

CORNWALL TOWN PLAN

CORNWALL, VERMONT



Adopted by Cornwall Planning Commission **16 March 2023**

Adopted by Cornwall Select Board **6 June 2023**

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INTRODUCTION



General Description

The town of Cornwall, which celebrated its 250th anniversary in 2011, is located in west central Vermont about 10 miles east of the southern end of Lake Champlain. Cornwall is located in the southern portion of Champlain Valley and has an area of 18,688 acres or roughly 29.2 square miles. It is bounded on the north by Weybridge, on the west by Bridport and Shoreham, on the south by Whiting, and on the east by Salisbury and Middlebury. Its village center is located southwest of Middlebury at the junction of Vermont Routes 30 and 74.

Purpose of the Plan

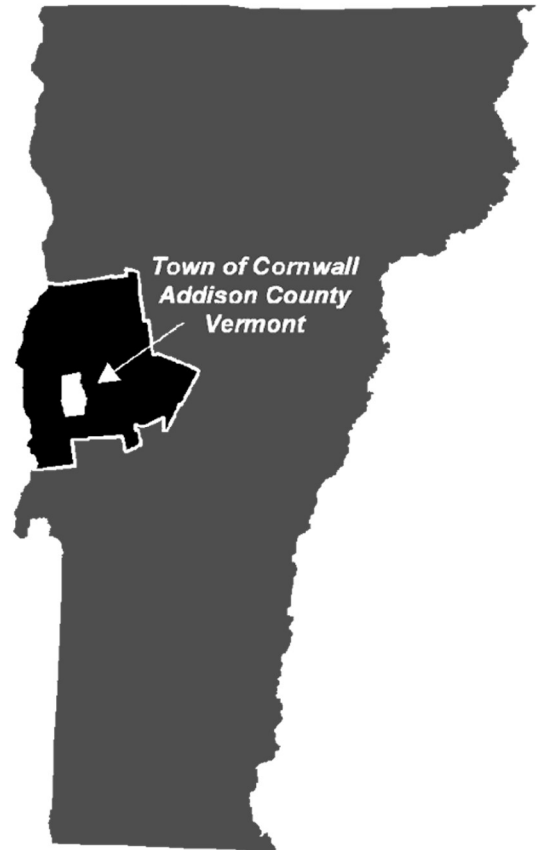
The purpose of the Cornwall Town Plan is to define a long-term vision for the town, provide a means of achieving that vision, and to balance the town's diverse values and priorities. The plan is designed to serve as the primary reference when making community decisions and provide guidance to local officials when setting public policy or, where appropriate, making recommendations in specific regulatory proceedings. It establishes policies that will help safeguard the heritage and shape the future of the town as Cornwall faces potential change and development over the next five years.

The plan discusses those features of Cornwall that combine to make it a special place, such as wildlife habitats, historic structures, scenic vistas, and cultural institutions, the maintenance of which contribute significantly to the quality of life for town residents.

Organization of the Plan

The plan is divided into three main sections: **Cornwall Yesterday**, **Cornwall Today** and **Cornwall Tomorrow**. Cornwall Yesterday describes the evolution of the town, its people and landscape over the past 250 years. Cornwall Today characterizes the current state of the town across a range of topics including housing, the economy, community facilities and the environment. Within the Cornwall Today section these topics are addressed through an inventory of facts and figures, drawn from the latest U.S. Census, as well as a more qualitative analysis of needs and opportunities. Cornwall Tomorrow outlines the vision, goals, objectives and policies that will chart the town's direction.

The plan ends with a section that outlines steps the town should follow to implement the goals and policies of this plan over the next five years, and reviews the plan's compatibility with the plans of its neighboring municipalities and the region.



Acknowledgements

The Cornwall Planning Commission would like to acknowledge the support and efforts of those people and entities that have made the development of this plan possible. First, work on this plan was supported with a 2021-2022 Municipal Planning Grant from the Vermont Department of Housing and Community Affairs. This funding made it possible for the Addison County Regional Planning Commission to provide technical assistance throughout the planning process. We would like to acknowledge the special expertise of Katie Raycroft-Meyer, Andrew L’Roe, and John Van Hoesen.

Completing this updated plan also would not have been possible without the participation of town officials, the members of the many committees and organizations that make Cornwall function so well, and residents who took the time to participate.

Special thanks to:

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We are also grateful to Don Shall whose photos once again illustrate the plan.

Thanks to you all from the Cornwall Planning Commission.

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CORNWALL YESTERDAY



TOWN HISTORY

This section is a brief history of the town, which provides context for discussing how and why Cornwall came to be the community it is today. When planning for the future, it is always best to first begin with an understanding of the past.

Pre-colonial history

There is a long history of human habitation in the Champlain Valley, going back more than 10,000 years to when the glaciers last retreated. The Native Americans who lived here left no written record, but the early colonial settlers of the region were fascinated by the numerous artifacts they found as they cleared and plowed the land. Native American settlements seem to have been concentrated along major waterways, including the Otter Creek, which served as transportation routes. The evidence found of the region’s first inhabitants includes tools of all kinds, cooking pots and pottery fragments, projectile points and spears, chips and flints, large stone fire hearths, foundations of longhouses, tilled land along some streams and burial grounds. These archaeological finds point to long-term habitation of the area.

Recent scholarship suggests that the Native Americans living in the Champlain Valley at the time of first contact probably were Abenakis and Mahicans. Foreign diseases carried by Europeans to the Americas and the many years of warfare in the valley left the region largely unpopulated when the first Europeans began settling what was to become the town of Cornwall.

Early Settlement

The first permanent colonial settlement in Cornwall took place in 1774. Fourteen men from Litchfield County, Connecticut made their “pitches” along Otter Creek in an area that was deeded to Middlebury in 1796. The charter granted to them was signed by Benning Wentworth, governor of New Hampshire, on November 3, 1761. At the time of settlement in Cornwall, Vermont was considered part of New Hampshire. People who were granted title to land were from Connecticut, Massachusetts or Rhode Island and lived by the traditions

of those places. New York also claimed Vermont and regularly disputed the grants given by New Hampshire. Conflicting land claims and boundary disputes were common. Original deeds were voided by New York, and some settlers had to repurchase their land before legally occupying it.

Settlement was stimulated by Cornwall's attractiveness, natural resources, and relatively low land prices and by the terms of the original grants. The proprietors had to meet certain provisions in order to retain their land. These conditions included a requirement that: settlers cultivate

Cornwall Population 1791-2020

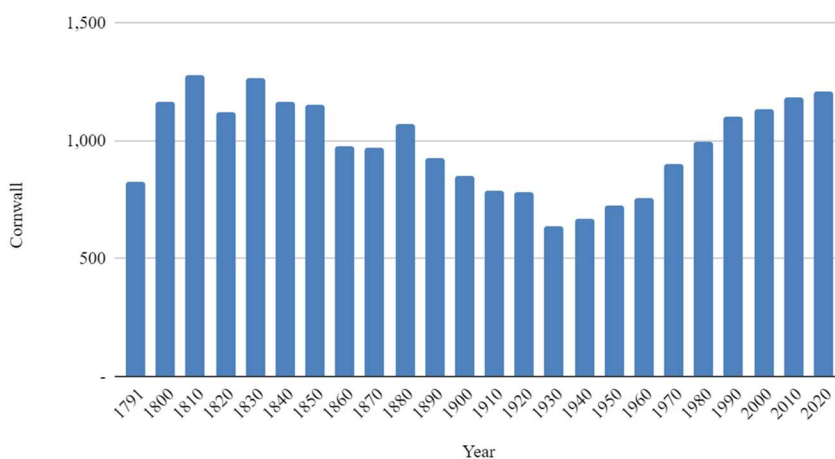


Table 1. Historic Census population counts for Cornwall

and plant five acres for every 50 owned within five years; all pine trees fit for ship masts be given to the Royal Navy; and a town center had to be laid out prior to any further subdivision of outlying land. Lots were also to be created for the first minister and for the first child born in the town.

Many of the original grant requirements were ignored. Pitches were made without regard to the original surveys. Considerable areas of land were subdivided and sold to pay for services rendered in the construction of the town's first roads.

Life in the early years was difficult, but apparently rewarding. Transportation routes were almost non-existent. People traveling to Cornwall from southern New England had to travel either by foot along a blazed trail from southern Vermont or by raft or sled down Otter Creek. Land could only be cleared of trees and rock at a rate of a few acres per month.

Despite these early difficulties Cornwall's population grew rapidly (see Table 1). Just after the Revolutionary War, the population was the highest of any town in Addison County. By 1840, Cornwall's population had reached 1,027 people. Rapid growth seems to have been both encouraged and disliked. Selectmen, fearful that the town might become responsible for large numbers of paupers, regularly sent summonses to new residents advising them to leave the town.

A Town Develops

The years leading up to the War of 1812 were productive ones for most people of the town. Larger and larger areas were cleared for crops. As long as there were trees to clear, the town had its first major export- potash, which was made from wood ashes. Potash and pearlash were shipped to ports as far away as England. The first farms permitted the establishment and development of other economic activities.

Word of the richness of the soil and agreeable climate encouraged more people, many of them Revolutionary War veterans, to come to Cornwall. In a short time, the town was able to boast several small hamlets, a church, a store and a "house of amusement," a library, a tavern, tanneries, and asheries, in addition to several successful farms. There also appears to have been considerable land speculation. One farm in the town reportedly changed hands no less than 14 times in 20 years.

The War of 1812 dampened growth in the state. Embargoes prohibited trade with Canada, which was an important market for farmers. Many goods were smuggled there nonetheless. The impact of the war was magnified by disease, crop failure and bad weather. The opening of the Champlain Canal in 1822 and the Erie Canal in 1825 made goods from the Midwest and west less costly.



Facade of Congregational Church

Soon thereafter, Cornwall's sheep industry began to thrive. Over 5,000 sheep were reported in the town during the 1840s. In the mid-1800s, the success of the sheep industry brought the town national and international recognition. Cornwall and Addison County were recognized as a hub of this important industry with sheep being exported throughout the world. Sheep, oiled and colored to look like top quality Merinos, were said to have a "Cornwall finish." Although sheep dominated the agricultural economy at this time, the townspeople also developed a respect for fine horses and cattle.

During the prosperous years of sheep-raising, residents constructed a number of new district schoolhouses to provide for the education of their children. Cornwall and West Cornwall villages remained modest centers throughout the 1800s. The Congregationalists remodeled their 1803 church in 1862. Farmers organized a chapter of the Vermont Grange in 1874 that met in the Cornwall Town Hall, after it was built in 1882. Next door, the Stowell family ran a store and the local post office from their home. In West Cornwall, the "Free Church" remodeled the Baptist meetinghouse and residents built their District School Number 5.

Around 1850, Cornwall entered a period to which some state historians refer as the Great Migration. Between 1850 and 1870, Cornwall's population fell to 775. The causes of the outward migration were varied. The Civil War took many men off local farms; some who survived sought new lives in the west instead of returning home. Many women went west with their husbands or left to work in the factories of southern New England. The relocation of the sheep industry to the western states and Australia also contributed to the population decline. New farm machinery allowed farms to function with less manpower. Smaller farms were consolidated into larger ones, which led to prolonged periods of limited economic opportunities.

Improvements in transportation during the last half of the 1800s allowed travel and trade to occur over greater distances than previously had been possible. Railroads arrived in Addison County in 1851. The railroads

permitted greater agricultural specialization and sparked the development of the dairy industry. Trains made it possible to ship butter, cheese, and eventually milk to the Boston market. Creameries were established to foster a growing dairy industry. Railroads refocused trade at major junctions along transportation routes. Consequently, Middlebury, Vergennes and Bristol developed significant industrial sectors while Cornwall's economy centered on agriculture.

During the Last Century

One notable addition to the town at the start of the 20th century was the Sampson Memorial Library, built in 1915 by the Mary Baker Allen Chapter



D.A.R. Sampson Memorial Library

of the Daughters of the American Revolution.

Orchards broadened the agricultural base and grew to considerable importance around the turn of the century. The first commercial Macintosh apples grown in Cornwall were planted in 1908; the first Red Delicious and Northern Spy, in 1910 and 1911, respectively.

During the Great Depression of the 1930s, farming allowed most families to provide for their basic needs. Agriculture served as a common focus in people's lives. Agricultural societies, like the Grange (Patrons of Husbandry), helped meet residents' needs for recreation, education and interaction. The First and Second World Wars, like the Civil War, encouraged emigration. Many soldiers left the town for the rapidly expanding urban centers of the east and west coasts for a wider range of available opportunities.

Throughout the 1940s and 1950s, Cornwall was still very much a traditional agricultural community. While growing slowly and steadily, the town resisted change. Starting in the 1960s, residential development began to accelerate. This was in response to the national trend of "reverse migration," which is the movement from urban to rural areas. New residents moved to Cornwall seeking a small-town atmosphere and a sense of community. In 1965, Standard Register opened in Middlebury, which helped the local economy and brought more people into the area. During this time Middlebury College increased the size of the student population, faculty and staff, and constructed more buildings thereby increasing employment opportunities. Longtime residents feared that, as a result of rapid growth, the town might change.

Growth continued through the 1970s and 1980s, as the town attained population levels not seen since the early nineteenth century. Changes in the number and size of farms accompanied the growth in population. The number of dairy herds fell from 71 in 1953, to 28 in 1977, to 5 in 2004. In 2010, four dairy herds and one commercial orchard remained in production. On a brighter note, much of the cropland is utilized by other farms in Cornwall and neighboring towns. There is also an increase in value-added and specialty agriculture on a commercial scale and Cornwall currently has several examples such as: goat cheese and soap production, apiaries, beef, pork, and chicken growers, and an iced cider producer.

Farms have helped define Cornwall's identity since the time the town was first settled and their loss has been observed with sadness. Almost all new development has occurred in rural and low-density areas.

Changes in agriculture and the increase in a more suburban pattern of development are driving forces behind Cornwall's planning efforts. The remaining sections of this plan will clearly detail what type of community Cornwall is today and identify a path that should help ensure that Cornwall remains a healthy and vibrant place in the future.



Cupola on 19th century barn.

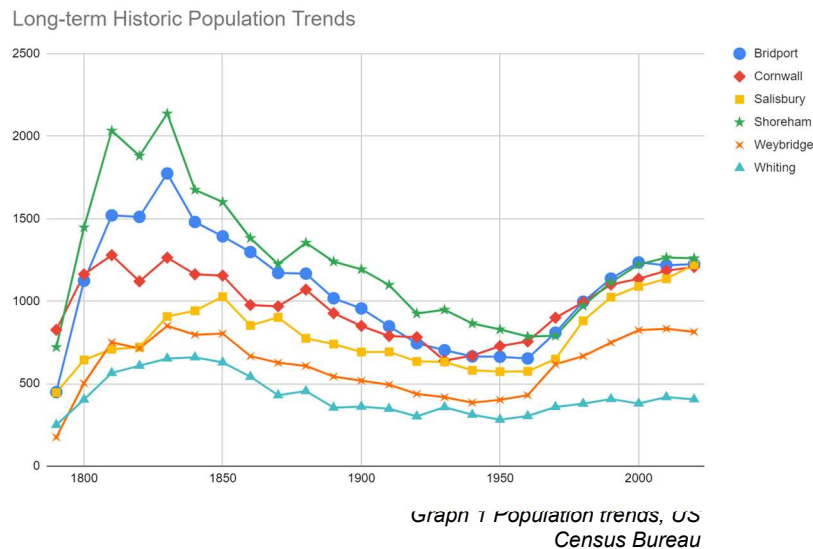
CORNWALL TODAY



POPULATION

This section briefly discusses a wide range of information on the population of Cornwall. Information on population helps paint a picture of the community and its people and suggests needs, problems and strengths within the town.

