commercial and industrial projects on more than ten acres of land; construction of 10 or more units of housing; subdivision of land into 6 or more lots; construction of a telecommunication tower over 20 feet in height; and development over 2,500 feet in elevation qualifies.

Prior to these activities being commenced, a permit must first be granted by the District Environmental Commission. In determining whether to grant a permit, the Commission shall evaluate the project in relation to ten specific review criteria.

These criteria relate to the environmental, economic, and social impacts of the proposed project on the community and region. Parties to Act 250 proceedings include Newbury, through the Planning Commission and Selectboard, the State, and the Regional Commission. One criterion that needs to be addressed is whether the project is in conformance with the Newbury Town Plan. If a project were determined not to be in conformance with the plan, the District Environmental Commission would have a basis to deny a permit. As such, Act 250 reviews can take into consideration protection of those types of resources considered important to the well-being of the community. Accordingly, the Town must evaluate Act 250 projects affecting Newbury and to offer testimony, as appropriate.

For a Town Plan to be given serious weight under Act 250, the Plan must contain specific and unambiguous language. If a community is serious that a policy be recognized by the District Environmental Commission during Act 250 review, it must use firm language such as “shall” or “must” instead of “should” or “could”. The Newbury Town Plan and the supporting Newbury Zoning Bylaws were designed to work together in close alignment, with the Town Plan articulating a broad, big -picture vision and policy, while the Zoning Bylaws incorporates

specific language on the application and implementation of those policies. In instances where the Town Plan may not be directly specific, the Zoning Bylaws provides more concrete language related to the intended implementation of the Town Plan policy. Thus, the Town Plan and the Zoning Bylaws are not intended to be read or reviewed in isolation from each other, particularly in circumstances where ambiguity may exist related to a specific case or project.

Highway Ordinances

Newbury has adopted VTrans's standards for road and bridge design. The Selectboard also has the ability to regulate private access to municipal roads through the issuance of "curb cut" permits to landowners. "Curb cuts" are places where a private driveway or road connects to a town highway. In granting a cut onto town roads, the Selectboard can give consideration to safety issues such as adequacy of sight distance and proximity to intersections as well as conformance with this Plan.

B. Non-Regulatory Implementation

Capital Budget & Program

The creation of a capital budget and program has been discussed in several chapters of this Plan. A capital budget and program is a financing approach that benefits the town greatly in the selection, prioritization and costing of capital projects. Under the capital budget, a project is selected (e.g. bridge refurbishment), a funding source determined (e.g. general taxes, and general obligation bonds) and a priority year given for each activity (e.g. construction in 2015). Collectively these capital projects make clear when public facilities will be placed to accommodate projected growth. When used in conjunction with the Town Plan and local bylaws, it can be a powerful mechanism for limiting the rate of growth in accordance with the fiscal capacity of taxpayers and other funding sources.

In addition, it is noted that under Vermont's Act 250 law, in granting a Land Use Permit for a major development or subdivision, the District Environmental Commission must first find that the project is in conformance with the town's capital budget. [See 10 V.S.A., Section 6086(a)(10).] Accordingly, this mechanism gives the town an indirect method of implementing its policies and priorities as set forth in the Plan.

While Newbury has an informal system of capital programming, it is recommended that a Capital Budget Committee be established to work with the Selectboard and Planning Commission in the development of a list of capital needs and expenditures, and to formally present a Capital Budget and Program for adoption.

Advisory Committees

State statute authorizes a community, by vote of the Selectboard, to create advisory committees. These committees can have differing roles: some provide advice to the Planning Commission or Development Review Board regarding development (for example, a historic review committee as part of a design review district), but more often advisory committees are created to focus on a specific topic in the Plan. The most common advisory committees are the Conservation Commission and the Energy Committee. These groups can assist the Planning Commission with the creation of policy, but they can also act as the primary source of outreach and education relating to their primary focus point. The Planning Commission has identified specific roles a Conservation Commission or Energy Committee could take if they were created by the Selectboard.

Coordination of Private Actions

Citizens and private enterprise have a vested interest in the well-being of Newbury. The actions of the private sector (such as the construction of homes and businesses, land conservation, and the recreational/agricultural use of land), must relate positively to the goals and policies as set forth in this Plan.

It is in the interest of Newbury, through the Planning Commission and Selectboard, to develop a cooperative relationship with private investment activities that may have a significant impact on the community values and policies set forth in the Plan. By working together in a cooperative venture early in the process of planning for a project, an adversarial relationship can be avoided. Contacts that should be maintained include the following:

- Green Mountain Economic Development Corporation
- Vermont Land Trust and Upper Valley Land Trust
- Twin State Housing Trust
- Owners of significant properties of high resource or development value, and
- Major employers in Newbury.

Conservation Activities

Conservation programs are an effective means of securing protection of valuable farm and forestland or significant natural resources. Techniques available involve voluntary direct work between non-profit conservation organizations and affected landowners, such as donation of conservation easements, bargain sales of land, and limited development schemes.

The land trust movement has grown immensely during the past twenty years, particularly in Vermont. Land trusts offer viable means of bringing together the needs of property owners with the community interests. The Vermont Land Trust and the Nature Conservancy are particularly well-recognized organizations. Several organizations are also involved in water quality protection. It is the intent of this Plan to implement its policies through coordination and the involvement of these organizations and others dedicated to public purposes.

Vermont Community Development Program

Since the mid-1970's, the Vermont Community Development Program (VCDP) has made grant funds available to towns for community projects. Historically, the major focus of the program has been on housing rehabilitation and affordable housing projects benefiting low and moderate-income families.

Newbury should investigate the Vermont Community Development Program and its potential to assist the community in addressing its housing needs. The Regional Commission and the Vermont Agency of Commerce and Community Development are resources available to assist.

C. Responsibility for Implementation

In order to ensure that the policies of this Plan are implemented, it is essential to identify what Municipal Panel, organization or citizen is most suited to act on them. Throughout this Plan, the Planning Commission has identified recommendations for action and indicated who should be responsible for them. Generally, responsibility for implementation of the Plan falls to either the Planning Commission (in the case of implementing changes to land use regulations) or the

Selectboard (in the case of implementing municipal policy). However, advisory committees as well as other community organizations could also have responsibilities for implementation.

In addition to assigning responsibility, the Planning Commission should also keep track of progress made toward implementing the goals, policies, and recommendations of this Plan. This information will be useful to identify areas where additional effort needs to be applied to achieve implementation. It can also be used to describe how successful the community has been at implementation in the next iteration of this Plan, and to guide future policy.

Responsible Party Acronyms

Acronym	Responsible Party
SB	Selectboard
PC	Planning Commission
DRB	Development Review Board
WRT	Wells River Trustees
NVT	Newbury Village Trustees
TRORC	Two Rivers-Ottauquechee Regional Commission
ANR	VT Agency of Natural Resources
VTrans	VT Agency of Transportation
RF	Road Foreman
FD	Fire Department
CC	Conservation Committee
SWPO	Sewer and Water Plant Operator
NHS	Newbury Historical Society
EC	Energy Committee
SWC	Solid Waste Committee

Priority key: Low (not really important), Medium (somewhat important), High (very important)

Timeline key: ASAP (right now), Short-term (1-3 years), Mid-term (4-8 years), long-term (over 8 years), ongoing (always occurring)

Cost key: low (less than 10k), moderate (10-100k), high (more than 100k)