INVENTORY



Current and Historic Population

Cornwall's population has grown 6.25% since 2000 to reach a total of 1207 according to the 2020 census, the highest it has been since 1830. As shown by Graph 1, the town's population has risen and fallen, sometimes dramatically, following a pattern similar to neighboring towns, usually in response to economic conditions like the collapse of Vermont's sheep industry and the Depression. The most dramatic growth, an increase of 19%, took place in the 1960s and 1970s. This growth resulted more from new residents moving in rather than from a natural increase resulting from more births than deaths. Many Vermont towns had similar experiences as large numbers of urban dwellers sought "refuge" in rural areas. Growth in Cornwall slowed and stabilized during the 1970s and 1980s and has remained slow.

Town	Population						
	1960	1970	1980	1990	2000	2010	2020
Cornwall	756	900	993	1,101	1,136	1,185	1,207
Bridport	653	809	997	1,137	1,235	1,218	1,225
Middlebury	5305	6,532	7,574	8,034	8,183	8,496	9,152
Salisbury	575	649	881	1,024	1,090	1,136	1,221
Shoreham	786	790	972	1,115	1,222	1,265	1,260
Weybridge	430	618	667	749	824	833	814
Whiting	304	359	379	407	380	419	405

Table 1 Total Population Counts for Cornwall and neighboring towns

Town	Population Change											
	1960 - 1970		1970 - 1980		1980 - 1990		1990 - 2000		2000-2010		2010-2020	
	#	%	#	%	#	%	#	%	#	%	#	%
Cornwall	144	19.0%	93	10.3%	108	9.8%	35	3.2%	49	4.3%	22	1.9%
Bridport	156	23.9%	188	23.2%	140	14.0%	98	8.6%	-17	-1.3%	7	0.5%
Middlebury	1,227	23.1%	1042	16.0%	460	6.1%	149	1.9%	313	3.8%	656	7.7%
Salisbury	74	12.9%	232	35.7%	143	16.2%	66	6.4%	46	4.2%	85	7.5%
Shoreham	4	0.5%	182	23.0%	143	14.7%	107	9.6%	107	8.7%	-5	-0.4%
Weybridge	188	43.7%	49	7.9%	82	12.3%	75	10.0%	9	1.0%	-19	-2.3%
Whiting	55	18.1%	20	5.6%	28	7.4%	-27	-6.6%	39	1.0%	-16	-1.4%

Table 2 Population Trends for Cornwall and neighboring towns

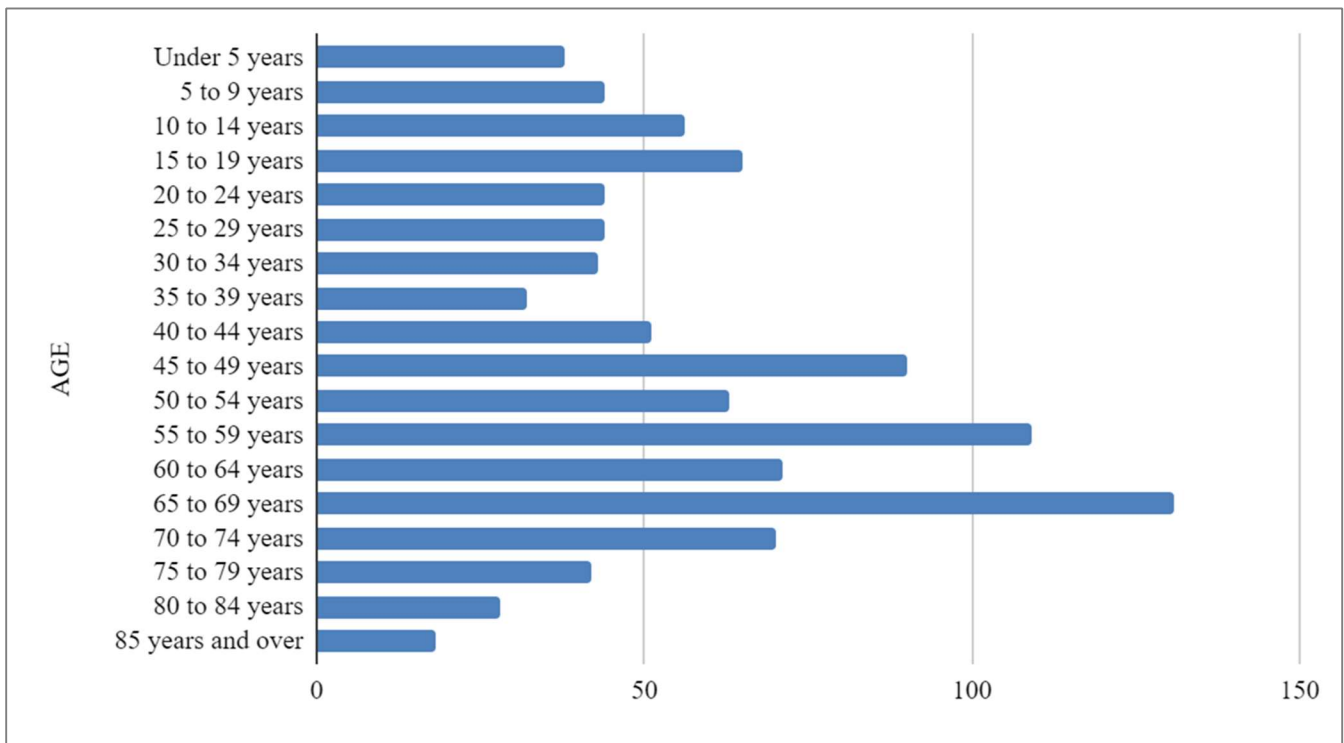
As can be seen in Table 2, Addison County towns grew at different rates each decade. While Cornwall's growth in the past ten years was minor, Shoreham, Weybridge, and Whiting lost population. Of the towns which border Cornwall, Middlebury saw the most growth. Over the past 40 years, Cornwall has generally grown at a slower rate than most of its neighbors with the exception of Whiting. Salisbury, Weybridge and Bridport all saw

population increases of around 95 percent between 1960 and 2010 while Shoreham, Middlebury and Cornwall have grown by 50 to 60 percent over the same period.

General Population Characteristics

Of the 1207 residents of Cornwall 92% are white alone, 3% are Black/African American, Native American/Alaskan Native, or Asian alone while 5% are of two or more races.

Cornwall’s population continues to age. According to the US Census Bureau’s American Community Survey (ACS) Five Year Estimates 2015-2019, Cornwall’s median age was 50.8 years old while Addison County’s was 43.7. In 2010 Cornwall’s median age was 46, and just over 40 years ago in 1980 it was 28. Those residents over traditional retirement age now make up approximately 29% of Cornwall’s population up from 17% in 2010. Meanwhile, the percentage of young people under 18 has dropped to 17%. ¹



Graph 2. Age distribution of residents (Census 2020)

¹ U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>; *Cornwall Town Plan, 2013*.

ANALYSIS

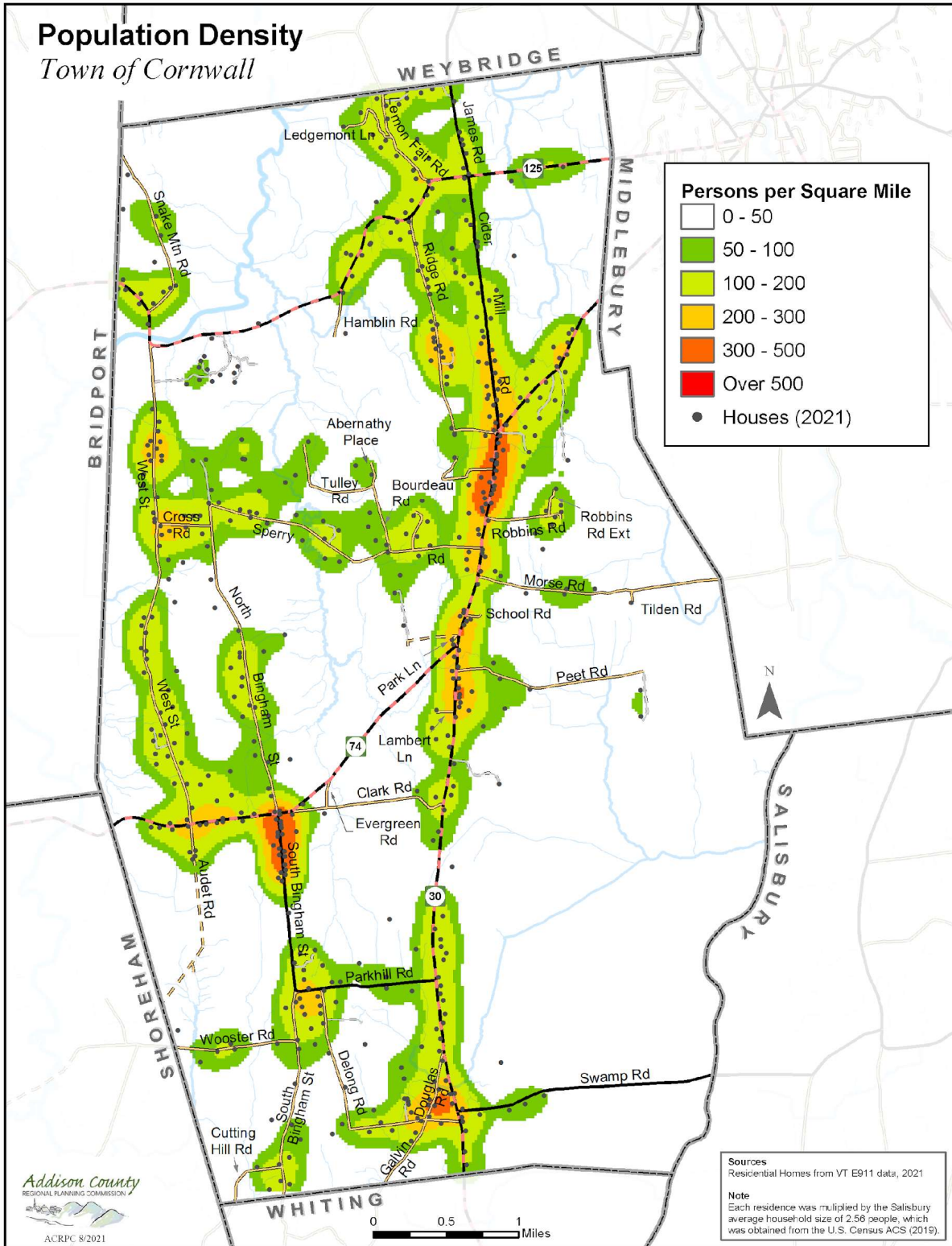
Components of Population Change

The factors which affect where people will choose to live are so complex that there is no sure way to project population growth accurately. Given roughly half the present population in Cornwall is over 50, growth will be controlled to a great extent by in-migration. With 1207 residents in 2020, Cornwall has already just barely surpassed the Addison County Regional Planning Commission's minimum growth projection, an average percentage growth rate of 1.8%.

Ready access to jobs is one of the key determinants of population change. Cornwall has few employment opportunities so this has probably not been a crucial factor in drawing many new residents. Most commute to work outside the town. This may change thanks to new technology. Telecommuting had already allowed some residents to telecommute before the COVID-19 pandemic made this a much more general practice. With the improvements in the necessary infrastructure planned by Cornwall and the surrounding towns, newcomers may choose to live here no matter where they work.

Availability of land and the cost of new construction also impact a community's rate of growth. Cornwall still has open farmland which could be developed but prices per acre are high and, thanks to the pandemic, so are the costs of materials. This and the lack of rental properties limit the supply of workforce and affordable housing in town, more than likely contributing to fewer young people being able to move here. The potential closure of the school, despite the school age population holding fairly steady, and the lack of affordable childcare may also affect a young family's choice of where to live.

On the other hand, quality of life, community character and proximity to Middlebury and the College have drawn retirees to Cornwall and other towns in the area thanks to the recreational, cultural and educational opportunities college towns generally provide. This helps explain the rapid growth of the senior population and may continue to be one of the most important factors spurring Cornwall's growth. While the town could benefit from this if it finds a way to harness the time and expertise of the retirees to support community projects and improvements, it will also have to find ways to provide services to more elderly residents.



Map 1. Population density for Cornwall - ACRPC

HOUSING

This section provides an overview of housing in Cornwall. Planning for housing is one of the most important aspects of a town plan. A community's plans for its housing needs can have a direct impact on local public services and facilities, economy, transportation, and the conservation of natural resources. A safe, adequate home is a fundamental need of every Vermonter. Housing is basic to survival; it offers shelter from extreme elements and serves as a center for personal and family life. In order to thrive and prosper Cornwall residents must have adequate, affordable and safe places in which to live.

INVENTORY

Current and Historic Housing

Cornwall has approximately 585 housing units according to the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates 2015-2019², an increase of more than 109 percent, or 306 units, over the past fifty years. A housing unit is a house, apartment, mobile home, or group of rooms occupied as separate residences. A large majority of the town's housing units consist of year-round dwellings. However, the growth in housing units over the last decade appears to be largely due to an increase in the number of seasonal or occasional use homes and rental units. An estimated 79 units were classified as seasonal, recreational or occasional use units in the 2015-2019 ACS data,³ a dramatic increase from an estimated 28 in 2010. During this period, rental housing also increased by 31 units.⁴ The number of year-round owner-occupied units actually decreased slightly during this time.⁵ In recent years, there has been a noticeable uptick in the use of Cornwall homes for short-term rental housing. This relatively new use is not currently addressed in the Town's zoning regulations.

	Total Units	Year-round Units		Seasonal Units		Year-round Units				Year-round Occupied Units			
						Occupied		Vacant		Owner		Renter	
		#	%	#	%	#	%	#	%	#	%	#	%
1970	279	256	91.8%	23	8.2%	248	96.9%	8	3.1%	196	79.0%	52	21.0%
1980	341	340	99.7%	1	0.3%	324	95.3%	16	4.7%	271	83.6%	53	16.4%
1990	416	414	99.5%	2	0.5%	387	93.5%	27	6.5%	317	81.9%	70	18.1%
2000	464	448	96.6%	16	3.4%	427	95.3%	21	4.7%	362	84.8%	65	15.2%
2010	517	489	94.6%	28	5.4%	468	95.7%	21	4.3%	387	82.7%	81	17.3%
2019	585	497	84.5%	79	15.9%	470	94.6%	27	5.4%	385	77.4%	112	22.5%

² U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>

³ Vermont Housing Finance Agency. "Housing Units [Cornwall]," <https://www.housingdata.org/profile/housing-stock/housing-units>

⁴ Ibid.

⁵ Ibid.

Table 1: Housing Units in Cornwall 1970-2019; Source: U.S. Census Bureau⁶

Cornwall has 470 households with an average size of 2.36 people according to the 2015-2019 ACS data.⁷ The number of households has increased substantially in the last five decades from 248 in 1970, while the average household size has declined from 3.63 people in 1970. Over the last fifty years, Cornwall has seen a significant reduction in average household size while at the same time there has been a significant growth in average home size throughout Addison County.⁸ Of the 470 households, 361 consist of homeowners and 109 consist of renters.⁹ Despite the steadily increasing percentage of renters, Cornwall's renter population (23%) is smaller than statewide (29%).¹⁰

Cornwall averaged a homeowner vacancy rate of 6.2 percent and a rental vacancy rate of 2.7 percent during the period 2015-2019.¹¹ A vacancy rate below five percent is considered low, according to the Vermont Department of Conservation and Housing. Throughout the 2000s, there has been a shortage of housing in northwestern Vermont, particularly workforce and affordable housing. The housing shortage has been sharpest in Chittenden County, but also has been noticeable in Addison County. The Town's Grand List for 2021 included 513 dwellings, 96% of which were classified as either a residence on less than six acres (R1) or a residence on 6 acres or more (R2). The remaining 18 properties were designated as mobile homes.¹² Owners of 353 (68.8%) of the dwellings filed a Vermont Homestead Declaration stating that the dwelling was their primary residence.