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
Chapter III: Economic Development					
1	Re-establish the Hamlet zoning designation around Boltonville along Route 302 in order to provide opportunities for commercial and mixed-use development that may include primary retail projects.	PC, ZA	Medium	Short-term	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
2	The Selectboard should establish an Economic Development Committee that will interact with Two Rivers-Ottauquechee Regional Commission, Green Mountain Economic Development Corporation, and the Cohase Chamber of Commerce to identify the needs of current and future businesses.	SB, TRORC	High	ASAP	Low
3	The Planning Commission should redefine retail in keeping with the regional plan allowing for small businesses to continue operating along the main Route 5 and Route 302 corridors without creating commercial sprawl.	PC, TRORC	Medium	ASAP	Low
4	The Planning Commission should review agricultural value-added businesses and ensure that the zoning bylaws will allow for activities such as agritourism and agricultural retail beyond a farmstand.	PC	Medium	ASAP	Low
5	The Planning Commission should update definitions in the zoning bylaws to reflect changes in types of businesses now as compared to when the bylaws were first enacted.	PC, DRB	High	ASAP	Low
6	The Town of Newbury Planning Commission, Conservation Commission, other boards, and citizens will work together to bring the Newbury Zoning Regulations into accordance with the Town Plan. The Town Plan emphasizes the recreational and economic potential of the Wells River and its adjacent Route 302 corridor. The Wells River and the Cross Vermont Trail serve as gateways to the Town of Newbury and are tremendous resources for citizens and visitors alike. Long-term protection of the Wells River is vital to the economic and environmental future of the town.	PC, CC, SB, WRT, ANR	High	Ongoing	Moderate
7	The Selectboard and Village Trustees (with assistance from the Planning Commission) should continue enrollment of Village of Wells River and Newbury Village in the Vermont Village Designation Program for the purposes of providing assistance to existing businesses and commercial developers in the villages and to implement the goals of this Plan.	SB, NVT, WRT, TRORC	High	ASAP	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
8	The Town should work with area organizations to further economic development, especially focused on agricultural enterprises, home-based businesses, and recreation-oriented businesses.	SB, WRT, NVT	Medium	Ongoing	Low
Chapter IV: Natural, Cultural, Scenic and Historic Resources					
A. Natural Resources					
1	The Planning Commission, with the Conservation Commission and any other relevant department, agency, or commission of the town, should coordinate and collaborate on any planning initiatives which involve Newbury's natural resources.	PC, CC, SB, ANR	Medium	Ongoing	Low
2	Zoning and subdivision regulations for the town should reflect preservation strategies. These regulations should control or restrict development of such key natural features as ridgelines and/or high elevations, slopes over 15%, designated wildlife habitats, rare plant and animal communities, wetlands, prime agricultural and forest lands, views and vistas. Such controls should also provide for adequate open space.	PC, CC	Low	Ongoing	Low
3	The Conservation Commission should consider a complete Natural Resource Inventory for Newbury. Much information currently exists, but it is in piecemeal form. A formal inventory would aid in preservation of these natural assets and offer valuable information on which to base decisions regarding development intensity, environmental impact and potential imbalances between development and the environment.	CC, ANR	Medium	Mid-term	Low
4	Newbury should selectively, as part of the inventory above, identify existing access points to the Connecticut River and other valuable natural areas, and protect and expand access opportunities for recreational, agricultural or forestry use. Often, natural resource planning includes a recommendation to "improve and/or increase opportunities for public access to riparian lands or remote, scenic highlands." The extensive network of "legal trails" that presently exists throughout the town provides access to otherwise remote	CC, RF, ANR	Medium	Mid-term	Low
5	Appropriate development should be sited in such a way that negative effects on rare plant or animal communities are avoided.	PC, CC, ANR	Medium	Ongoing	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
6	The Town must evaluate major Act 250 project applications affecting Newbury and to offer testimony at hearing, as appropriate.	SB	High	Ongoing	Low
7	The Town of Newbury Planning and Conservation Commissions will work together to: a. assist landowners with desirable riparian buffer maintenance practices; b. promote Acceptable Management Practices (AMP) and Best Management Practices (BMP) for maintaining water quality by farmers, loggers and landowners; c. establish guidelines for nature, recreational, and educational trails.	PC, CC	Medium	Ongoing	Low
B. Flood Plains and Flood Resiliency					
1	The Planning Commission should update the Newbury Zoning Regulations to ensure that it meets or exceeds the standards required by the Federal Emergency Management Agency so that Newbury may continue to participate in the NFIP.	SB, PC	High	Ongoing	Low
2	The Planning Commission should maintain the Newbury Zoning Regulations prohibition on new development within the floodplain, considering only recreational and agricultural uses.	PC	High	Ongoing	Low
3	The Town shall maintain its membership in the National Flood Insurance Program.	SB	High	Ongoing	Low
4	The Planning Commission should consider adding River Corridor Area protections to mapped areas and unmapped upland streams.	PC	Low	Ongoing	Low
5	The Selectboard should update the Local Emergency Management Plan at least once a year or when key emergency management personnel change.	SB	High	Ongoing	Low
6	The Selectboard and an appropriate committee should update and adopt a Local Hazard Mitigation Plan with assistance from the Two Rivers- Ottauquechee Regional Commission on an appropriate timeline.	SB, TRORC	High	Ongoing	Low
7	Newbury should consider enacting river corridor protections which would enable Newbury to receive the largest amount of Emergency Relief Assistance Funding available from the State.	SB, PC	Medium	Ongoing	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
8	To achieve flood hazard mitigation goals and protect life and property during such events, Newbury will engage in measures to ensure proper road and drainage construction, as well as limiting development in flood-prone areas.	SB, PC, VTrans, RF, TRORC	Medium	Ongoing	Moderate
C. Historic Districts and Resources					
1	The town should incorporate Newbury's archaeological sites, historic districts, and structures in their entirety in the geographic information system (GIS) mapping for the town.	NHS	Low	Mid-term	Moderate
E. Scenic Evaluation Criteria					
1	When evaluating scenic areas the Development Review Board may use the following criteria as appropriate data are available: a. Dramatic Focal Points: natural or man-made landscapes which include clear and dramatic focal points are more sensitive to scenic disruption; b. Landscape Diversity: a combination of elements which increases the scenic effect, may include elements of topographic variation, mixture of open meadows and woodlands, water, distant views, mixture of vegetative types; c. Order, Pattern, Scale, and Design: landscapes should have a sense of order or logic, with a clear progression from the village, to clustered residential settlements, and then to surrounding rural countryside. Order is heavily influenced by scale and pattern of buildings, and architectural similarities of form, size, and design; d. Intactness: landscapes that have retained traditional patterns or forms, or have absorbed development with minimal disruption, are more likely to add to the scenic quality of an area.	PC, CC, DRB	Low	Ongoing	Moderate
2	The Selectboard should consider surveying the town for significant archeological, scenic, and historical areas.	SB, NHS	Low	Long-term	Low
F. Agricultural Land and Farming					
1	The Town should investigate methods of permanently preserving open lands.	SB, PC, TRORC	Low	Long-term	Moderate
2	The Town should promote opportunities for local buyers to utilize locally produced farm products.	SB	Low	Long-term	Moderate