Approximately 30 percent of Cornwall's housing was built before 1940, and roughly 25 percent has been built since 2000.¹³ Four affordable housing units were built in Cornwall in 2012, as a Habitat for Humanity project. This was the first project of its kind in the area.

Housing Costs

The median price of homes sold in Cornwall in 2019 was \$393,000,¹⁴ which is approximately \$140,000 greater than the median home price was in 2010. It is also approximately \$150,000 greater than the median price of

⁶ For 2019 data: Vermont Housing Finance Agency. <https://www.housingdata.org/profile/housing-stock/housing-units>; <https://www.housingdata.org/profile/housing-stock/vacant-homes>; <https://www.housingdata.org/profile/rental-housing-costs/vacancy-rate>

⁷ U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>.

⁸ Addison County Regional Planning Commission. "Chapter 2." *Draft-Population and Housing Report for the Addison County Regional Plan, 2021*. p. 23. https://acrpc.org/wp-content/uploads/2021/09/pop-and-housing_draft_09_01_21.pdf.

⁹ U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>.

¹⁰ Vermont Housing Finance Agency. "Populations and Households." *Vermont Housing Data*. <https://www.housingdata.org/profile/population-household/households-by-tenure>.

¹¹ U.S. Census Bureau, *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>; Vermont Housing Finance Agency. "Vacant Homes." <https://www.housingdata.org/profile/housing-stock/vacant-homes>; Vermont Housing Finance Agency. "Rental Housing Costs." <https://www.housingdata.org/profile/rental-housing-costs/vacancy-rate>.

¹² Note the Town Lister data does not include statistics on apartments.

¹³ *Town of Cornwall Grand List*, Last Updated January 24, 2022.

¹⁴ *ACRPR Draft Population and Housing "Chapter 2,"* p. 28.

homes sold both throughout Addison County and the State of Vermont.¹⁵ Cornwall has the highest ratio of home prices to county incomes of any town in Addison County, with a ratio exceeding 5.0.¹⁶ Cornwall's Grand List indicates that the median price of homes sold in 2021 in the Town has risen further to \$406,000. The median assessed home value for all Cornwall was \$346,000 in 2021 and the average was \$423,000.

The State's definition of affordable housing is based on what a household earning 80 percent of the county median family income could afford, while spending 30 percent or less of their gross income on housing (i.e., mortgage/rent, taxes, insurance and utilities). The 2015-2019 Addison County median family income (MFI) was \$68,825.¹⁷ A household earning 80 percent of the Addison County MFI would have an annual income of \$55,060¹⁸ and could afford to spend about \$1,376¹⁹ a month on housing. Median monthly owner costs in Cornwall were \$1,856 according to the 2015-19 ACS data.²⁰ Based on median household incomes, 30 percent of Cornwall homeowners spent 30 percent or more of their monthly incomes on housing costs.²¹ This is 10 percentage points lower than the comparable data from 2009, but slightly higher than the 2015-19 statewide number of 27%. Nearly 40% of renters in Cornwall spent 30 percent or more of their monthly incomes on housing costs in 2015-19, as compared to 75 percent in 2009.²² This compares to 51 percent of statewide renters in 2015-19.²³ Median rent in Cornwall for 2015-19 was \$1,155, whereas the Statewide median was \$985.²⁴

ANALYSIS

Future Need for Housing

The future need for housing in Cornwall will continue to be driven by several factors including change in population, change in household size, change in the characteristics of households, homeowner finances, the cost of permitting and construction, the uses of existing units and the character and composition of the existing housing stock in town.

As the demographics of the population change, there may also be shifts in the type of housing Cornwall's residents want. Over the past 20 years, many of the homes constructed in Cornwall have been significantly larger and located further out in the rural areas than many of the older homes in town. In time, these houses become difficult for elderly residents to maintain and may be located too far from needed services. Options for single-family homes, including condominiums, town houses, apartments and adaptive re-use should

¹⁵ ACRPR Draft Population and Housing "Chapter 2," p. 27.

¹⁶ Vermont Housing Finance Agency. "Home Ownership Costs." <https://www.housingdata.org/profile/homeownership-costs/home-price-affordability>.

¹⁷ Vermont Housing Finance Agency. "Community Snapshot." <https://www.housingdata.org/profile/snapshot>.

¹⁸ 80% * \$68,825

¹⁹ 30% * \$68,825

²⁰ U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/>

²¹ Vermont Housing Finance Agency. "Homeownership Costs." <https://www.housingdata.org/profile/homeownership-costs/homeowner-cost-burden>.

²² Vermont Housing Finance Agency. "Rental Housing Costs." <https://www.housingdata.org/profile/rental-housing-costs/renter-cost-burden>.

²³ Vermont Housing Finance Agency. "Rental Housing Costs." <https://www.housingdata.org/profile/rental-housing-costs/renter-cost-burden>.

²⁴ Vermont Housing Finance Agency. "Rental Housing Costs." <https://www.housingdata.org/profile/rental-housing-costs/median-gross-rent>.

continue to be explored to determine if they could be accommodated in certain areas of Cornwall in a manner that is compatible with the community's character.

In order to maintain a demographically balanced community, Cornwall needs to attract (and retain) younger residents as well older residents. Currently, most of the children growing up in Cornwall leave the community after high school. While most parents want their children to continue with their education or start their careers, many hope that they will ultimately be able to return to the area to find jobs, own homes and start their own families. This is currently very difficult for most of Cornwall's young people, as there is a shortage of housing in Cornwall that is safe, affordable and suitable for young individuals and families.

The Town should encourage the development of additional workforce and affordable housing that meets the strong demand for safe and affordable housing that is right-sized both for younger individuals and families, as well as older residents with limited means. The latest generation of workforce, affordable and mixed income housing is based on good planning, minimal impact and recreating the neighborhood design of New England villages. Construction of new housing options, including rental housing, consistent with these good development practices should be a priority to make it possible for young people, as well as elderly residents, to live in Cornwall. The 2012 Habitat for Humanity project, which includes four new housing units on Delong Road, is a good example of implementing these goals and should continue to be encouraged for the future.



Map from 2004 planning exercise showing new residential housing (with white thumb tacks)



ECONOMY

Cornwall's local economy is based primarily on out-of-town employment, agriculture, home-based businesses and several small businesses. Planning for how the community manages its land resources also is part of the economy. As a community, we wish to support the businesses in town and assist landowners as they steward these resources.

INVENTORY

Income for Residents

According to the Vermont Department of Taxes, Cornwall's income levels are well above the Addison County medians. The income of the town's residents has been among the highest in the region for the past 35 years. The Vermont Department of Taxes summary of median family income in Cornwall has risen from \$57,086 in 2000 to \$78,527 in 2009 and more recently to \$109,619 in 2019. In comparison, the Addison County median family income in 2019 was \$78,872. When adjusted for inflation to 2019 dollars, the net increase is roughly \$15,500 from 2009 to 2019.

On the other hand, 13 Cornwall residents earn only 50% of the Federal poverty guideline for annual income which in 2020 was \$12,760. Another 58 residents earned 125% of that guideline.

Educational Attainment for Residents

<i>Education attainment, Town and County</i>		
	Cornwall	Addison County
<i>Less than high school diploma</i>	2%	6%
<i>Regular high school diploma or GED</i>	22%	30%
<i>Some college</i>	9%	15%
<i>Post-secondary degree (AD, BA, etc.)</i>	38%	33%
<i>Advanced (Masters, Doc.)</i>	29%	16%
<small>Summarized from ACS 5-year estimate, 2020 B15003</small>		

Table 1. Educational attainment for Cornwall and Addison County, Vermont; Source: U.S. Census

The majority of Cornwall’s townfolk form a highly educated workforce. With all of Addison County for comparison, Cornwall has proportionally more people who have completed post-secondary education, and relatively fewer people who have not completed high school. As illustrated in Table 2, many of Cornwall’s residents are employed in educational and health care services, including Porter Medical Center and Middlebury College, which would account for a number of these advanced degrees.

Employment

In 2020, 46% of the Cornwall workforce was employed in the educational services, health care and social assistance professions. The top three employment industries, the sectors that begin with Educational Services; Professional; and Retail, which employ more than twice the remaining industries represented in the town’s workforce. This illustrates one of the central tensions to land use planning in Cornwall - while our town has the appearance of a working rural landscape, the vast majority of its residents are engaged in non-agricultural industries.

INDUSTRY	
<i>Civilian employed population 16 years and over</i>	
Educational services, and health care and social assistance	46.40%
Professional, scientific, and management, and administrative and waste management services	13.50%
Retail trade	12.20%
Other services, except public administration	6.70%
Arts, entertainment, and recreation, and accommodation and food services	5.40%
Construction	5.20%
Transportation and warehousing, and utilities	2.80%
Manufacturing	2.20%
Finance and insurance, and real estate and rental and leasing	1.50%
Public administration	1.10%
Wholesale trade	1.10%
Agriculture, forestry, fishing and hunting, and mining	0.90%
Information	0.70%

Table 2. Cornwall employment by sector; Source: U.S. Census

Many of the jobs held by town residents are outside the boundaries of Cornwall. As illustrated in the map below, a great number of residents work in the Town of Middlebury. Two areas of Middlebury are highlighted as dense areas of employment for Cornwall folk: near Middlebury College and Porter Medical Center. Beyond the borders of Addison County, many Cornwall residents work in Burlington and Chittenden County.

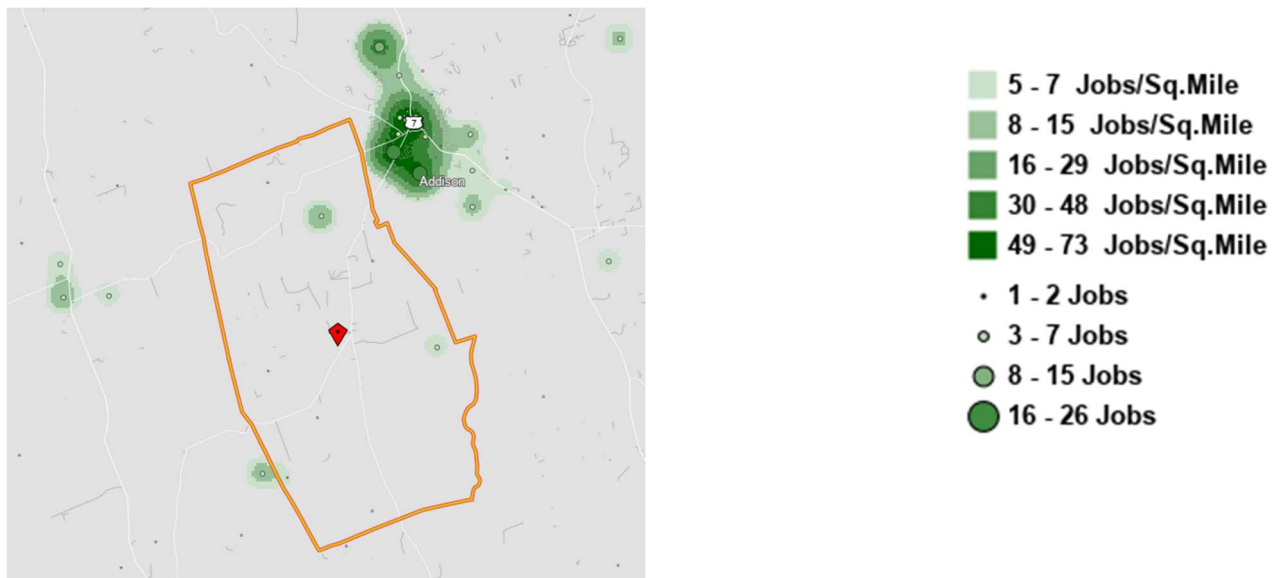


Figure 1. Map from US Census Bureau On the Map tool, <https://onthemap.ces.census.gov/>

As of 2020, the American Community Survey estimates that there are 890 individuals over the age of 16 in Cornwall, 534 of whom are in the workforce. The majority of these individuals, approximately 390, get to work by driving alone, with a small amount carpooling or using other means of travel. During this same period, 83 individuals worked from home, relatively level with the 78 who were estimated to have worked from home in 2010. It also should be noted that much of the surveying for the 2020 American Community Survey took place in the first half of the year, which was still early in the COVID-19 pandemic.

Another facet of the town's economy is the portion of the population who are retired. The US Census Bureau tracks the number of households that received retirement income. While not a perfect measure, it can provide some point of reference. According to the American Community Survey, there has been a general trend upwards in the number of households receiving retirement income. In 2010 the survey states that 18.3% received retirement income, in 2015 it was 10.9%, and in 2020 28.1%. In each case, the margin of error for these numbers suggests some possibility for variation, but they suggest Cornwall has roughly 1 in 5 households, out of 442 households in 2020, that receive retirement income.

Although agriculture employs fewer of our residents than historically has been the case, the landscape of the town is visually and in practice still engaged in agriculture. According to the State of Vermont's records on the Current Use Program, there are about 7,845 acres in town enrolled in the program. This is a little over 40% of the town's total area being managed for agriculture and silviculture.

And while there are few dairy operations in town, currently two, a dwindling number of other agricultural businesses maintain a noteworthy and varied presence.

Cornwall-based Non-agricultural Business

There are a number of townfolk who own and operate businesses in town or work from home. In addition to the retail operations of the two orchards, there are a variety of businesses in town, including a motorsports and boat storage facility, several construction and excavation firms, a vehicle body shop, a rug hooking school and retail operation, as well as others. Aside from businesses that actively seek local customers, several townfolk run their businesses from home. One noteworthy absence is the small childcare center that has closed since the last writing of the town plan. The lack of childcare providers in Cornwall and neighboring communities, not only has revenue and employment impacts in the town, but also has the ripple effect of making it harder for local working parents to find childcare so that they can work. Another form of local business that has blossomed in the past decade is the use of residential homes as short-term rentals. At present, very little is known about the impact of these on the local economy and the housing market, but the monetization of residences for temporary accommodation should be included for a complete picture of the local economy.

Cornwall's work-from-home contingent, according to the American Community Survey, saw marginal growth since 2010, but that is also possibly quite different now due to changes from the pandemic.

Demographic Considerations

Many Cornwall residents enjoy a relatively high standard of living with regionally high incomes and advanced degrees. This information, paired with the demographic discussion of the Population section, should highlight the fact that Cornwall is a community of mostly high earning and/or high net worth individuals many of whom are in a later stage of their career or retired. As the Population section noted, there are some members of our community living below the poverty line. Our plans should reflect the community and be mindful of the range of households that are part of the town. The Planning Commission should seek to better understand the avenues the town might have to encourage the in-flow of younger people and a greater variety of incomes and employment.

Agricultural Economy

The appearance of an agricultural landscape is a large part of Cornwall's appeal as a town. People in Cornwall have long depended on the land to generate regular income, but over time the value derived from the landscape tends to be more from real estate, and less from farm-based income. Aside from the profits generated by property sales, available land becomes perceived as being more valuable and thus less affordable for those interested in agriculture pursuits.

It is a state and local priority to preserve prime agricultural land and Cornwall should consider how to continue to plan for agriculture to be a key element of our local land use policy making. Aside from providing local employment, the thoughtful management of land can ensure we have access to land that can contribute to a local food supply.

Cornwall should continue to support a farmer's right to farm using Required Agricultural Practices. Farmers, along with the appropriate state and federal agricultural agencies, should also be encouraged to farm in an environmentally responsible way utilizing Accepted Management Practices (AMPs) and Best Management Practices (BMPs). Residents involved in planning and conservation should familiarize themselves with supportive resources for current farmers and those looking to acquire land to farm. Those involved in planning and zoning should look to creative agricultural policies which support on-farm businesses and boost the economic viability of farms.

Home-Based Businesses and Work-from-Home

There are a wide variety of non-agricultural home-based businesses in town, including those involving excavation, architecture, landscape design, woodworking, dog kennels and horse stables. Cornwall residents operate most of these from the property on which they live. Operating a business from residential property is a traditional practice in rural areas where the dominant economic activity, farming, could be described as a home-based business. Cornwall should support the ability of residents to work from home. Working in Cornwall may increase the chance of an individual becoming involved in town community activities, reduce the amount of commuting traffic on local roads, and generate economic activity within the town.

Some of Cornwall's home-based businesses pre-date the town's zoning regulations and many have been permitted as home occupations. However, some do not meet the strict definition of a home occupation found in the current zoning regulations or they have grown beyond them. From time-to-time, conflicts arise between business operators and their neighbors over the impacts of the business on surrounding property owners.

Cornwall should reexamine its regulations related to home-based businesses and develop standards that will allow many of the town's existing businesses to meet the legal standards of the regulations and that will protect neighboring property owners from potential nuisances that in certain situations may be generated by home-based businesses.

While some of the local businesses do not rely on the internet as a primary means of conducting business, many opportunities for remote work and ancillary elements of running a business rely on fast and reliable internet service. Currently, Cornwall has one internet-service provider offering DSL hardwire service and one offering high speed satellite service. Cornwall should consider how best to support local business with a concerted effort in updating high-speed internet infrastructure.

Maple Broadband, a local communications union district of which Cornwall is a member, has been working in conjunction with other local communities to upgrade broadband service in Addison County. Local people making these kinds of sizable investments in technological upgrades have some noteworthy historical precedent in Cornwall. Almost one hundred years ago during rural electrification, after other corporations had decided not to expand service into Cornwall, the town's residents joined with Salisbury to create a local utility company to extend service to everyone in both towns. Eventually, other small rural communities around Salisbury and Cornwall joined this company and many additional local towns were electrified through these efforts.

Commercial Development in Cornwall Village

Cornwall Village once was a commercial center, albeit small, that provided a variety of goods and services to local residents. Due to the closing of Longey's Cornwall Country Store in the 1980s and the Cornwall Store in the early 2000s, there is nowhere in town where residents can purchase basic groceries or other such goods. In a small town like Cornwall, a general store or cafe offers residents a public space outside of the home in which to meet and engage with neighbors, in addition to being a convenient place to purchase a few household necessities. As recently as 2011, a majority of residents in a Planning Survey supported some kind of small general store in town, with anecdotal support continuing to be strong.

Such commercial development should be of a scale appropriate to a small, Vermont village center and provide goods and services needed by town residents. Recently there have been some early moves to develop a small-scale retail business at the site of a former general-store type business. As of writing, this project is in the permitting phase.

While it is important to have a sense of what kind of amenities and services Cornwall residents would welcome, it is just as important to have a clear understanding of the limiting factors of implementing such plans. Lack of available land, water, and wastewater infrastructure are significant hurdles to discuss. The Town should be prepared to discuss these options for the future – when land becomes available, or a development project is proposed. Cornwall's zoning regulations should be reviewed to ensure that design standards, such as building size, permitted uses, signage, lighting and parking promote only relatively small-scale commercial activity and complement the character of the village. Investigation of potential wastewater infrastructure in the village also is recommended. The neighboring town of Shoreham, which constructed a treatment system in its village, may provide a model that could be used in other similarly situated rural hamlets.

EDUCATION

Education is an important planning topic for a number of reasons. In rural communities like Cornwall, the local school and its related events and organizations are a central component of community life and a mechanism for increasing residents' participation in and identification with their town. The quality of education in a community affects how attractive it is to new residents, especially those with children or about to start families.

INVENTORY

Overview of Schools

Cornwall is a member of the Addison Central School District (ACSD), which owns, maintains and administers the town's public elementary school, the Anna Stowell Sunderland Bingham Memorial School (Cornwall School), as well as the public middle school and high school located in Middlebury. The elementary school is located proximate to the Cornwall village center and currently serves children from kindergarten through fifth grade. The Middlebury Union Middle School (MUMS) educates the district's sixth through eighth graders and the Middlebury Union High School (MUHS) is the public high school for ACSD ninth through twelfth graders. Cornwall children attend MUMS and MUHS along with students from Bridport, Middlebury, Ripton, Salisbury, Shoreham and Weybridge. There are also a number of private schools in the area, although none are located in Cornwall.

Cornwall students and residents have access to vocational training at the Hannaford Career Center (the Hannaford Center) in Middlebury. The Hannaford Center also has the capability to offer distance learning and interactive educational programs. The Community College of Vermont (CCV) offers college classes, professional training and continuing education opportunities to adults from a site in Middlebury as well. In addition, Middlebury College offers a wealth of educational, enrichment and cultural activities and opportunities to the public.

Cornwall historically has had a handful of home-based early childhood education providers, but the bulk of the area's childcare programs are located in Middlebury and elsewhere in Addison County. Middlebury is home to several of the area's largest early childhood education programs, including Mary Johnson Children's Center, Otter Creek Child Center, College Street Children's Center, Aurora Preschool, Quarry Hill School and the Addison County Parent/Child Center, among others.

Cornwall School

As the only school located within the Town of Cornwall, Cornwall School is the primary focus of the Education Section of the Town Plan. However, MUMS, MUHS, the Hannaford Center, CCV, Middlebury College and the area's early childhood education centers all play important roles in educating Cornwall's children and residents.

a. The Facility

Cornwall School is a masonry and steel structure that was constructed in 1959. Prior to construction of the current school, Cornwall owned several “one-room” schoolhouses located in different parts of the town. By the 1950s, these schoolhouses had become overcrowded and outdated, and the student population was projected to continue to grow. Accordingly, Cornwallians recognized the need for a new, central school of sufficient size and capacity to educate all of the Town’s elementary school-age population for years to come. The tax rate at that time was relatively high, however, and public sentiment opposed any tax increase. Instead of funding construction through a tax increase, the Town spearheaded a campaign asking for personal contributions to offset the amount to be borrowed for the new school. In the end, the Town raised \$129,000 for the new school through donations and in 1959 the Peet family donated the approximately five-acre parcel that remains the home of Cornwall School today.

In February 2018, the Cornwall School building and land were deeded to the ACSD as part of the unification of the school district (the District) prompted by Act 46. The District now is responsible for the cost of operating, maintaining and making necessary capital improvements to Cornwall School. Previously in 2017, the District launched a facilities master planning process to review all of the ACSD’s school buildings, evaluate their condition, strengths and weaknesses and ultimately to determine what school facility projects to prioritize and how best to configure district resources, with the stated goals of ensuring student success, equitable opportunities across the entire ACSD learning community, and fiscal responsibility to ASCD taxpayers. The culmination of this planning process may result in the closure of one or more elementary schools in the District. If Cornwall School were to close, ownership of the school property would revert to the Town of Cornwall and the Town would have to determine what to do with the property.



Cornwall School playground

There have been many improvements to the Cornwall School building and property in recent years. Since 2016, the roof has been repainted to address cosmetic rusting issues and several efficiency and electrical upgrades were made to the building. In 2019, asbestos tiles from the halls were abated and new Flowtex flooring was installed. A wind turbine was donated and installed that not only provides electricity to the school, but also educational opportunities to the students. The playground has received several improvements, including adding trees as wind blocks, berms and other landscaping improvements. Also, several new playground structures

have been added in recent years, including a gaga ball court and the “chaos climber.”

b. Enrollment

During the 1960s, Cornwall School’s first decade of operation, enrollment reached as high as 126 students. Over the next few decades, however, enrollment dropped considerably. As of 1999, the school’s enrollment had decreased to 81 students. However, since the turn of the century, Cornwall School’s enrollment largely has been stable, hovering between the high seventies and the mid-nineties, with an average enrollment between 2004 and 2022 of roughly 83 students.

Year	Enrollment	Average Class Size
2004-05	91	13.0
2005-06	90	12.9
2006-07	80	11.4
2007-08	92	13.1
2008-09	96	13.7
2009-10	83	11.9
2010-11	78	11.1
2011-12	85	12.1
2012-13	80	11.4
2013-14	88	12.6
2014-15	77	11.0
2015-16	77	11.0
2016-17	81	11.6
2017-18	78	11.1
2018-19	76	10.9
2019-20	82	11.7
2020-21	87	12.4
2021-22*	78*	13.0
2022-23*	93	15.5
Average for 2004-23	83.8	13.0

*Table 1 – Cornwall School Enrollment (2004-2022) [*6th grade moved out of Cornwall School to MUMS]*

In FY 2022, the ACSD moved the sixth grades of all of the area elementary schools to MUMS, which reduced the Cornwall student population by 11 students to 78. However, notwithstanding this shift, the school projected enrollment of 84 students for FY 2022-23, which would have been the highest projected student population of any of the elementary schools in the District other than Mary Hogan. Instead, the actual enrollment exceeded expectations reaching 93 at the start of the 2022-23 school year. The capacity of the

Bingham Memorial School is 175 students (i.e., 25 students per classroom). Given current population projections, its capacity is not likely to be exceeded without a dramatic increase in the town's population, which is unlikely for the foreseeable future.

c. Costs

Public education is expensive, but a critically important investment. Though school budgets are now voted on at a district-wide level, Cornwall residents have been supportive of funding the district's schools. And for good reason: quality public schools have long-lasting positive effects on the students attending those schools, as well as beneficial ripple effects that resonate throughout the community and beyond. Notwithstanding inflationary pressures, the budget for Cornwall School in recent years has been fairly stable. The FY2011 school budget was \$1,299,806. Between FY2011 and FY2016, the school budget increased at an average rate of 2.76% of year. The unification of ACSD resulted in a substantial 27% decrease in the annual school budget for FY2017.

And since then, the school budget has averaged a modest 1.5% annual increase, which actually is lower than the national change in the consumer price index over the same period. The proposed FY2023 school budget is \$1,161,677.

d. Educational & Enrichment Programs

The Cornwall School has long provided quality educational experiences, enrichment programs and community building activities for Cornwall children. Like the other elementary schools in the ACSD, Cornwall is an authorized "primary years program" school that is part of the larger International Baccalaureate (IB) teaching and learning framework. The IB program focuses on big-picture concepts and utilizes an inquiry-based approach to education. The framework is intended to help students better understand themselves, others, their communities, and the world beyond through the concept of student agency. Embedded in the IB programming are traditional educational disciplines including math, reading, writing, science, history, social studies, computer literacy, music, art and physical education. In addition to the traditional curriculum, the school offers numerous outdoor education opportunities for students, including working in the school garden, learning in the school's outdoor classroom, and exploring the natural landscape surrounding the school and other local areas. Many of these opportunities have been funded and/or organized by the parent-led Friends of Cornwall School (FOCS) organization and made possible with the financial support of the Gilligan Fund. In recent years, the school and FOCS have offered a variety of enrichment activities to Cornwall students such as Four Winds Environmental Education and Nordic skiing. FOCS has also spearheaded afterschool outdoor, music and art programming for Cornwall students, in partnership with area nonprofits such as the Middlebury Area Land Trust, the Middlebury Community Music Center and the Middlebury Studio School. Cornwall School hosts special events throughout the school year such as harvest festival, grand-friends luncheon, gifts for giving, "all out" days and movie nights. It has also hosted several artists-in-residence over the years, recently including puppeteers from the No Strings Marionette Company and an instructor in capoeira, a Brazilian martial art.

The unification of the ACSD has moved ownership of and control over Cornwall School from the Town to the District. Accordingly, whereas previous iterations of this Town Plan have discussed at length needs for future improvements to the Cornwall School facility and short- and long-term educational planning, these decisions are no longer made at the local level. Rather, Cornwall residents now take part in a larger conversation of District-wide educational policy and facilities planning along with residents from the other towns comprising the ACSD. Ultimately the ACSD school board, in consultation with the District's various stakeholders, will determine whether and how investments are made in the Cornwall School facility, and more generally how it will allocate educational resources across the district. Cornwall has one representative on the 13-member ACSD school board.

While the town no longer has a direct role in educating its children, its decisions and policies do have an impact on education in the District. For instance, while Cornwall School's student population does appear largely to have stabilized over the last two decades, it is certainly much lower than when the school was built. Increasing the stock of affordable and workforce housing in Cornwall, investing in broadband and other infrastructure and amenities that can facilitate remote work, and supporting the provision of early childhood education and afterschool programs in Cornwall and Middlebury as well as other nearby towns would make it easier for young families to settle in Cornwall, boosting student enrollment.

HISTORIC AND CULTURAL RESOURCES

Cultural resources help us understand and celebrate our community heritage. These resources include archaeological sites, historic sites and structures, and community settlement patterns, and the larger cultural landscapes that reflect the character of a time, place or way of life. Cornwall's historic and cultural resources offer a link to the past, help define the town's present character and provide a context and pattern for future growth and development.

INVENTORY

As the Cornwall Yesterday section describes, the town has a rich history. That history remains a vital component of the community and is visible in the town's built environment. Historic structures, many of which are located on and visible from municipal and state highways, greatly contribute to the character of and quality of life in Cornwall.

There are more than 60 buildings in Cornwall listed on the Vermont State Register of Historic Places. The town also has two state Historic Districts – West Cornwall and Cornwall Village – which together contain more than 30 additional structures. These buildings range from farmhouses along with their associated barns and outbuildings, to former schoolhouses, small buildings and churches. There are three structures in Cornwall listed on the National Historic Register – the Town Hall and the blacksmith's shop along Route 30, and a residential home on Lambert Lane.



Blacksmith's Shop on Route 30 (c. 1791)

Other features in the environment also reflect Cornwall's history. Stonewalls, foundations, cellar holes, stumps and trees are indicators of dramatic natural and cultural changes that have shaped the town's landscape. There are also archaeological resources buried beneath the surface in Cornwall, especially along the Lemon Fair River and Otter Creek. Extensive archaeological excavations were done around the area of the bridge over the Lemon Fair River on Route 125 prior to the total rehabilitation of the bridge. The excavation in the area provided evidence of a Native American presence at several locations in the area.

The Lavalley General Store has been the focus of three attempts to find a way to preserve and use the building. To date, despite the significant time and energy that has been put into this project, the Cornwall Historical Society and those interested in the preservation of the building have been unsuccessful in their attempt to secure the needed funding to "save" the building. At the March 2012 Town meeting, the Selectboard was directed by voters to sell or demolish the building in the most cost-effective manner. The building was demolished in early 2013.

Adaptive Reuse

Adaptive reuse is the term used to describe using old buildings for new purposes. As a rural town in transition from an agricultural community to a largely residential community, Cornwall has a significant number of farm buildings either no longer in use or underutilized. These structures are one of the components of the town's landscape that residents identified as central to Cornwall's rural character. If uses cannot be found for these buildings, owners may no longer maintain them and they could eventually disappear.

Former agricultural buildings can be converted to a variety of uses from residences and apartments to commercial or industrial space. The Town does grant waivers for historic residential buildings that do not meet dimensional standards in order to support productive use of these buildings. The regulations should be reviewed to ensure such waivers can also allow businesses to re-use and adapt historic structures in town.



Vacant farm building

COMMUNITY FACILITIES AND SERVICES

A primary function of any municipality is to provide basic facilities and services to the people who live and work within its boundaries. These include law enforcement, fire and emergency medical services, as well as libraries, recreation and town administration.

INVENTORY

Town Office

The Cornwall Town Hall, which was built in 1882 and is listed on the National Register of Historic Places, houses the offices of the Town Clerk and Treasurer. It serves as a meeting and working space for the Select Board, the Listers, the Planning Commission, the Historical Society, and the Development Review Board. Residents cast their town, state and federal election ballots at the hall. The hall also houses the library and has an auditorium meeting space, used by several dance groups, and functions as a meeting room and for special town meetings. The Town Hall has also been designated as the town's Emergency Operations Center and Emergency Shelter. The Cornwall Emergency Management Team supplied the building with the necessary equipment and supplies for that purpose.