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
3	The Town should promote a better understanding of the farming and forestry practices and natural resource management in general; the agricultural industry, conservation organizations, public schools and the tourism and recreation industries should sponsor continuing educational opportunities to the public.	SB, CC	Low	Long-term	Moderate
4	The Town should support increased availability and use of locally grown foods.	SB	Low	Long-term	Low
Chapter V: Land Use					
General Land Use					
1	The Zoning Regulations and Bylaws should be reviewed against current state guidelines resulting from passage of S.100.	PC, TRORC	Medium	Mid-term	Low
2	Owners of land that is not suitable for intense development should be encouraged, through public and private means, to maintain valuable resource lands in productivity for agriculture, silviculture, or for conservation uses.	SB, PC, CC, TRORC	Low	Long-term	Low
3	The Town, via the Selectboard, should review the process of disclosure to the public about any large-scale public or public/private partnership project proposal or application that may have the potential to impact the overall quality of life and character of the Town and is therefore likely to be of wide interest to residents.	SB, PC	Medium	Ongoing	Low
Wells River Village Area					
1	The Planning Commission should work with Village Trustees to investigate the benefits of reducing lot coverage and setbacks within the Wells River Area.	PC, WRT	Medium	Ongoing	Low
2	The Planning Commission should consider whether to refine zoning areas to reflect the different densities possible because of differing access to public sewer and water.	PC, WRT	High	ASAP	Low
3	The Village of Wells River Trustees should investigate the benefits of expanding the public water and sewer systems.	WRT	Medium	Ongoing	Moderate
4	The Planning Commission should work with the Trustees of the Village of Wells River to refine the zoning districts within the Village, and make recommendations on where commercial versus residential development should be focused, and reflect the unique access issues in the WRVA, such as Bible Hill, Schaeffer Hill and Tullar Hill.	PC, WRT	High	ASAP	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
South Newbury, West Newbury, and Boltonville Hamlet Areas (HAM)					
1	The Planning Commission should work with the hamlet of West Newbury to do a finer scale review of the zoning for the area and consider possible increases in density within the core hamlet area as well as determine whether the hamlet of West Newbury might be a potential future growth area and/or pursue a path to incorporation as a Village.	PC	High	ASAP	Low
Rural Areas (R1, R2, R5)					
1	The Town should convene public discussions to reevaluate the suitability of established zoning districts.	PC	High	Ongoing	Low
Conservation and Natural Resource Areas (CD10)					
1	The zoning bylaws for the Conservation District should be reviewed against current state guidelines resulting from passage of S.100.	PC, TRORC	High	ASAP	Low
2	The Planning Commission shall review the size, boundaries, function, and impact of the Conservation and Natural Resource areas.	PC, CC	High	ASAP	Low
3	Important wildlife habitat and habitat connectors shall be protected from development in order to maintain healthy and diverse wildlife populations.	PC, CC	Medium	Ongoing	Low
4	Development shall allow for at least the state recommended buffer between development and streams, rivers, ponds, lakes, wetlands, and vernal pools.	PC, CC	High	ASAP	Low
Agricultural Land and Farming					
1	The Town of Newbury should investigate methods of permanently preserving open lands.	PC, CC	Low	Ongoing	Low
Mixed Use Commercial Area					
1	The Planning Commission should draft clear standards (possibly including performance standards) with regard to the types and sizes of appropriate light industrial and commercial development and access management for conditional use reviews.	PC	Low	Ongoing	Low
2	The Planning Commission should consider amending the Newbury Zoning Ordinance to provide guidance as to how landscaping can be used to maintain the character of the Mixed Use Commercial Area.	PC	Low	Ongoing	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
Industrial Area					
1	The Planning Commission should consider other areas which might be appropriate for light manufacturing.	PC	Low	Ongoing	Low
2	Locations to consider for light manufacturing should be on a paved state highway.	PC	Low	Ongoing	Low
B. Other Land Use Areas					
1	The Selectboard, with the Town Highway Department, should review the configuration of Halls Lake Road and consider alternatives.	SB, PC, RF	Medium	Mid-term	Low
Chapter VI: Transportation					
1	The Town should incorporate complete street planning.	SB, RF	Low	Ongoing	Low
2	The Town and the Village of Wells River should investigate unifying all highway districts in the town under one department.	SB, RF, WRT, NVT	Medium	Mid-term	Low
3	The Town should explore public-private partnerships to upgrade existing town roads to meet current and future fire & life safety access.	SB, RF	Low	Ongoing	Low
4	The Planning Commission should examine zoning district frontage requirements with an eye to access impact on Town infrastructure.	PC, RF	Low	Ongoing	Low
5	The Planning Commission should revise zoning and subdivision regulations to ensure that public input and traffic safety is considered when granting road access.	PC, RF	Low	Ongoing	Low
6	The Town should explore Class 1 road designation within the Village centers.	SB, RF, WRT, NVT	Low	Ongoing	Low
7	The Town should investigate additional park and ride locations.	SB, PC, RF, VTrans	Low	Ongoing	Low
8	In order to preserve the character and rural nature of the Conservation and Rural zoning districts, the Town should review the highway ordinance and investigate how the Town can discourage the unnecessary paving of dirt roads.	SB, PC, RF	Medium	Ongoing	Low
9	The Town should review the highway ordinance and investigate how it can discourage the paving of roads to a single location.	SB, PC, RF	Medium	Ongoing	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
Chapter VII: Community Utilities, Facilities, and Services					
B. Water Supply and Sewerage Facilities					
1	The Town of Newbury should begin work on a Capital Budget Program which would aid the town in budgeting for those major expenditures associated with town facilities and services, whether such capital outlay be made for a new playing field, or a new fire engine.	SB	Short-term	Mid-term	Low
C. Recreation and Open Space					
1	Based on current activity and interest in trail sports (i.e. snowmobiling, cross-country skiing, hiking, horseback riding, etc.) within the town, the Town should develop a system of interconnected trails. Some of the network already exists. Such a system could be used throughout the seasons for various planned events such as ride-ins and educational nature hikes. Such a plan could be implemented through the Newbury Recreation Committee and Conservation Committee.	SB, CC, RF	Low	Ongoing	Moderate
2	The Town should continue to pursue recreational opportunities.	SB, CC, NVT, WRT	Low	Ongoing	Moderate
3	The Town should consider appropriate management plans for public lands.	SB, CC, NVT, WRT	Low	Ongoing	Moderate
D. Education and Childcare Facilities and Services					
1	The Town should encourage the schools to use local foods in school meal programs.	SB	Low	Ongoing	Low
E. Public Buildings					
1	The Selectboard and Planning Commission should look into funding programs to make the entire Town Office building accessible, such as through an elevator and other improvements.	SB	Low	Ongoing	Moderate
H. Emergency Management					
1	The Selectboard should adopt a Hazard Mitigation Plan with assistance from the Two Rivers-Ottauquechee Regional Commission and establish procedures for continued maintenance of the Plan.	SB, TRORC	Low	Ongoing	Low
I. Solid Waste Disposal					
1	The Town should encourage Northeast Kingdom Waste Management District to establish a transfer station Wells River.	SB, WRT	Low	Long-term	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
2	The Planning Commission, the Solid Waste Committee and other interested residents' groups should work to identify, develop, and refine solid waste management options for Newbury through the town's Solid Waste Implementation Plan. It is appropriate that broadly defined conceptual solutions to Newbury's solid waste issues as expressed in this town plan be further expanded and resolved through amendments and revisions to the existing implementation plan, a document expressly written to enact solid waste management practices for the town.	PC, SWC	Low	Ongoing	Low
Chapter VIII: Housing					
1	Community leaders should work with state housing agencies, non-profit organizations, and lending institutions to ensure the availability of loan or grant funds for Newbury residents to acquire or improve their primary homes.	SB	Medium	Ongoing	Low
2	The Town should work with the Two Rivers-Ottauquechee Regional Commission to evaluate Newbury's role in supplying the region's housing stock by assessing its capacity for growth.	PC, WRT	Low	Long-term	Moderate
3	The Town should evaluate the impact of short-term rentals on housing availability and affordability in Newbury and consider methods of addressing or managing this issue.	PC	High	Mid-term	Low
4	The Town should investigate the prevalence of recreational trailers, motor homes, or camping vehicles as permanent or temporary dwellings and consider methods of managing such uses.	PC	High	Mid-term	Low
Chapter IX: Energy					
1	Town officials and volunteers should work to increase public awareness and use of energy conservation practices, energy-efficient products and efficiency and weatherization programs through educational efforts aimed at local residents and businesses.	EC, SB	Low	Ongoing	Low