A pre-2013 view of the Town Hall and the LaValley General store

The building no longer has the capacity for the Annual Town Meeting; consequently, this event is conducted at the Bingham Memorial School.

The Town Hall underwent extensive repairs during the 1980s and in 2008 underwent preservation work which included: new windows throughout the building, a new ADA bathroom, new furnace installation and stabilization and roofing of both fire escapes. In 2011, Cornwall received an Emergency Management Planning Grant to assist in the installation of a generator to provide back-up power in case of an emergency.

Town Green

The Cornwall Town Green, located on Route 30 in Cornwall's historic village, is the site of many of the Town's public events. The central location of the green, across from the Town Hall, south of the Cornwall Congregational Church and in close proximity to the Cornwall Elementary School, contributes to importance and accessibility to the community.

The Town Green is currently used as a meeting spot for public events such as Green-Up Day. The green is also informally used as a park space by community members, travelers and tourists. There are picnic tables and large shade trees that contribute to its sense of place. There is also ample parking for anyone wishing to use the Town Green at the neighboring Town Office and Library lot.

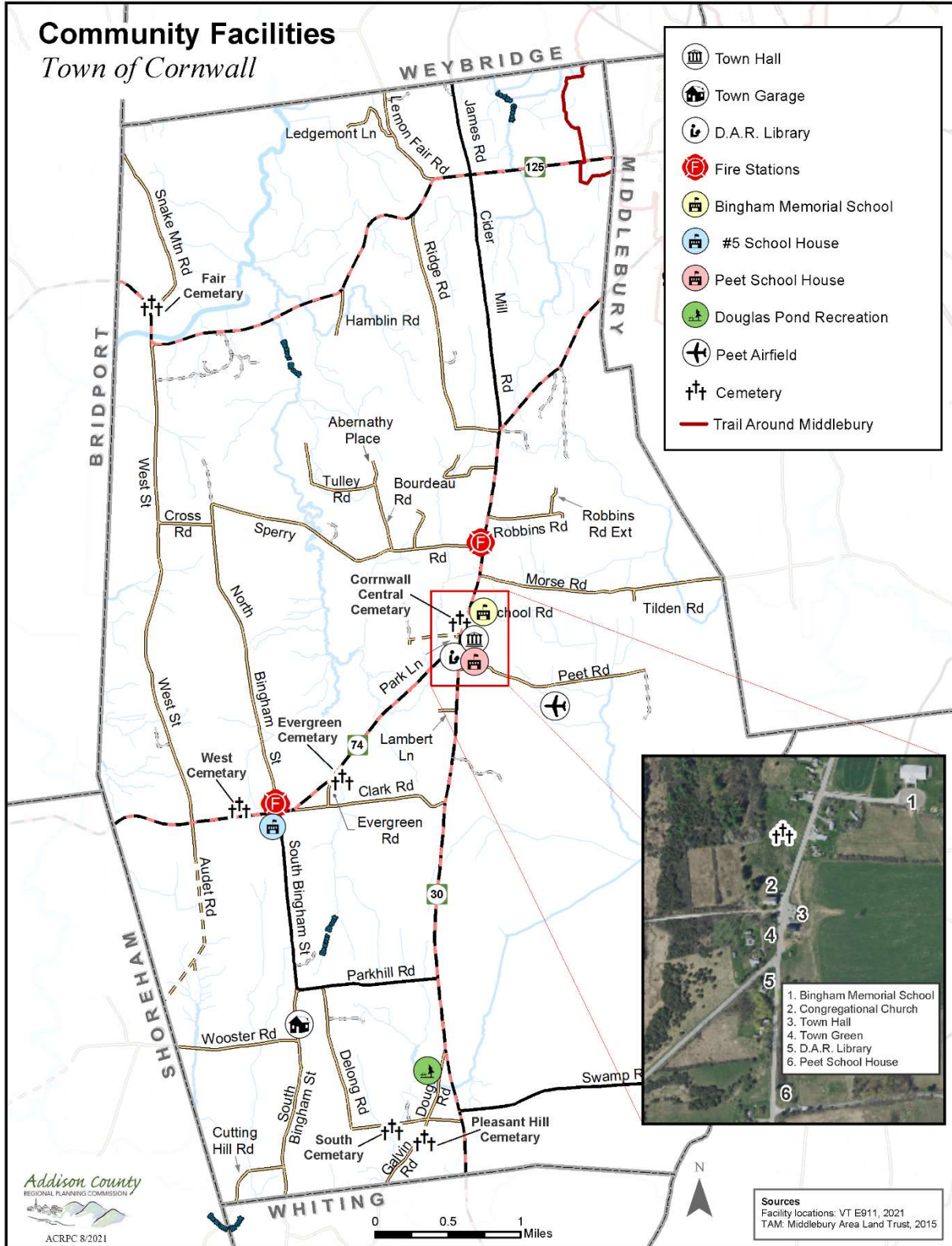
Library

The Cornwall Free Public Library is housed in the Cornwall Town Hall and serves as an educational resource for both adults and children. It is supported by an annual appropriation from the town. Although a survey in the fall of 2003 indicated that 37 percent of the 57 respondents favored closing the library, the library has successfully engaged Cornwall residents and is now used and enjoyed by many on a regular basis.

The library now uses ResourceMate software to catalog books and media. All books and media that are part of the library collection have been barcoded. The total library collection numbers nearly 4000 items. This software is also used for electronic software checkout. Through the use of the new barcoded library cards, patrons are also able to download eBooks through the Green Mountain Consortium and Heritage Quest online database. Current information shows that the library is circulating about 700 items per year, with approximately 100 patrons utilizing the library services. The library has one public computer available for use. The library also offers wireless internet access to visitors and patrons. It is open Tuesday-Friday from 9am-5pm.

Community Facilities

Town of Cornwall



Town Garage

The Town Garage is located at 1469 South Bingham Street, just north of Wooster Road, in the southwestern corner of Cornwall. The garage was built in the early 1970s on land purchased from the Hoops Family.

The garage has had several upgrades including a cold storage lean-to, an office and parts room, and another lean-to that is heated and secure. If the Town chooses to upgrade to bigger trucks in the future, significant structural work would need to be done in order to fit both trucks and other equipment.

Until the early 1980s the salt and sand pile was across the street from the garage, on land that belongs to the Gill Family. In the mid-1980s it was discovered that salt leaching from the salt pile was entering the water table. At this time a sand and salt shed was built on town land adjacent to the garage, with cement slab floors. In order to flush salt from the water table, a pump and extensive piping system was designed which sends well water from the site of the garage to the Lemon Fair River in Shoreham. This continues today. A standby generator was installed in order to keep pipes from freezing during below-freezing temperatures.

The sand shed had a steel roof installed recently, however there are sections of the building's cement walls that are severely compromised. This will need to be addressed in the near future. Possible upgrades to this building could include additional bearing supports to make it a functional building, moving the salt and sand piles to a new arch and fabric storage structure.

Douglas Pond

The Town owns Douglas Pond on Douglas Road. This pond was once used for swimming and ice skating but has since grown over. Although the pond could no longer be used for swimming, some residents have shown interest in creating better access to the pond, including the creation of a traffic pull off.

Undeveloped Land

The town owns two acres near the Bingham school that is currently rented and used for hay. There is currently no discussion as to potential future use of this land. Future uses for this land could include additional village housing or a site for solar energy infrastructure for school and/or municipal use.

Cornwall Fire Department

The Cornwall Volunteer Fire Department (CVFD) was established in 1950. It has approximately 26 highly trained members, including five first responders. The department houses its vehicles and equipment in two fire stations on Route 30 near the Sperry Road intersection and in West Cornwall at 63 North Bingham Road. It is imperative that the highway transportation links and highways to and from these locations be well maintained and free from obstruction

	2017	2018	2019	2020	2021
Medical Assists	42	46	51	48	46
Auto Incidents	13	14	12	16	7
Fire/Smoke/CO Investigations	11	10	12	8	13
Grass, Brush, & Agricultural Fires	2	4	-	4	7
Fallen Wires & Trees	1	3	7	2	7
Structure Fires	3	8	1	4	3
Mutual Aid	6	6	4	7	2
Other	9	2	3	1	2
Total	87	93	90	90	87

Table 1 – Cornwall Fire Department Response Call Categories (2017-2021)

or any utility infrastructure development with the potential to cause catastrophic failure due to explosion or

otherwise. It is self-evident that these highways will be vital in the event a large or small emergency response is required from these locations or assisting agencies. At the 2012 Town Meeting, residents voted to fund significant improvements to the latter to improve space availability for needed equipment. Voters also agreed to transfer the 0.5-acre property from the Town to the Cornwall Fire Department.

There is a First Response Group organized under the auspices of the department. Its members respond to medical emergencies and provide care until the Middlebury Ambulance arrives.

The CVFD typically responds to around 45 medical calls per year, 12 auto accidents, and 4 structure fire calls. The department gives and receives mutual aid with neighboring departments and usually responds to around 5 mutual aid calls each year.

Construction and retrofitting of older homes with modern materials increasingly adds a toxic mix of chemicals in smoke. This poses an increased risk to firefighters and requires additional training. While Cornwall continues to have a committed group of volunteers, issues such as increased training requirements, firefighter employment located outside of town, and an aging population pose a threat to volunteer recruitment and retention.

Middlebury Volunteer Ambulance Association

In a medical emergency, Cornwall is served by the Middlebury Regional Emergency & Medical Services, Inc. (MREMS). MREMS serves the towns of Middlebury, including East Middlebury, Bridport, Shoreham, Orwell, Ripton, Salisbury, Cornwall, Weybridge, Whiting, and New Haven. They also respond to mutual aid requests from the neighboring towns of Bristol, Brandon, and Vergennes. Cornwall supports MREMS through an annual allocation at Town Meeting and through an annual drive for operating support.

Emergency Management

The State, and the Federal Emergency Management Agency, has mandated that every town have an Emergency Manager, and participate in the Regional Emergency Management Committee (REMC). The Emergency Management Director is responsible for updating and submitting a Local Emergency Management Plan (LEMP) every year after Town Meeting. The LEMP establishes points of contact and lines of responsibility during a disaster as well as identifying vulnerable (high risk) populations, shelters, procedures and resources. Having an adopted LEMP is one of the primary requirements for Cornwall to receive funds from the Emergency Relief and Assistance Fund (ERAF) for post-disaster relief. In the event of a Federally declared disaster. More detail on this funding is provided in the Flood Resilience section.

Cornwall has applied for funding to update its 2015 *Local Hazard Mitigation Plan*, which identifies hazards and rates their likelihood, assesses the resources available in and to the Town, and establishes protocols for handling large-scale emergencies and disasters. This document will guide Town officials, emergency responders, and citizens through the process of preparing for and responding to a disaster. Part of the role of Emergency Management is getting preparedness information to citizens, and encouraging people to take these important steps to being prepared for an emergency – whether it be fire, flooding, or another weather-related situation.

Because the Town Hall is designated as the Town's emergency operations center and Red Cross shelter area in the Town's *Emergency Management Plan*, it is imperative that no development of utility transmission

infrastructure with the potential for catastrophic failure, by explosion or otherwise, be located near or prevent access to that structure.²⁵

Police Protection

Police protection, including traffic enforcement, in Cornwall is provided by the State Police, with contract services available from the Addison County Sheriff's Department. The crime rate in Cornwall is significantly below regional and state levels.

Healthcare, Social and Human Services

While there are no medical facilities located within Cornwall, residents have convenient access to Porter Medical Center in Middlebury and its associated medical practices. There are also a number of dental and healthcare providers not associated with Porter located in Middlebury.

Some Cornwall residents may also seek medical care in the Burlington or Rutland areas. Fletcher Allen Medical Center in Burlington is the nearest Level I Trauma Center and patients in need of services not available at Porter are typically transported there.

Cornwall residents have access to a variety of social and human service organizations, most of which are nonprofits located in Middlebury. Organizations like the Addison County Community Action Group, Addison County Home Health and Hospice, Addison County Transit Services, Champlain Valley Agency on Aging, the Counseling Service of Addison County, Elderly Services, the Open Door Clinic, Vermont Adult Learning and WomenSafe receive a small amount of funding annually from the town to support their services, which are available to Cornwall residents.

ANALYSIS

Cost of Government

Over the past several decades, the cost of government and services in Cornwall has grown. Many of these costs are beyond the control of the Select Board and voters.

²⁵ For example, the Town would consider a gas transmission pipeline located closer than the potential impact radius (as that term is calculated under the federal regulations governing "high consequence areas" and gas transmission pipelines at 49 CFR Section 192.901 et seq. or any successor regulation), from an emergency structure or space to be unsafe because the failure of a transmission pipeline could have a significant impact on people and/or property. The Town considers its residents and their property to be as important, and as worthy of protection, as those who happen to live in areas with greater population density. For the sake of clarity, the formula for the Potential Impact Radius as used in 49 CFR Section 192.901 is as follows:

$r = 0.69 \times \sqrt{p \cdot d^2}$, where "d" is the diameter of the transmission pipe and "p" is rated pressure of the pipe. For a 12" transmission line at 1440 PSI, the potential impact radius would be as follows: $r = 0.69 \cdot \sqrt{1440 \cdot (12^2)}$ = 314 feet. A 10" transmission line at 1440 PSI yields a potential impact radius of 262 feet.

In the past five years, Cornwall has established a capital budget to pay for town vehicle costs. Capital budgets allow scheduling such expenditures and structuring financing to avoid a sudden, unanticipated increase in the tax rate. The Cornwall budget, in the past, has been highly variable due to such capital expenditures (such as repairs to town buildings or equipment for the fire department).

Creating mutual aid agreements between neighboring towns for all types of resources, including highway related assets, is another way to provide a sense of financial/resource security. An example of this is the joint purchase of an excavator by Shoreham and Cornwall.

UTILITIES AND ENERGY

The availability, location and quality of services provided by utilities within a municipality influence the community's growth pattern. Areas with adequate utility service are often more attractive, less expensive places for new development to occur and growth tends to follow the extension of utilities into a previously unserved area. Similarly, the characteristics and pattern of development can influence the amount of energy consumed by public, residential and commercial energy users. The interrelationships between utilities, energy and land use patterns should be considered when planning for the future of the town and any development, operation or maintenance of utility transmission or distribution infrastructure should take place in a manner that does not adversely affect the safety of the residents or their property or adversely affect the aesthetic or historical nature of the town.

INVENTORY

Utilities

Typical of rural communities with low-density development, there is limited provision for utilities and infrastructure in Cornwall.

Water and Wastewater

There is no public water or wastewater treatment system in the town, so all households rely on private water and septic systems. The Town Hall and D.A.R. Library do share a single septic system, with waste being piped from the Town Hall under the road to a system built behind the D.A.R. building. Clay soils in much of the town require expensive raised septic systems which increase the cost of development.

Solid Waste

Licensed haulers transport Cornwall trash to a transfer station in Middlebury. District waste is disposed of outside the region at a contracted landfill. The district has a mandatory recycling ordinance and waste haulers who operate in the district are required to offer recycling services. Recyclables in Cornwall do not have to be separated out by type, since the district has contracted with a single-stream facility that separates the materials after they are collected. The district also accepts household hazardous waste, white goods and construction debris at its Middlebury transfer station. Garbage and recycling drop-off service is available at the Town Hall parking lot on Saturday afternoons. Residents wishing home pick-up of trash and recycling may subscribe to one of several private services. Cornwall participates in the Addison County Solid Waste Management District (ACSWMD) and residents have access to all of ACSWMD's services including hazardous waste disposal.

Telecommunications

GoNetspeed provides residential and business telephone and internet service throughout Cornwall, with various levels of high-speed DSL (digital subscriber line) available to the entire town with no distance-to-office limits. Service lines are mostly underground, with some overhead on the company's own poles or shared GMP poles. GoNetspeed has a small building near the Town Hall that houses its main service equipment for the town.

There is currently no provision of, or plans for providing, cable television service in Cornwall; therefore, there is also no access to high-speed internet service via cable lines. Satellite television is provided by several companies with high-definition mini-dishes available. These companies offer satellite high-speed internet services to residential customers as well. Local DSL service is fast enough to provide video streaming of media as an alternative to satellite service. Cell phone service is offered by several national companies including Verizon, Sprint and AT&T Mobile among others, although reception is still poor in many areas. There are no cell phone towers or antennas currently installed in Cornwall. Much of the cellular phone infrastructure installed in the region has been focused on providing service to traffic corridors like Route 7 and more densely populated communities like Middlebury. This plan supports the use of existing structures, such as steeples and farm silos, when installing cell phone infrastructure.

Energy

Electricity

Green Mountain Power (GMP) provides electricity to Cornwall; there are no substations or transmission lines in the town. Service lines are overhead on poles; in recent years, it has become more common for new development to run the service lines underground in buried conduit.

GMP's main sources of electricity include large hydro, which provides around 51 percent, and nuclear, which provides about 32%. Small hydro-projects like those in Middlebury and Salisbury contribute 14 percent while solar provides the remaining 3% of GMP's power portfolio. It should be noted that these proportions are determined after the sale of renewable energy credits (RECs). Each REC represents the environmental benefits of 1MWh of renewable energy and conveys the right to claim the environmental value of that energy to whoever purchases the credit. RECs can only be counted once. So, when GMP sells RECs to reduce overall costs for customers, GMP can no longer claim the green attributes of the power we produced – it is considered “market power” rather than “renewable power” for our customers.²⁶ Therefore, although GMP generates the equivalent of about 20% of the energy used by the utility through solar and wind, it sells a majority of the RECs produced by these generators and can only claim 3% of its energy is sourced from solar.

GMP offers customers the opportunity to sign up for ‘Cow Power’, a program in which Vermont farms can transform methane gas from cow manure into electricity and connect this energy back to the grid. Three farms in Addison County are involved in this program.

Household energy use represents approximately 35 percent of total statewide energy consumption. Almost 60 percent of domestic demand is for space heating and domestic hot water.²⁷ The remaining 40 percent runs miscellaneous appliances, lighting, cooking, drying and air conditioning. Space heating and hot water heating are affected by building design and construction. Other energy uses are affected primarily by personal choices and habits. There are no commercial energy generation facilities in Cornwall.

²⁶Green Mountain Power. *Annual Energy Mix*.

<https://greenmountainpower.com/energy-mix/#:~:text=Most%20of%20our%20energy%20supply,and%20regional%20renewable%20energy%20sources.>

²⁷Clean Energy States Alliance. *A Vermonter's Guide to Residential Clean Heating and Cooling*, Vermont Public Service Department, January 2021.

<https://publicservice.vermont.gov/sites/dps/files/documents/A%20Vermonter%27s%20Guide%20to%20Residential%20Clean%20Heating%20and%20Cooling%20%282021%29.pdf>

Fuel

According to the 2020 Census, just over 54 percent of Cornwall's homes are heated with fuel oil or kerosene. About 23 percent use wood heat, either traditional inside stoves or furnaces, or using outside furnaces, while the remaining homes use bottled gas or electric heating options.²⁸ Although not a standalone source of heating, residents have installed a total of 181 heat pumps in Cornwall.

Companies within Addison County deliver fuel oil, propane and kerosene to Cornwall. Wood pellet delivery is available through the ACORN energy co-op in Middlebury, and firewood is available from individual vendors in Cornwall and other surrounding towns.



Sugarhouse in Cornwall, c. 2012

Fuel Assistance

Champlain Valley Office of Economic Opportunity (CVOEO) provides a suite of programs to income qualified residents to ensure families stay warm and safe in their homes.

- [Seasonal Fuel Assistance](#) is a state-run program that helps pay for your primary heat source. **Call (802) 388-2285** for help.

²⁸U. S. Census Bureau. *American Community Survey 5-Year Estimates, 2015-2019*, <https://data.census.gov/cedsci/table?t=Heating%20and%20Air%20Conditioning%20%28HVAC%29&g=0600000US5000116000&y=2020&tid=ACSDT5Y2020.B25040>

- [Crisis Fuel](#) is the emergency component of the fuel assistance program. CVOEO staff determine Crisis Fuel eligibility and arrange assistance for eligible households directly with their fuel and utility providers. Call **1-877-295-7998**.
- **Champlain Valley Weatherization** offers a variety of services to both homeowners AND renters to improve home energy efficiency and comfort, and to decrease heating bills. If you rent, they'll work with your property owner to bring you the benefits of the program at little or no cost to them.
 - Energy audits to identify potential improvements in energy efficiency comfort, and ways to save money on fuel bills.
 - Heating systems check-ups to ensure safety, efficiency, and effectiveness.
 - Free lighting and appliance upgrades (where applicable) through our partnership with [Efficiency Vermont](#).
 - Renovation construction services from a qualified crew, including materials and supplies.

Visit the CVOEO website <https://www.cvoeo.org/about-us/programs> for a description of additional fuel related and other assistance programs available to Vermont residents.

Efficiency Vermont currently offers a woodstove changeout rebate, which gives homeowners a \$200 rebate on the replacement of an old wood stove with a new, cleaner burning wood or pellet stove. The Vermont Forest Parks and Recreation Department provides education on Advanced Wood Heating systems along with additional incentives and rebates.

Renewable Energy Sources

Wood and Biomass

Locally cut timber, much of it from the Cornwall Swamp, was the only source of energy for town residents until the turn of the last century. A significant percentage (23%) of Cornwall's homes continue to be fully or partially heated with wood, most of which is still cut locally. Local maple syrup producers depend on wood fuel for boiling sap.

Solar and Wind

As of 2021, a total of 96 renewable energy generators have been installed in Cornwall with a total production capacity of 826kW. A majority of this generation capacity comes from residential solar systems with a capacity of 15kW or less. However, Cornwall does host 8 solar generators with a capacity between 15 and 100kW. Only 4% of the renewable generation capacity in town comes from small wind. There are 8 households in Cornwall that use solar water heating systems.

Ground Source Heating

Ground source heat pumps rely on an energy exchange between the air within a building being heated and the ground. Ten feet below the earth's surface, the temperature is typically a constant temperature of 50°F. This provides a year-round supply of hotter or cooler air – depending on the season, cutting down on additional heating and cooling services typically needed for a New England home.

Transportation and Energy

Approximately 34 percent of Vermont’s energy use is for transportation, 35 percent is for residential uses, and the remaining 31 percent is for commercial and industrial uses. Energy consumption per household for transportation purposes is very high. Most residents drive their car every day to get to work, school and for recreational purposes. In 2019, it was estimated that the average Vermont resident travels 11,772 miles each year. With the cost of gasoline at historic high levels, commuting can cause significant financial burdens on many households.

Cornwall is located in the Tri Valley Transit (TVT) service area, but there is no regularly scheduled public transportation serving the town. However, TVT does provide Dial-a-ride services to eligible residents who call this number 802-388-2287. Several programs including Go! Vermont and the Walk Bike Council of Addison County provide incentives and opportunities for residents to share rides or use active modes of transportation like bike riding and walking.

Cornwall has no commercial gas station. The nearest gasoline and diesel pumps are four to ten miles from Cornwall village, in East Middlebury, Middlebury, Bridport and Shoreham. Private fuel tanks exist on farm and commercial properties, with deliveries coming from the surrounding towns. In 2010, Cornwall completed an upgrade to Route 30, which included widening the shoulders between Cornwall and Middlebury, for the specific purpose of creating a safer space for cyclists and pedestrians. In the 2011 planning survey, over 70 percent of participants agreed provisions like these should continue to be made for cyclists and pedestrians on Cornwall roads.

Energy Conservation

In the 2011 Cornwall planning survey, over 60 percent of the participants agreed heating and other utility costs were one of the greatest financial burdens associated with their housing (second after property taxes). Almost half of the 2011 survey respondents have had some type of energy efficiency assessment of their home, and 85 percent said they had taken some measures to increase their home’s energy efficiency.

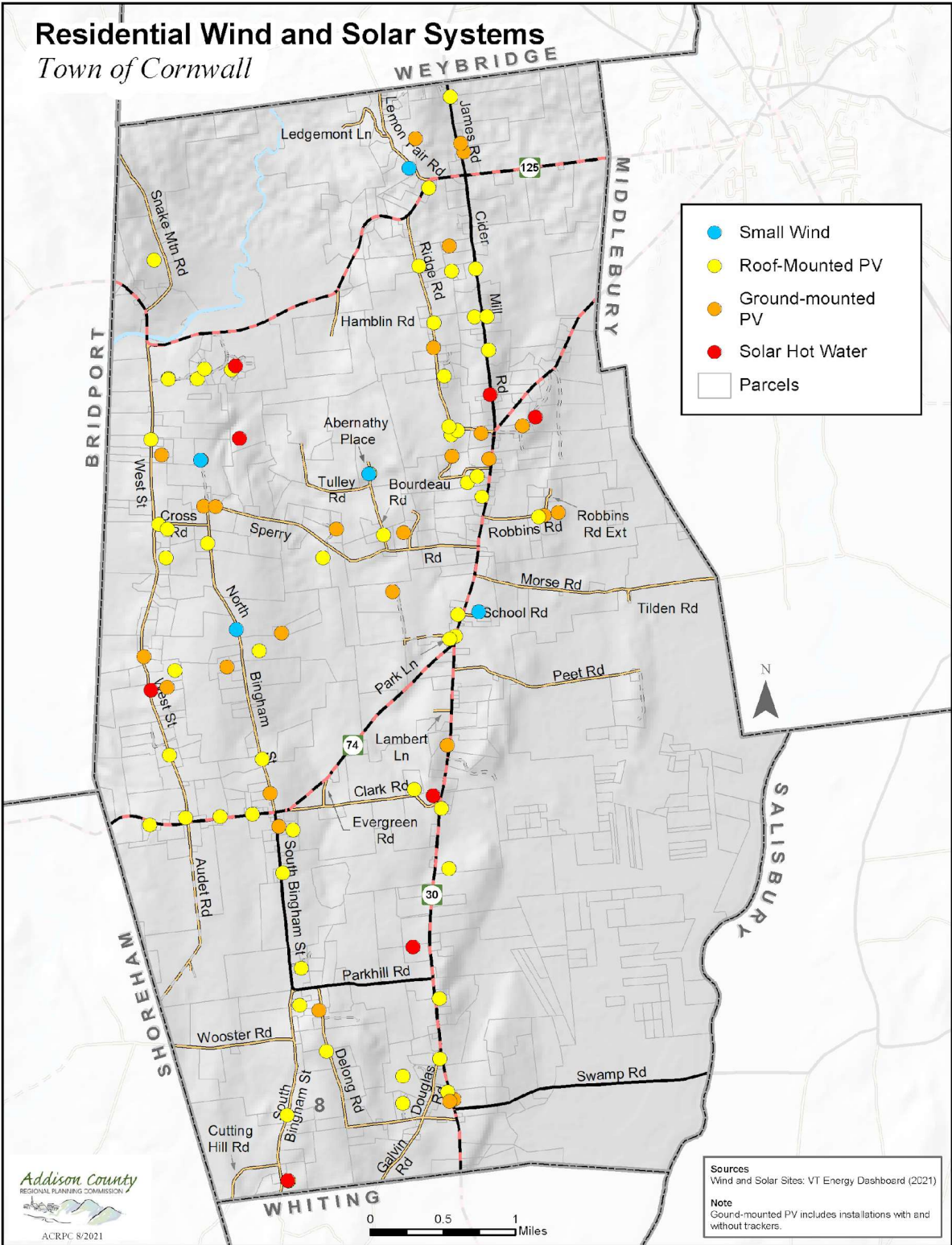
The Champlain Valley Office of Economic Opportunity provides a weatherization service that assists income-qualified households in the region to take steps to increase the efficiency of their homes and reduce their energy bills.

A wide variety of state and federal subsidies and rebates are currently available for Vermont residents to conserve energy. Efficiency Vermont offers programs including energy audits, incentives for Home Performance with Energy Star for construction of new homes and renovations, information on appliances and compact fluorescent bulbs, building an Energy Star home, home heating help, rebate information, and Efficiency Vermont’s reference library. More information can be found at: www.Efficiencyvermont.com

Energy Coordinator

Cornwall has an Energy Coordinator, appointed annually by the Cornwall Selectboard. The coordinator is part of a county-wide energy committee that meets throughout the year. Energy Coordinators in each Addison County town are responsible for understanding federal, state and local opportunities, such as energy-saving

programs and grant opportunities available to their town. They also advise the planning commission and Selectboard on pertinent policies and regulations associated with energy efficiency and conservation.



Map 1. Residential Wind and Solar Systems (Source: ACRPC)

Utilities

As Cornwall has grown, GMP and GoNetspeed have expanded services to meet the need. GoNetspeed may need to increase its cable capacity by burying new cable, running new aerial lines, or adding SLCs to areas with limited capacity.

Water and Wastewater Infrastructure

Cornwall has no public water or wastewater infrastructure. Residents rely on wells for drinking and all other household needs. Due to residents' exclusive reliance on wells for drinking and other water use, utilities must assure that any infrastructure be designed, sited, constructed, and maintained to protect existing wells and the groundwater upon which they draw, particularly in the most densely populated areas along Cornwall's major transportation routes (Routes 30, 74 and 125).²⁹ Single family septic systems are used to handle waste water. The lack of municipal water and wastewater infrastructure and heavy clay soils makes increased density in the historic settlement areas expensive. It would be beneficial for Cornwall to understand the newest technologies available for small-scale community water and wastewater systems and how these might be used in future development decisions.

Cellular Telecommunications

Although service has improved somewhat in the last few years, it is not yet consistently available throughout Cornwall. In communities around Cornwall, cell phone towers have been erected on top of silos to mitigate visual impacts to the landscape. Any company seeking permits for such infrastructure needs to prove that no existing structure in town meets their needs before being allowed to construct a tower. The town should include this in updated zoning regulations.

Energy

The 2011 Vermont Comprehensive Energy Plan recommends that Vermont set a goal to obtain 90 percent of our total energy from renewable sources by 2050. It is in Cornwall's best interest to reflect similar ambitions. The conservation of energy can play an important role in the local economy while protecting the environment and saving money for homeowners and businesses. The Cornwall Plan encourages residents to take the necessary steps toward creating more energy- efficient and sustainable homes and lifestyles.

²⁹ For example, the Town would consider a gas transmission pipeline located closer than the potential impact radius (as that term is calculated under the federal regulations governing "high consequence areas" and gas transmission pipelines at 49 CFR Section 192.901 et seq. or any successor regulation), from a residential, commercial or municipal well to be unsafe because the failure of a transmission pipeline could have a significant impact on people and/or property. The Town considers its residents and their property to be as important, and as worthy of protection, as those who happen to live in areas with greater population density. Please see footnote 1 for a potential impact radius calculation example.

Policy

Updating bylaws to allow for broader home business opportunities and the installation of alternative energy projects is a good first step for incorporating energy efficiency into the daily life of Cornwall residents. This Plan supports the use of alternative technologies such as small-scale wind turbines, geothermal heating, small-scale hydro-electric and solar technologies in order to create clean, affordable, and local sources of energy.

Buildings

Given that much of the town's existing housing stock was built over one hundred years ago, rehabbing and weatherizing these older homes is critical to reducing energy consumption. Some of these older dwellings still rely on basic winterization methods such as plastic over windows and exterior walls, hay bales around the foundation, and closing off parts of the house to reduce heating demand. Cornwall's homeowners can take steps to weatherize their homes or to replace older, inefficient appliances or mechanical systems that can reduce energy use and expense for heating and cooling by 10 to 50 percent.