#	Action (Recommendations)	Responsible Party	Priority	Timeline	Cost
2	The Town should consider municipal or community-based renewable energy generation, to include municipal or district biomass heating systems, and the installation of individual or group net metered generation facilities on town buildings and property to serve town facilities. Sources of funding for municipal power generation could include third-party financing, municipal funds, bonds, grants, and available government incentive programs.	SB, EC	Low	Long-term	Low
3	The Selectboard should reactivate the Energy Committee as a Town committee so that they may develop an Energy Action Plan as a supplement to the municipal plan and to find opportunities to reduce municipal expenses through energy efficiency and energy conservation.	SB	Low	Long-term	Low
4	The Town should implement energy efficiency measures recommended by the Energy Audits and (if formed) an Energy Committee for existing and future facilities as opportunities arise, and incorporate priority efficiency improvements (e.g., facility retrofits, renovations, and equipment upgrades) in the town's capital budget and program.	SB, EC	Low	Long-term	Low
5	The Town, with help from the Energy Committee (if formed), should develop municipal procurement and purchasing that emphasize products that are energy efficient (e.g., Energy Star® rated).	SB, EC	Low	Long-term	Low
6	The Town should develop facility maintenance and operation policies that maximize energy efficiency while maintaining comfort levels for employees and visitors.	SB, EC	Low	Long-term	Low
7	The Town should consider the benefits and/or drawbacks of using regionally available alternative-fuels, such as biodiesel, in municipal vehicles.	SB, EC	Low	Long-term	Low
8	The Planning Commission should consider opportunities to expand access to bike paths and multi-use paths for non-motorized uses.	PC	Low	Long-term	Low
9	The Town should consider appropriate locations to encourage the installation of an electric vehicle charger to further encourage the use of electric vehicles by residents	SB, EC	Low	Ongoing	Low

Appendix A

This appendix includes the Town of Newbury's Municipal Energy Data.

Two Rivers-Ottauquechee
REGIONAL COMMISSION

April 28, 2017

Larry Scott
Planning Commission Chair
Town of Newbury
P.O. Box 126
Newbury, VT 05051

RE: Municipal Summary Worksheet - Energy

Mr. Scott:

TRORC is pleased to have prepared and enclose a copy of the Municipal Summary Worksheet and maps for your town, which summarizes the type of data that is required to be in an "Enhanced Energy Plan" under the energy planning law passed last year and known as "Act 174". As you are aware, writing an "Enhanced Energy Plan" and seeking a determination of energy compliance is optional for communities. If your town chooses to write one and meets the municipal standards set by the Department of Public Service, the town plan receives substantial deference in renewable energy generation Certificate of Public Good process. The data in the attached document provides analyses and targets derived from regional analyses and targets. Municipalities ***may*** choose to rely on these "municipalized" analyses and targets to meet the standards in this section.

Municipalities which elect to use the analysis and targets provided by the TRORC will be presumed to have met the Analysis and Targets standards. Alternatively, municipalities may develop their own custom analyses and targets or supplement the analyses and targets provided by the RPCs with specific local data; if this option is chosen, the analysis and targets must include all of the same components and meet the standards required of regions, as described in the standard checklist. Some of the numbers such as current electricity use by town will need to be updated when TRORC receives new data. The Summary worksheet, maps, and the excel worksheet that feeds the data into the summary sheet will be emailed out and can also be found on the TRORC website under your respective town page site. If you have any questions about the attached document or energy planning for your community please don't hesitate to contact us.

Sincerely,

Christopher Damiani
Planner

cc: Peter G. Gregory, Executive Director, Frank Tegethoff, TRORC Commissioner, File

128 King Farm Rd.
Woodstock, VT 05091
802-457-3188
trorc.org
William B. Emmons, III, Chair
Peter G. Gregory, AICP, Executive Director

Municipal Template - Energy Data

The following is an explanation of the information displayed in the Municipal Template for Newbury.

The intent of the Municipal Template is to provide the municipality with data that can be used to ensure compliance with the requirements of Act 174 and "Enhanced Energy Planning" (24 V.S.A. 4352). The spreadsheet contains data that estimates current energy use and provides targets for future energy use across all sectors (transportation, heating, and electricity). It also sets a target for renewable energy generation within the municipality.

This data is meant to be a starting point for the municipality to begin planning its energy future and to talk about the changes that may need to occur within the municipality to ensure that local, regional and state energy goals are met. This includes the goal that 90% of all energy demand be met by renewable sources by 2050.

Figure 1 - Data Sources

- American Community Survey (ACS)
- Vermont Department of Labor (DOL)
- Vermont Department of Public Service (DPS)
- Energy Information Administration (EIA)
- Efficiency Vermont (EVT)
- Long-range Energy Alternatives Planning (LEAP)
- Vermont Energy Investment Corporation (VEIC)
- Vermont Agency of Transportation (VTRANS)

Estimates of current energy use consist primarily of data available from the American Community Survey (ACS), the Vermont Agency of Transportation (VTrans), the Vermont Department of Labor (DOL), and the Vermont Department of Public Service (DPS). Targets for future energy use are reliant upon the Long-range Energy Alternatives Planning (LEAP) analysis for the region completed the Vermont Energy Investment Corporation (VEIC). Targets for future energy generation have come from the regional planning commission and DPS. Targets for both future energy use and energy generation have been generally developed using a "top down" method of disaggregating regional data to the municipal level. This should be kept in mind when reviewing the template. It is certainly possible to develop "bottom up" data. For those municipalities interested in that approach, please see the Department of Public Service's Analysis and Targets Guidance.

There are some shortcomings and limitations associated the data used in the Municipal Template. For instance, assumptions used to create the LEAP analysis are slightly different than assumptions used to calculate current municipal energy use. Regardless, the targets established here show the direction in which change needs to occur to meet local, regional and state energy goals. It is important to remember that the targets established by LEAP represents only on way to achieve energy goals. There may several other similar pathways that a municipality may choose to take in order to meet the 90x50 goal.

Below is a worksheet by worksheet explanation of the Municipal Template spreadsheet:

1. Municipal Summary

The Municipal Summary worksheet summarizes all data that is required to be in the Municipal Plan if the plan is to meet the "determination" standards established by the Vermont Department of Public Service.

1A. Current Municipal Transportation Energy Use	
Transportation Data	**Municipal Data**
Total # of Vehicles (ACS 2011-2015)	1,,317
Average Miles per Vehicle (VTrans)	11,356
Total Miles Traveled	14,955,852
Realized MPG (VTrans)	18.6
Total Gallons Use per Year	804,078
Transportation BTUs (Billion)	97
Average Cost per Gallon of Gasoline (RPC)	2
Gasoline Cost per Year	1,857,420

This table uses data from the American Community Survey (ACS) and Vermont Agency of Transportation (VTrans) to calculate current transportation energy use and energy costs.

1B. Current Municipal Residential Heating Energy Use				
Fuel Source	**Municipal Households (ACS 2011-2015)**	**Municipal % of Households**	**Municipal Square Footage Heated**	**Municipal BTU (in Billions)**
Natural Gas	8	0.8%	864,000,000	1
Propane	225	22.2%	21,007,200,000	21
Electricity	28	2.8%	1,612,800,000	2
Fuel Oil	425	41.9%	39,843,600,000	40
Coal	2	0.2%	216,000,000	0
Wood	317	31.2%	33,236,400,000	33
Solar	0	0.0%	0	0
Other	10	1.0%	1,080,000,000	1
No Fuel	0	0.0%	0	0
Total	**1015**	**100.0%**	**97,860,000,000**	**98**

This table displays data from the ACS that estimates current municipal residential heating energy use.