Basic, inexpensive measures such as turning off lights in empty rooms or replacing light bulbs with new, more efficient bulbs can substantially reduce energy usage. According to Efficiency Vermont, if every household in the state changed one light bulb, Vermonters would save enough electricity to light 14,500 homes for a year. Using timers to regulate lighting, heating or cooling in a home can also significantly decrease energy consumption.

Newer furnaces that are Energy Star rated or wood stoves containing catalytic converters offer increased efficiency than use of traditional equipment, and some provide for a variety of fuel sources. Pellet stoves allow consumers to heat with wood, while being cleaner and easier to operate. Heat pumps are an efficient electric heating option that can also be used for cooling in the summer. Efficiency Vermont offers rebates for advanced wood heating and heat pump systems.

Transportation

Transportation currently accounts for approximately 36 percent of the total end-use energy demand in Vermont. Nonrenewable petroleum supplies 95 percent of the energy used for transportation, all of it supplied from outside our region.³⁰ Transportation consumes 60 percent of all petroleum used in Vermont. Commuters, shoppers, recreationists and other non-commercial users traveling in private automobiles consume almost half of all the energy used in Vermont for transportation. Therefore, effective transportation policy has great potential to affect Vermont's petroleum usage and overall energy demand, as well as reducing our energy expenses and dependence on foreign oil.

³⁰Vermont Agency of Transportation. *Vermont Transportation Energy Profile*, November 2019.

<https://vtrans.vermont.gov/sites/aot/files/planning/documents/planning/The%20Vermont%20Transportation%20Energy%20Profile%202019%20Final.pdf>.

Reducing energy use for transportation is a difficult challenge for a rural town like Cornwall. Residents depend on a car to cater to their individual needs and busy daily schedules. The majority of Cornwall residents commute to Middlebury or further every day, but when surveyed, 50 percent of respondents said that they would not commute by bus even if it was available to them. Only a quarter of the respondents have ever carpooled to or from town. While bus service is available to all students, many parents drive their children to school, and many students drive to MUHS daily as there is no late bus available after sports or other after-school activities.

Continuing to provide additional infrastructure for walking and biking, such as wider shoulders on Route 30 and bike racks, where necessary, is essential to supporting cleaner transportation linkages. Continuing conversation with residents and with Tri Valley Transit regarding public transportation options for the future would also be beneficial, as would continued discussion on better provisions for cyclists and pedestrians on Route 74 and 125. Encouraging carpooling and the use of the Cornwall *Park and Ride* are also important.

Natural Gas Pipeline and Other Transmission and Generation Infrastructure

With regard to any type of utility scale transmission or generation proposed to impact Cornwall; this plan supports energy infrastructure and services which do not cause undue adverse impact to the health and safety of our residents or on the environmental and scenic qualities of our natural resources, and supports the associated goals within this plan. In order to protect the residents of Cornwall and the aesthetic and historic character of Cornwall, including the Cornwall Village and West Cornwall Areas, Cornwall adopts the following implementation measures for transmission or generation infrastructure that utilities or others propose to construct, operate and maintain within Cornwall, each of which should be considered prior to and during a public service board review process:

a. Proposed utility infrastructure shall be designed to provide substantive economic benefits to the town and its residents. Utility infrastructure designs shall provide service in the Cornwall Village and West Cornwall Areas while implementing and reinforcing the Town's planning goals for these areas.

b. Proposed utility projects (including energy distribution projects) shall fully use existing infrastructure and utility rights of way to meet the town's and region's energy needs before additional infrastructure is built or new rights of ways are required. This shall include co-locating energy distribution lines³¹, telephone, fiber optic, and cable lines (or any future telecommunications technology) in the same corridors. Services using utility poles shall be co-located to reduce the health, safety, environmental, aesthetic and economic impacts of the services they provide. Utilities shall exhaust all feasible areas where landowners will voluntarily negotiate rights of way prior to pursuing eminent domain against any individual landowner. All corridors for transmission lines or pipes, whether for electricity or gas, shall be located outside of populated areas and away from residences, businesses and public buildings and spaces to provide the maximum margin for safety, noise and other impacts.³²

³¹ The terms "distribution" and "transmission" for the purposes of this plan shall be understood to have the definitions of such terms in use by the Vermont Public Service Board, or any successor regulatory authority.

³² For example, the Town would consider a gas transmission pipeline located closer than the potential impact radius (as that term is calculated under the federal regulations governing "high consequence areas" and gas transmission pipelines at 49 CFR Section 192.901 et seq. or any successor regulation), from a residence, business or municipal building or space to be unsafe because the failure of a transmission pipeline could have a significant impact on people and/or property.

c. Utilities shall conduct thorough and complete siting analyses of alternate routes that demonstrate how sensitive wildlife habitat, soils, along with agricultural, forest and water resources, are protected in accordance with the goals of the associated sections of this plan and shall share the results of these analyses with the Town prior to filing a petition seeking permission to construct utility infrastructure within the town.

d. Utilities shall undertake and present to the town an analysis of viable alternatives to the proposed project which calculates costs whether capital, environmental or health when evaluating both locally generated and imported energy sources.

e. Utilities shall fully explain to Town officials and Town emergency responders, and shall provide the necessary training, support and equipment for our emergency personnel to respond successfully to any emergency situation involving the infrastructure proposed.

f. Utilities shall communicate transparently, honestly, and clearly with affected landowners, Town officials and the Addison County Regional Planning Commission to develop appropriate health, safety and environmental mitigation plans prior to filing their Section 248 applications and continue communicating throughout the permitting and, if applicable, construction process.

g. Utilities shall work toward the phasing out of fossil fuels and encourage development and use of renewable energy resources such as solar, wind and locally generated methane.

h. Utilities shall bury transmission and distribution lines and other service lines in or around the proposed corridor underground and/or site the above-ground lines to reduce aesthetic, historic and natural resource impacts of the lines. New transmission and distribution corridors shall be designed to minimize the aesthetic impact on all properties adjacent to the line and preserve the property values of the citizens of Cornwall.

In addition to these implementation measures, the Town of Cornwall holds entities proposing transmission and/or generation infrastructure responsible for supporting and helping to implement, where applicable, the goals of our natural and scenic resources plan, our land-use plan, and our energy plan.

The Town considers its residents and their property to be as important, and as worthy of protection, as those who happen to live in areas with greater population density. Please see footnote 1 for a potential impact radius calculation example.

TRANSPORTATION

Transportation is one of the most fundamental subjects of planning. The economy could not function without a system for the movement of people, goods and services. Transportation and transportation planning have a direct impact on development patterns and land investment.

INVENTORY

Cornwall has approximately 34 miles of local roads and 13.5 miles of state highways. Three state highways pass through Cornwall with Cornwall village at the intersection of two of them – Routes 30 and 74.

State Highways

All three State Class 2 highways (Route 30, 74 and 125) in Cornwall are classified as “major collectors.” Major collectors are designed and maintained to serve traffic traveling within a region as opposed to through it. They gather vehicles from local roads and streets and distribute them into the larger highway network. They also link major communities within a region and serve both as local connectors and as a vital link in the town's emergency response system and in the delivery of other services. Because of the importance of these roads, the increased population densities along these corridors, and the location on them of both emergency first responders (fire department) and emergency operations center and Red Cross shelter area (Town Hall), construction of utility transmission lines, whether for electricity or gas, along these routes is not favored by the town.

Route 30

Route 30 runs 6.4 miles through Cornwall from the Whiting to Middlebury town lines. It is one of the three north-south highways (the others being Routes 7 and 22A) in western Vermont. Route 30 was repaved in 2010, with a ‘mill and fill’ down through Whiting and Cornwall, to Route 74, and reclamation of sub-base between 74 and the Middlebury town line. Lane width is now 11 feet with three-foot shoulders to better accommodate cyclists and pedestrians using Route 30 between Cornwall and Middlebury.

Traffic on most sections of Route 30 in Cornwall has increased since 2010. South of VT Route 74 intersection, the Annual Average Daily Traffic (AADT) increased approximately 2100 vehicles per day in 2007 up to 2,300 in 2021. North of VT 74 from Cider Mill Road to the Middlebury town line, the AADT increased from 4500 in 2010 up to 5164 vehicles per day in 2020.

Route 30 and Cornwall Village Center

Within the village center (just south of VT Route 74 at the library), the 85th Percentile Speed was 62 mph. The posted speed limit for the village is 40 mph. Although special consideration should be given to any State Highway passing through a small village center, the speed and volume of traffic on this section of Route 30 continues to be of concern to the Town of Cornwall and some of its residents, particularly to those who frequently use the Town Hall and Congregational Church, and to those driving in and out of the Bingham School road entrance. The scale of the village and the speed of the road does not match up and make it nearly impossible for the village center to be pedestrian-friendly. These issues are compounded when surrounding roads are closed and regional traffic is re-routed onto Route 30 through the village.

Road Segment	AADT 2010	AADT 2021	Source	85th % Speed
Whiting Town Line to Swamp Rd.	1800	1863	Grown annually from 2015	47
Swamp Rd. to VT 74	2100		-	
Parkhill Road to Route 74		2223	Grown annually from 2018	62
VT 74 to Cider Mill Rd.	3700			-
Cider Mill Rd. to Middlebury T/L	4500	5164 (2020)	Grown annually from 2014	NA

Table 1. Average Daily Traffic upon VT Route 30 in the Town of Cornwall, *Source: VT Agency of Transportation*

In light of this, ongoing conversations have occurred with a Cornwall Traffic Committee and the Vermont Agency of transportation (responsible for all State roads) as to what can be done.

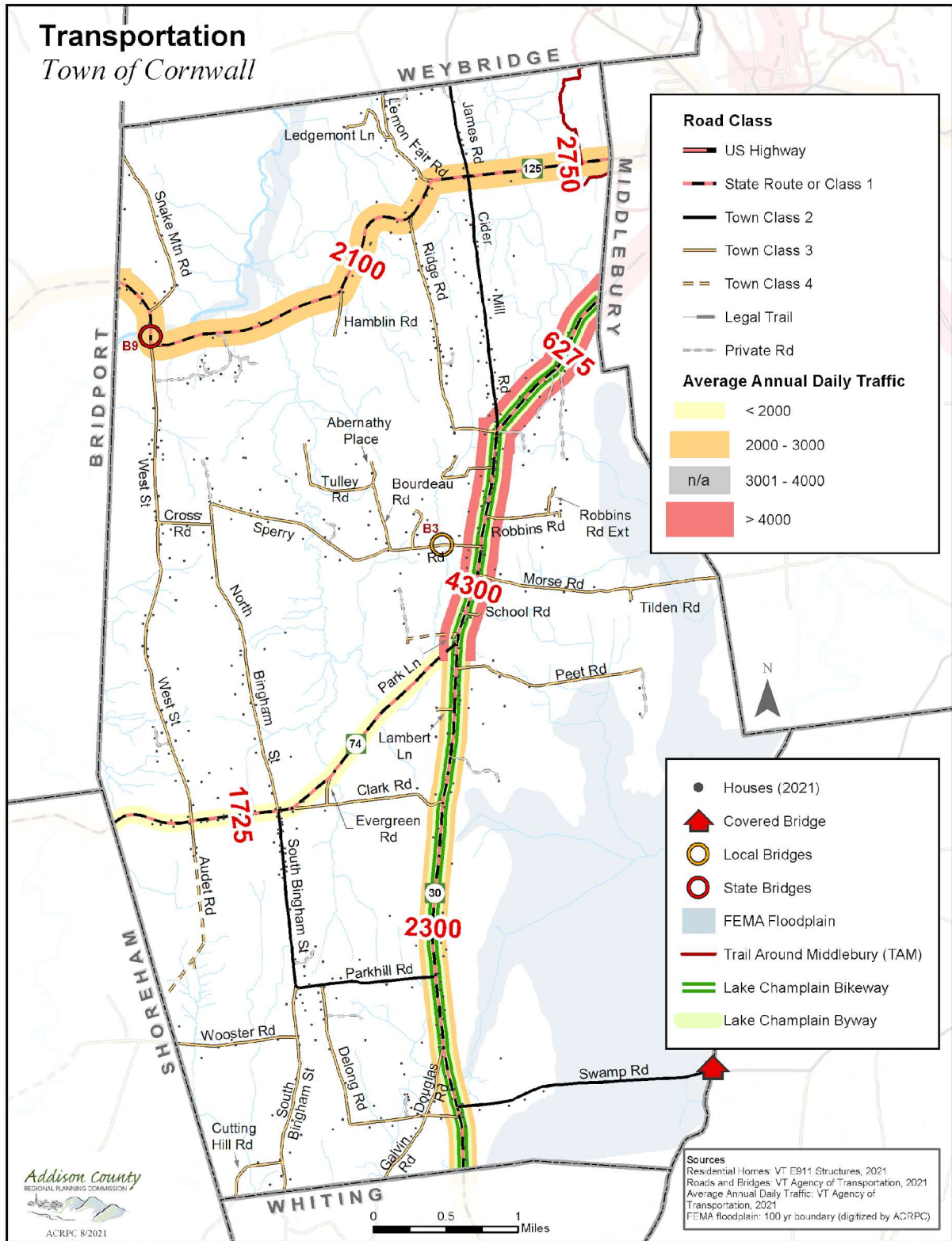
While the above discussions are focused on reducing speed limits, other potential solutions to this problem include: police enforcement, using a temporary speed monitor, creating crosswalks, highlighting the school entrance with distinguished street design and signage, creating places for pedestrians and cyclists, and creating a more identifiable gateway into Cornwall’s village center in general - using road stenciling, signage, lighting, different street design or landscaping.

Route 74

Route 74 runs 2.9 miles into Cornwall from west of the Shoreham town line, providing an east-west connection between Routes 30 and 22a. In Shoreham, it also connects to New York State via the Fort Ticonderoga Ferry, which operates on a seasonal basis. This connection to Lake Champlain is the historic function of the road and the reason that Cornwall village developed at the intersection of Routes 74 and 30.

The segment of Route 74, between West Street and Bingham Road is the most heavily traveled, with 1,725 vehicles a day in 2021.

In 2011, a new bridge deck was replaced to a small bridge just east of the Shoreham town line. Also, the entrance to Route 74 from Route 30 was realigned and narrowed in order to slow turning traffic at this dangerous intersection. The rest of Route 74 in Cornwall needs to be repaved.



Road Segment	AADT 2010	AACT 2021	Source	85th % Speed
Shoreham Town Line to West St.	2700(2011)	1148	Grown annually from 2018	62
West St. to Bingham St.	1900	1622	Grown annually from 2019	NA
Bingham St. to VT 30	1600	1656	Grown annually from 2018	62

Table 2. Average Daily Traffic upon VT Route 74 in the Town of Cornwall, **Source:** VT Agency of Transportation

Route 125

Route 125, one of a few east-west highways in Vermont, runs 4.2 miles through Cornwall from the Bridport to Middlebury town lines. It connects to New York State via the Crown Point Bridge, intersects with Route 22a in Bridport. From Cornwall it runs through Middlebury and into the Green Mountains before ending at Route 100 in Hancock.

Until 2005, traffic volume on this highway had been increasing annually, but this growth trend seems to have slowed. The demolition of the Champlain Bridge in 2010 probably had an impact on vehicle numbers, lessening daily traffic counts by at least 100 vehicles, if not more, from prior years. As can be seen on the table below, more people drive on the section of Route 125 between Cider Mill Road and Middlebury, than do from Bridport to Cider Mill Road.