1C. Current Municipal Commercial Energy Use

	Commercial Establishments in Municipality (VT DOL)	Estimated Thermal Energy BTUs per Commercial Establishment (in Billions) (VDPS)	Estimated Thermal Energy BTUs by Commercial Establishments in Municipality (in Billions)
Municipal Commercial Energy Use	37	0.725	27

The table uses data available from the Vermont Department of Labor (VT DOL) and the Vermont Department of Public Service (DPS) to estimate current municipal commercial establishment energy use in the municipality.

1D. Current Electricity Use *

Use Sector	Current Electricity Use
Residential (kWh)	7,775,529
Commercial and Industrial (kWh)	5,678,670
Total (kWh)	13,454,199

*This table displays current electricity use within the municipality with data from the ACS, DPS, and VT DOL. More accurate data will be available soon from Efficiency Vermont (EVT).

1E. Residential Thermal Efficiency Targets

	2025	2035	2050
Residential - Increased Efficiency and Conservation (% of municipal households to be weatherized)	33%	67%	100%

This table displays targets for thermal efficiency for residential structures based on a methodology developed by DPS using data available from the regional Long-range Energy Alternatives Planning (LEAP) analysis and ACS. The data in this table represents the percentage of municipal households that will need to be weatherized in the target years.

1F. Commercial Thermal Efficiency Targets

	2025	2035	2050
Commercial - Increased Efficiency and Conservation (% of commercial establishments to be weatherized)	6%	9%	18%

This table shows the same information as Table 1E, but sets a target for commercial thermal efficiency. Information from the VT DOL is required to complete this target.

1G. Thermal Fuel Switching Targets (Residential and Commercial) - Wood Systems

	2025	2035	2050
New Efficient Wood Heat Systems (in units)	0	0	0

This target was calculated using data from LEAP and ACS. This table provides a target for new wood heating systems for residential and commercial structures in the municipality for each target year. Due to the LEAP model forecasting a large decrease in wood use resulting in a negative number of targets we have put zero in for this section. Towns are encouraged to use efficient wood heat.

1H. Thermal Fuel Switching Targets (Residential and Commercial) - Heat Pumps

	2025	2035	2050
New Heat Pumps (in units)	103	271	571

This table provides a target for new heat pump systems for residential and commercial structures in the municipality for each target year. This target was calculated using data from LEAP and ACS.

1I. Electricity Efficiency Targets

	2025	2035	2050
Increase Efficiency and Conservation	-0.6%	5.7%	9.9%

Data in this table displays a target for increased electricity efficiency and conservation during the target years. These targets were developed using regional LEAP analysis. Towns are encouraged to consider increased efficiency targets.

1J. Use of Renewables - Transportation

	2025	2035	2050
Renewable Energy Use - Transportation	9.6%	23.1%	90.3%

This data displays targets for the percentage of transportation energy use coming from renewable sources during each target year. This data was developed using the LEAP analysis.

1K. Use of Renewables - Heating

	2025	2035	2050
Renewable Energy Use - Heating	49.7%	62.1%	92.8%

This data displays targets for the percentage of heating energy use coming from renewable sources during each target year. This data was developed using information from the LEAP analysis.

1L. Use of Renewables - Electricity

	2050
Renewable Energy Use - Electricity (MWh)	12,441- 15,206

This data displays the target for electricity generation coming from renewable sources within the municipality for 2050. This data was developed using information from the regional planning commission and DPS. This data is the same as the data in Table 1Q.

1M. Transportation Fuel Switching Target - Electric Vehicles

	2025	2035	2050
Electric Vehicles	122	864	1,798

This tables displays a target for switching from fossil fuel based vehicles (gasoline and diesel) to electric vehicles. This target is calculated on Worksheet 2 by using LEAP and ACS data.

1N. Transportation Fuel Switching Target - Biodiesel Vehicles

	2025	2035	2050
Biodiesel Vehicles	215	404	681

This tables displays a target for switching from fossil fuel based vehicles to biodiesel-powered vehicles. This target is calculated on Worksheet 2. by using LEAP and ACS data.

1O. Existing Renewable Generation

Renewable Type	MW	MWh
Solar	0.26	319
Wind	0.00	-
Hydro	1.25	4,380
Biomass	0.00	-
Other	0.00	-
Total Existing Generation	**1.51**	**4,699**

Table 1O shows existing renewable generation in the municipality as of 2015, in MW and MWh, based on information available from the Vermont Department of Public Service.

1P. Renewable Generation Potential

Renewable Type	MW	MWh
Rooftop Solar	1	1,472
Ground-mounted Solar	1,313	1,610,263
Wind	27	82,782
Hydro	0	21
Biomass and Methane	0	0
Other	0	0
Total Renewable Generation Potential	**1,341**	**1,694,538**

Renewable generation potential is based on mapping completed by the regional planning commission that is based on the Municipal Determination Standards and associated guidance documents developed by DPS. The renewable generation potential is expressed in MW and MWh by the type of renewable resource (solar, commercial wind, hydro, etc.).

1Q. Renewable Generation Target

	2050
Total Renewable Generation Target (in MWh)	12,441- 15,206

Renewable generation target for municipalities was developed by the town's population percentage within the region.

1R. Sufficient Land

	Y/N
Renewable Sources	Y
Surplus of Generation	12158%

This table shows whether or not there is sufficient land in the municipality to meet the renewable generation targets based on the renewable generation potential in the municipality.

Existing Energy Generation

This map was created as part of a Regional Energy Planning Initiative being conducted by the Two Rivers-Ottauquechee Regional Commission, and the Vermont Public Service Department.

Created:2017

NEWBURY

BIOMASS KW

- 19
- 20 - 375

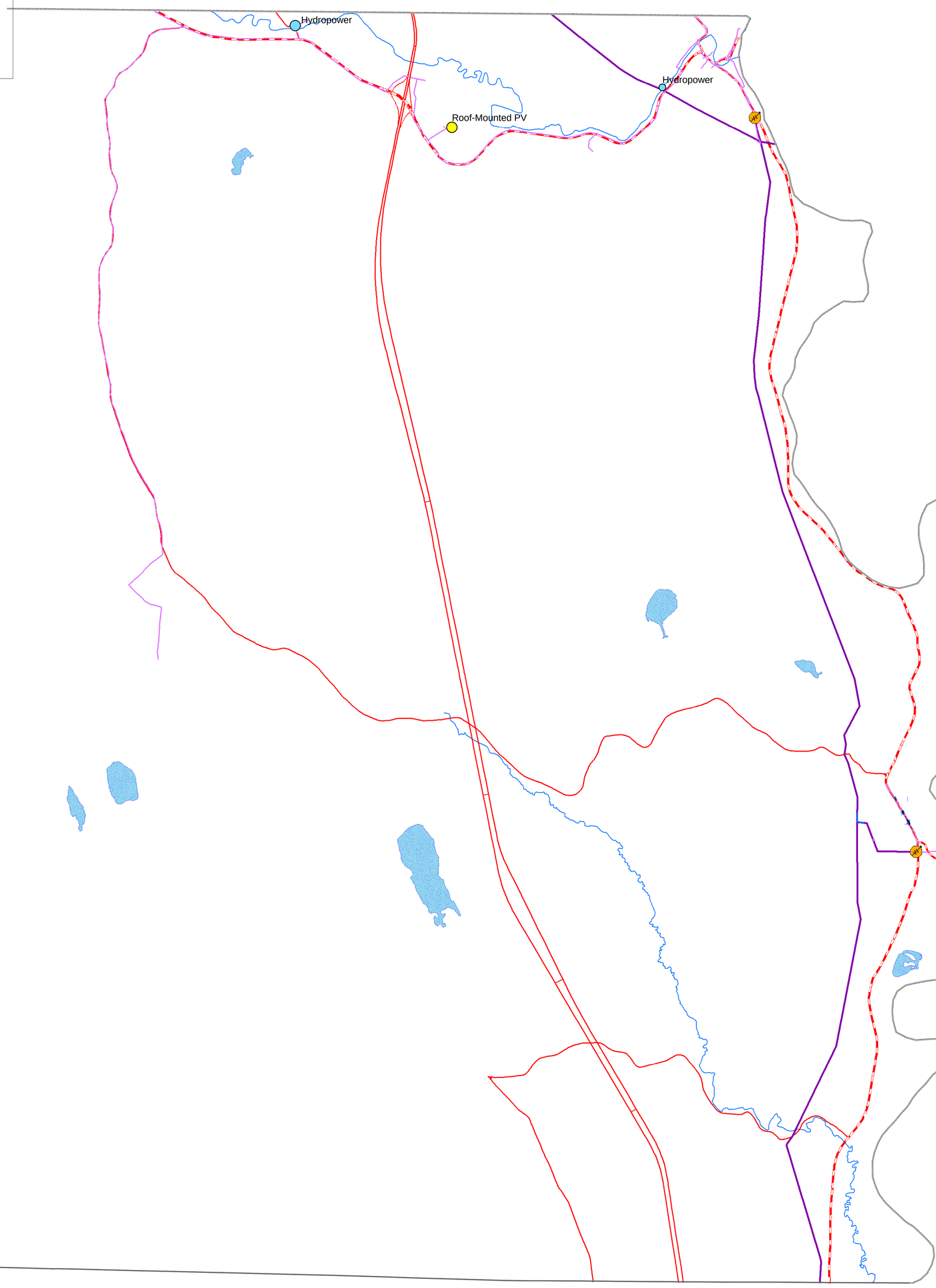
HYDRO KW

- 15 - 100
- 101 - 500
- 501 - 2000
- 2001 - 37400

SOLAR KW

- 15 - 25
- 26 - 100
- 101 - 500
- 501 - 2200

- Substations
- 3 Phase Power Lines
- Transmission Lines
- Lakes/Ponds



0 0.5 1 2 Miles

N

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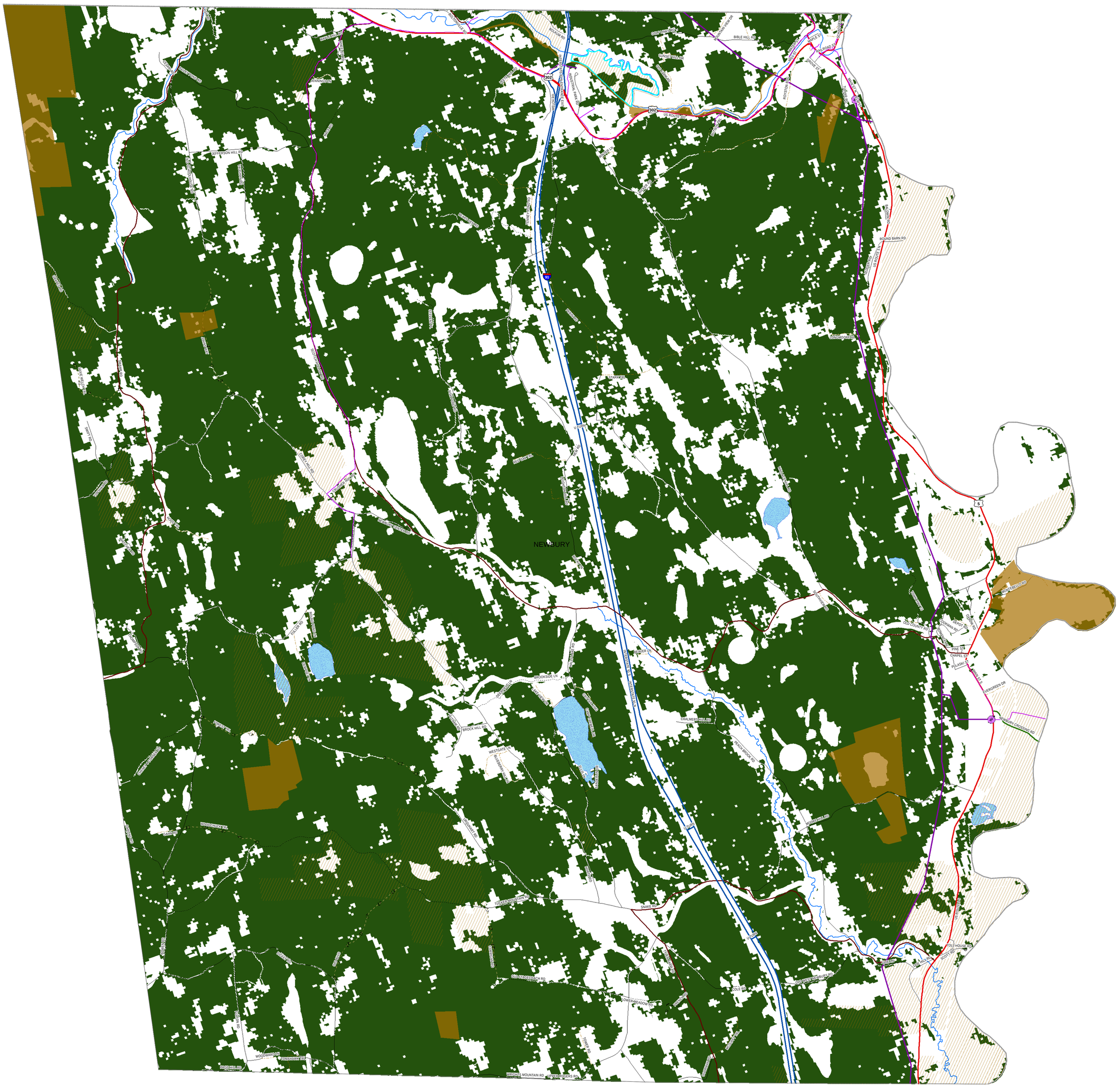
BIOMASS Energy Potential

This map was created as part of a Regional Energy Planning Initiative.
Created: 2017

NEWBURY



Biomass
Methodology: This map shows areas of potential for woody biomass production and harvest. The map also illustrates other conditions that may limit the feasibility of extensive harvesting of wood for energy use. These limiting factors are referred to as constraints. The map does not show areas where other types of biomass, such as biomass from grasses or agricultural residue, could be grown/harvested.

Constraints: Physical features or resources that make extensive harvesting infeasible are considered Level 1 constraints. Level 1 constraints include: FEMA floodways, river corridors, federal wilderness areas, rare and irreplaceable natural areas (RINAs), vernal pools, and class 1 and 2 wetlands. These areas have been removed and are not shown in any way on this map.

Conserved

- Public Cons
- Private Cons
- Substations
- 3 Phase Power Lines
- Transmission Lines
- Lakes/Ponds
- Rivers/Streams
- Woody Biomass

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Hydroelectric Energy Potential

NEWBURY

This map was created as part of a Regional Energy Planning Initiative.
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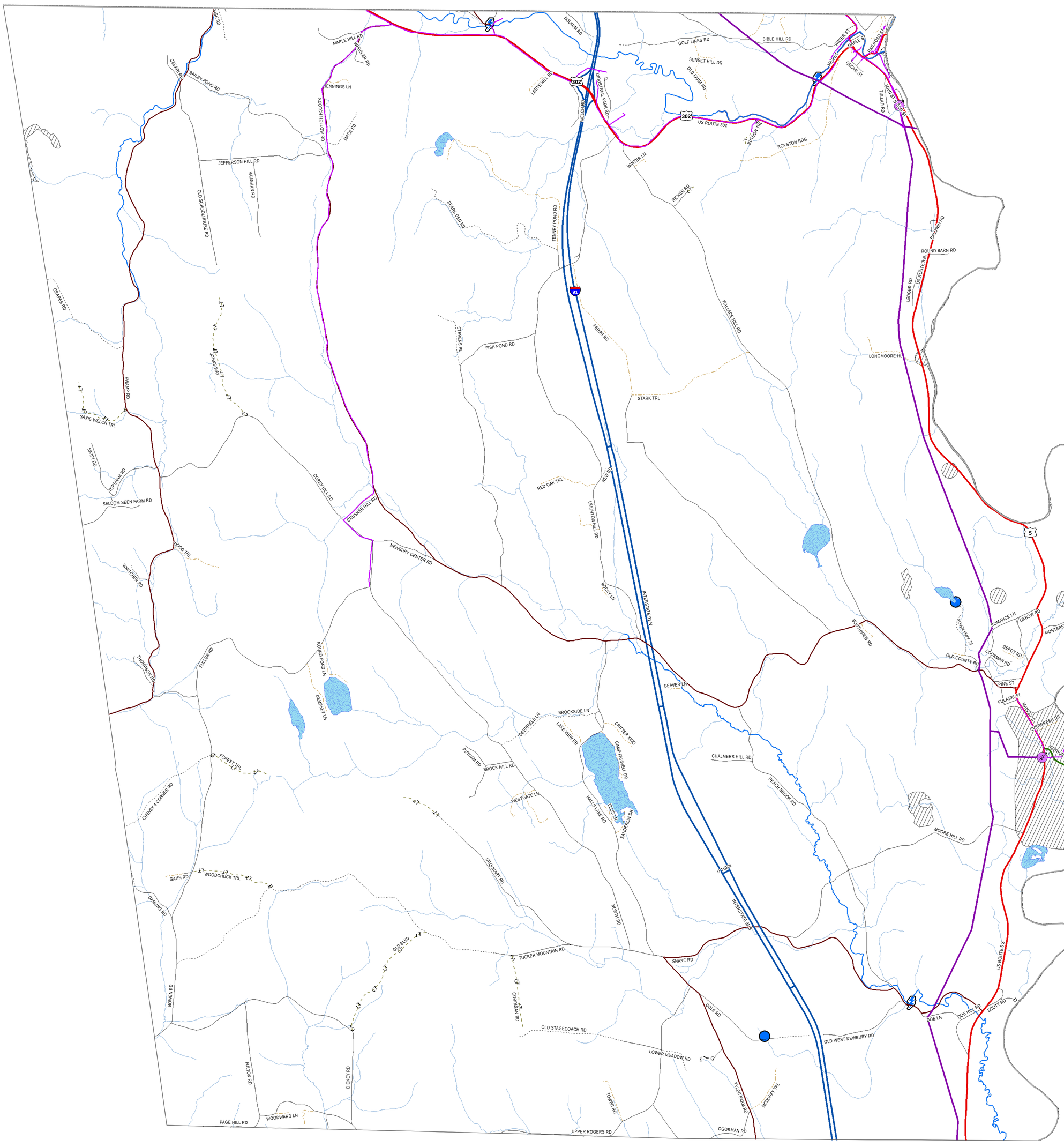
- Substations
- 3 Phase Power Lines
- Transmission Lines
- Lakes/Ponds
- Rivers/Streams
- Operational Hydroelectric Facilities
- < 50 kW Capacity
- > 50 kW Capacity
- High Hazard with < 50 kW Capacity
- High Hazard with > 50 kW Capacity
- Impaired Waters
- Stressed Waters
- Designated Outstanding Resource Waters
- 0-3
- 4 - 6
- 7 - 9
- Rare and Irreplaceable Natural Areas (RINAs)



Hydroelectric
Methodology: This map shows areas of resource potential for renewable energy generation from hydroelectric facilities. Sites identified are existing dams that could be developed for hydroelectric generation as well as active hydroelectric facilities. Information on existing hydroelectric facilities was obtained from the Vermont Dam Inventory and data on potential hydroelectric sites was obtained from a study conducted by Community Hydro in 2007~. Potential hydroelectric generation capacity for several of the larger dams are noted below.

~ http://www.vtenergyatlas-info.com/wp-content/uploads/2010/02/DPS-Undeveloped-Hydro-Potential-FINAL-VERSION.pdf

N

0 0.5 1 2 Miles

Hydroelectric Constraint Description
* Rare and Irreplaceable Natural Areas (RINAs) are significant natural communities. They do not Include the following rank descriptions: uncommon to common breeder in VT, common to very common in VT, historic in VT, not applicable, unrankable, unrankable breeding population, and extirpated.

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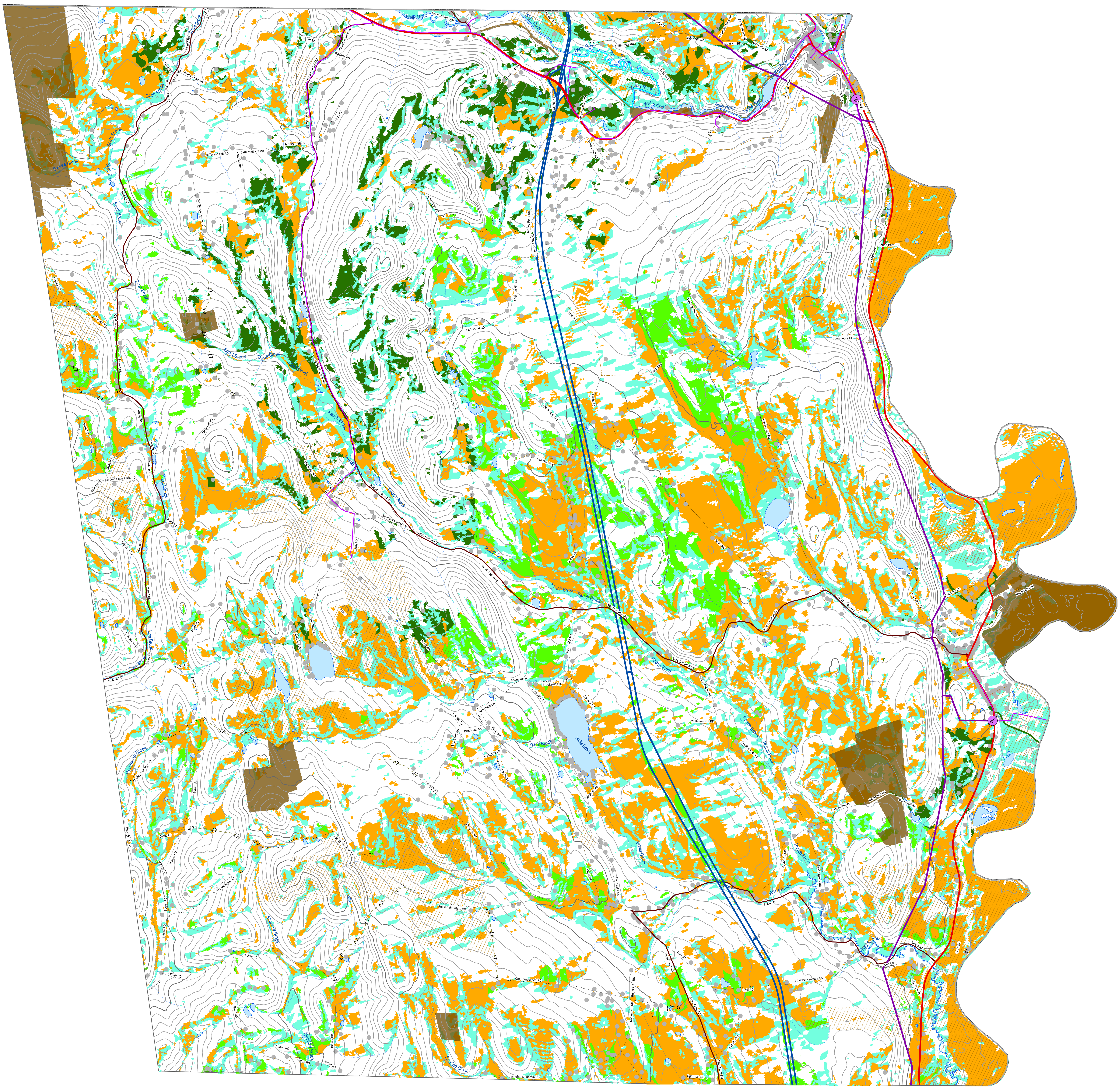
Substations	**SOLAR POTENTIAL**
3 Phase Power Lines	**Suitability**
Transmission Lines	Prime
Structures w/1ac buffer	Constraints
Conserved	Prime 1m 3phase
Public Cons	RAW solar
Private Cons	

Solar Energy Potential NEWBURY

This map was created as part of a Regional Energy Planning Initiative.
Created: 2017



Solar
This map shows areas of potential electricity generation from solar energy. It includes areas with good access to solar radiation and also considers other conditions that may limit the feasibility of solar energy development. These limiting factors are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no constraints are present.

These maps are designed to initially identify areas and follow-up on-site work is required to verify the areas are feasible for projects. They are subject to revision and are NOT intended to green-light or fast-track projects.

DARK GREEN Prime: No Constraints within 1 mile 3 phase power
GREEN Prime: No Constraints no known or possible constraints present
ORANGE Constraints no known but at least one or more possible constraints
BLUE GREEN Raw potential with constraints

Known Constraints
Vernal Pools (confirmed and unconfirmed layers)
DEC River Corridors
FEMA Floodways
State-significant Natural Communities and Rare, Threatened, and Endangered Species
Wilderness Areas, including National Wilderness Areas
Class 1 and Class 2 Wetlands (VSWI and advisory layers)

Possible Constraints
Agricultural Soils (VT Agriculturally Important Soil Units)
FEMA Special Flood Hazard Areas
Protected Lands (Updated 07/26/2016.)
Act 250 Agricultural Soil Mitigation areas
Deer Wintering Areas
ANR's Vermont Conservation Design Highest Priority Forest Block Datasets
Forest Blocks - Connectivity
Forest Blocks - Interior
Forest Blocks - Physical Land Division
Hydric Soils

TRORC Unsuitable areas (included in known constraints)
FEMA Floodways
Wilderness Areas, including National Wilderness Areas
Class 1 Wetland

N

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0 0.5 1 2
Miles

Wind Energy Potential

NEWBURY

This map was created as part of a Regional Energy Planning Initiative.
Created:2017

- Substations
- 3 Phase Power Lines
- Transmission Lines
- Lakes/Ponds
- Rivers/Streams

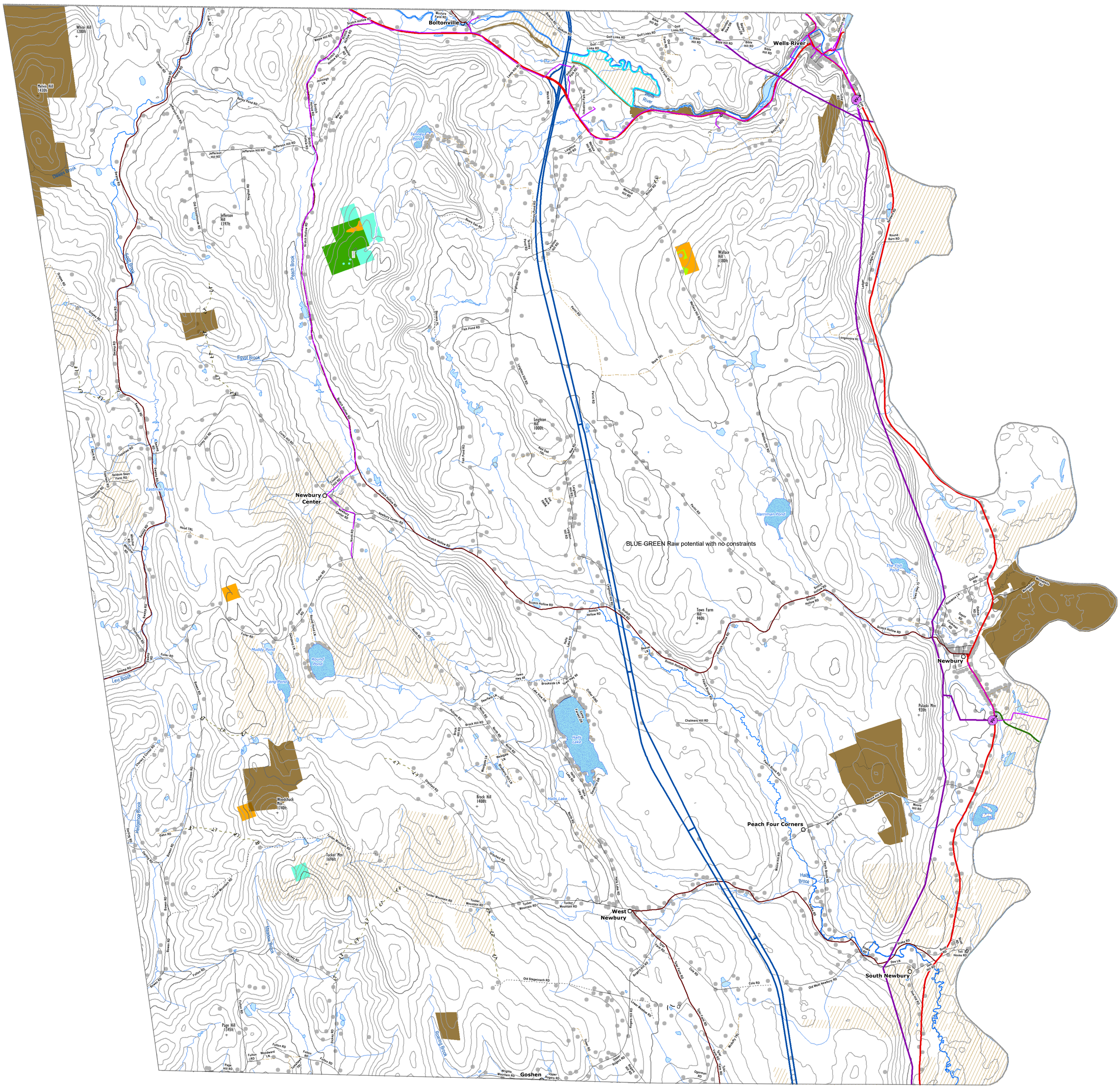
Conserved

- Public Cons
- Private Cons
- Structures w/1ac buffer

Wind Potential

Suitability, HubHeight

- Prime, 50
- Prime, 70
- Constraints, 50
- Constraints, 70
- Prime 1m 3phase
- RAW wind



BLUE GREEN Raw potential with no constraints

Wind
This map shows areas of potential wind energy development. It includes areas with good access to wind resources and also considers other conditions that may limit the feasibility of wind energy development. These limiting factors are referred to as constraints. Areas of prime wind potential exist where the natural conditions make development feasible and no constraints are present.

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0 0.5 1 2 Miles