Road Segment	AADT 2010	AACT 2021	Source	85th % Speed
Bridport Town Line to Cider Mill Rd.	1900		-	-
Cider Mill Rd. to Middlebury T/L	1600	2635	Grown annually from 2018	58

Table 3. Average Daily Traffic upon VT Route 125 in the Town of Cornwall, **Source:** VT Agency of Transportation

The Lake Champlain Byway

Cornwall is home to portions of the Lake Champlain Byway, a program whose purpose is to “identify, designate and promote scenic byways and to protect and enhance the recreational, scenic, historic and cultural qualities of the areas through which these byways pass” (<http://www.lakechamplainbyway.com/>). The Lake Champlain Byway runs along portions of Route 74 and Route 30 in Cornwall and identifies the following locations as points of interest to travelers:

- Old Stone Blacksmith Shop
- Cornwall Public Library and Town Hall
- Cornwall Congregational Church
- Lemon Fair Wildlife Management Area

Town Roads

Nearly 26 miles or 76 percent of the town’s local roads are Class 3 highways. There are around 6.5 miles (19 percent) of Class 2 and 1.5 miles (5 percent) of Class 4 roads in town.

Class 2 highways, formerly known as State Aid highways, secure truck links between towns. They are designated by the Selectboard and are approved by the State Transportation Board. Cornwall's Class 2 roads include: Cider Mill Road, James Road, South Bingham Street (from Route 74 to Parkhill Road), Parkhill Road, and Swamp Road. All these roads are paved. Paving width of Class 2 roads is at least 21 feet. Swamp road is subject to closure due to seasonal flooding.

Class 3 highways are negotiable under normal conditions all seasons of the year by a "standard pleasure car" and have sufficient surface and base, adequate drainage, and width to permit winter maintenance. The Selectboard designates them after consultation with a representative of the State Transportation Board. Cornwall's Class 3 roads currently include: Snake Mountain Road, Ridge Road, West Street, Sperry Road, Morse Road, Clark Road, Wooster Road, Delong Road, South Bingham Road (south of Parkhill Road), Douglas Road, as well as several shorter access roads.

Class 4 highways are defined by the state as all other town highways including impassible and untraveled roadways. These roads, as public rights-of-way, must remain open and accessible. A locked gate or other type of obstruction is prohibited, but landowners and the Town may agree upon and formalize the enclosing of the road, creating a pent road. Cornwall's Class 4 roads total 1.46 miles, including some sections that are untraveled and impassable.

Private Roads and Drives

There are also some private roads in Cornwall and further construction of such roads to serve new development is likely in the future. While the construction and maintenance of these roads is not the responsibility of the town, it is important that private roads and drives be constructed to minimum standards that provide safe use of the road by both vehicular and non-vehicular traffic, access by emergency and delivery vehicles, and prevent erosion and water pollution.

Private roads and drives need to accommodate access from the main road to homes for at least one fire truck and one ambulance. Emergency vehicles should be able to turn around at a house, thus eliminating the need to back down the road or drive. Fire departments in rural areas use a method called the "rural hitch," which involves stationing one truck adjacent to the house and supplementing the water supply through use of trucks and hose from a more distant location. This is possible when the trucks can be located roughly within 1,000 feet of each other. Longer private roads or drives should be required to provide pull-off areas wide enough to park a fire truck and let another pass.



View down a tree-lined road in Cornwall



Old covered bridge over Otter Creek

Gravel roads and driveways are a potential source of sediment to the town's surface waters. Every road or driveway can become a conduit for rainwater or snowmelt, eroding the road material and dumping it into nearby streams. Run-off and erosion from poorly constructed or maintained private roads often results in damage to the town roads they intersect with. Private roads and drives need to be constructed and maintained to prevent run-off and erosion from damaging town roads and reducing water quality in the town's water bodies. Currently, the Cornwall Road Commissioner must assess any new road cut for conformity with state regulations, Vermont Standard B-71 for drainage and curb cuts.

Highway Structures

The Vermont Agency of Transportation categorizes bridges and culverts according to their clear span as follows: small bridge or culvert (less than six feet), bridge or large culvert (6 to 20 feet), bridge greater than 20 feet, and covered bridges.

Bridges

Lemon Fair Bridge

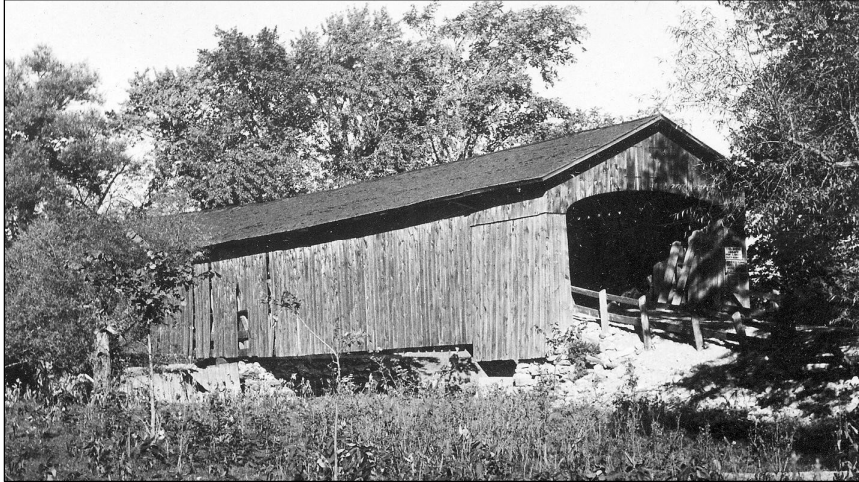
The Lemon Fair Bridge is a two-lane structure carrying Route 125 over the Lemon Fair River. It has two 62-foot spans, consisting of a concrete deck on steel stringers. Originally built in 1936 with a roadway width of 20 feet, the bridge had a low state sufficiency rating and was replaced in 2010. Issues still exist due to the sharp turn at the south end of the bridge and an awkward intersection where West Street intersects with Route 125.

Swamp Road Bridge

Swamp Road Bridge or Station Bridge, a lattice truss covered bridge built in 1865 over the Otter Creek, was on the National Historic Register. The responsibility for this bridge was shared by the towns of Cornwall and Salisbury. Sadly, the bridge was destroyed by fire in 2016 and currently a temporary bridge serves this site. In the Spring of 2022, the Town of Cornwall was in the process of determining the design of the new Swamp Road Bridge. A Vermont Agency of Transportation (VTrans) engineering study of the site proposed design criteria for possible replacement structures. The study boiled the options down to three: A new conventional steel-beam bridge, a new truss bridge, or a new covered bridge.

Three Mile Bridge

The Town should formulate a position relating to the desire to rebuild this Otter Creek crossing.



The former Three Mile Bridge

Small Bridges and Culverts

The Town maintains four bridges or culverts with six to 20-foot spans, all on Class 3 roads and is also responsible for the maintenance of close to 200 crossroad culverts, not including culverts for driveways. These vary from 12 to 72 inches in diameter and 30 to 50 feet in length.

Capital Budget and Program

Cornwall's Capital Budget Committee plans for the town's complete equipment replacement schedule. Below is a list of the town's current road equipment.

Road Equipment

- 2001 Komatsu 130 Excavator (Jointly owned with the Town of Shoreham)
- 2006 Easy Lawn L65-7RtR Hydroseeder (Jointly owned between 11 towns)
- 2007 Karavan Trailer (Tandem axle used for the chloride tanks and pump)
- 2007 Cam Superline Heavy Trailer (Used to transport the excavator)
- 2008 Salsco 627XT Chipper
- 2007 John Deere Tractor with Loader
- Diamond Mower (Mounted to John Deere Tractor)
- Woods Side Mount Mower
- 3-point Hitch Disc Harrow (Attaches to John Deere Tractor)
- 2022 Cimline M series Crack Sealer (Jointly owned between 7 towns)
- 2022 3-point Hitch Buffalo Turbine Blower
- 2004 Volvo 710B Motor Grader

- Volvo Payloader
- 2018 International Single-Axle Dump truck
- 2020 Dodge Ram 5500 Dump Truck
- 2022 International Tandem-axle Dump Truck

Public Transportation

None of the fixed routes of the Tri Valley Transit (TVT) serve Cornwall, mainly because of the low density of settlement or commercial activity along the state highways in town. As gas prices rise further and an energy crisis is perceived by a larger percentage of the population, the interest in accessing public transportation may increase. The Town has been in communications with TVT about providing commuter bus service into Middlebury from the park-and-ride, and possible bus routes along Route 125 as well, but nothing to date has been pursued. In order to implement TVT routes, Cornwall would need to provide a 20 percent local match to TVT. While no regular service is currently provided in Cornwall, TVT does provide “demand response” service throughout the county – “Dial-a-Ride” or DAR. Volunteer drivers transport elderly or disabled residents to healthcare or social service appointments. These rides are for critical medical care, medical appointments, grocery shopping or other essential services depending on the program the individual qualifies for and their individual needs. In 2003, Cornwall residents used this service for nearly 1,000 trips. In 2008 Cornwall residents used this service for 450 trips. In 2011 Cornwall residents used this service for only 183 trips. In comparison, the neighboring town of Salisbury used this service for nearly 3,000 trips in 2011. The significant decrease in service use in Cornwall can be attributed to previous riders moving into elder care homes or passing away, or that the population most served by DAR is not living in Cornwall to begin with. Numbers also fluctuate based on a sudden, critical need for help by any family using the service on a daily or weekly basis.

Commuting

According to the 2020 American Community Survey, approximately 390 of the 534 individuals in Cornwall’s workforce, 73%, get to work by driving. A small amount of carpooling or other means of transportation is indicated in this data.

According to the 2011 survey, 60 percent of respondents traveled to Middlebury during peak hours. Only 6 people out of 140 indicated that they carpool more than once a week. Sixteen people carpooled more than once a month and 99 people said they never carpool.

In recent years, the parking lot at the Town Hall has undergone recent upgrades to include a designated Park-and-Ride area.

Air Transportation

One private airstrip is in operation in Cornwall and is used primarily for recreation.

Cycling and Pedestrian Traffic

Cornwall is home to some of the most popular bicycle routes in the county. Many bicycle-touring companies regularly utilize Routes 74, 125, and 30 as well as West Street and Cider Mill Road. These routes are especially popular with Middlebury College runners and cyclists. Recreational walking or running is also done on smaller, back roads. Provisions should continue to be made for bicyclists and pedestrians in Cornwall.

Discussion as to the safety of pedestrians using Cornwall's Village Center has been raised at planning commission meetings. Many residents believe that traffic calming, sidewalks and/or a crosswalk from the church to the Town Hall would be a good idea. Residents also feel that slower speeds should be enforced in the Village Center.

In 2010, working with Addison County Regional Planning Commission and VTRANS, Cornwall received an enhancement grant and successfully added three-foot shoulders to Route 30 between Middlebury and Cornwall Village. There has been varied response by residents as to whether or not the shoulders provide adequate room and safety for cyclists. However, there was strong support from Cornwall residents to implement this project, and for implementing similar measures along VT Route 125 and 74 in the future. Funding, negotiations at the State level (on State highways), and lack of available adjacent property are hurdles to implementing off-road walking and cycling routes.

ANALYSIS

Safety Concerns

There are a range of safety concerns related to Cornwall's transportation system including those related to traffic speed, limited sight distances, poor layout of intersections, and bicycle and pedestrian use of the roads. While a number of recent update projects have improved conditions, such as shoulders on Route 30, bridge improvements and the 74/30 intersection improvement, there are safety concerns which must be considered regularly.

During the ten-year period from 2012-2022 the VT Agency of Transportation has documented the following crash data on Cornwall's State Highways:³³

- **Route 30:** 69 crashes, 16 with injuries
- **Route 74:** 9 crashes, 7 Injuries (including 1 fatality)
- **Route 125:** 33 crashes, 14 injuries (including 1 fatality)

Due to the fact that Route 30 is relatively straight, in good condition, and is a major north-south transportation corridor, speed and volume of traffic are continual battles for the Village Center Area of town and those using the shoulders for cycling or running. The locations of the crashes on Route 30 were evenly spaced north to south. Both Route 74 and 125, have significant dips and curves that should not be traveled at high speeds. Many of the recent crash sites are located on these bends in the road. Even with the Lemon Fair bridge having been reconstructed and realigned, a concentration of crashes have occurred at the intersection of West Street and Route 125. Manure on the roads from farming equipment is also a significant danger, especially in conjunction with wet roads.

³³Vermont Agency of Transportation. Vermont Public Crash Data Query Tool.
<http://apps.vtrans.vermont.gov/CrashPublicQueryTool/>.

Road Policy

Cornwall's Road Policy governs the use and maintenance of the town's highways. It states that the town will not be responsible for maintenance of Class 4 roads, and that the users of the road will pay for the entire cost of upgrading a Class 4 road to Class 3 unless otherwise agreed. The town may at its discretion maintain Class 4 roads that have been improved to meet Class 3 standards, but it is not obligated to do so. Roads entering developments are also covered by the policy. A private road may be taken over by the town if the town chooses, if it meets applicable state standards, and if a right-of-way is deeded to Cornwall. Weight, size and speed restrictions are also covered by the policy as are driveway culverts.

There are two programs in Vermont that provide recommendations for construction and maintenance of private roads and drives. The **Vermont Local Roads Program**, *Developing a Highway Access Policy: Guidelines and a Model Ordinance*, contains minimum standards for the design, construction and maintenance of residential driveways and private roads. The *Vermont Better Backroads Manual* from the **Better Backroads Program** recommends techniques and actions that can be used to improve the maintenance of gravel roads and drives. Cornwall's private roads and drives should be constructed and maintained to the standards described in these publications.

Municipal Road General Permit

In Spring 2017, Cornwall received a grant from the VTrans Better Roads Program to conduct a culvert and road erosion inventory, prioritize identified projects and develop a Capital Improvement Plan (CIP) to implement the projects over a period of five years. The proposed CIP describes the major projects and costs related to road erosion projects and lays out a prioritization schedule for their completion to comply with the **Municipal Roads General Permit (MRGP)** issued by the Agency of Natural Resources. As part of the CIP process, budgets should be developed based on the projects to be undertaken.

In Spring 2018, an inventory of 211 culverts was completed as well as an inventory of all Class 2, 3 and 4 roads that have the potential to affect water quality.³⁴

Access Management

With ever greater amounts of faster moving traffic – as well as more driveway and road intersections – on state and some local roads in Cornwall, the potential for dangerous intersections, difficulty making left turns and exiting driveways, congestion and driver confusion increases. Access management is a group of strategies, tools and techniques that work to optimize the safety and efficiency of roads. One of the most basic access management strategies is to limit the addition of new access points being added along roads and encourage use of shared drives. Other simple access management techniques include:

- Designing driveways/road connections to B-71 VT standards;
- Limit private property drainage into road ditch system;
- Driveways constructed so as to provide adequate access to private structures by emergency vehicles;
- Locating driveways on side roads, where appropriate;

³⁴Town of Cornwall [Vermont]. *Highway Department Capital Improvement Plan*. Addison County Regional Planning Commission, 2018, <https://docs.google.com/document/d/1mHdRNveMluMebmpQAkzm5x43gB7-dMqU/edit>. Document available upon request to the Addison County Regional Planning Commission.

- Establishing a minimum spacing distance between driveways;
- Consolidating driveways and connecting parking lots, where applicable; and
- Increasing the minimum lot frontage.

Access management strategies should also be incorporated into Cornwall’s road policy and land use regulations.

Rural Character

From previous planning survey results, it is clear that Cornwall’s roads are intrinsically linked to the rural character valued by residents. Many residents feel strongly that the town’s gravel roads should not be paved or widened.

It should, however, be noted that future traffic volumes on some town roads may reach levels at which paving could minimize total costs to drivers and the town. Cornwall’s Select Board has a policy to guide the decision-making process related to paving of the town’s gravel roads based on criteria from the Vermont Local Roads programs and other similar guidelines.



Roadside view in Cornwall.

Many of Cornwall’s roads exemplify scenic qualities that are pleasing to residents and add significantly to the rural character of the town. Stone wall or wooden fences, mature trees and hedgerows that line the road, views of the Adirondacks and Green Mountains over open fields, neatly planted apple orchards, streams and other natural landforms are all features that define the scenic quality of Cornwall’s roads. The road itself, whether paved or gravel, can also be scenic. Narrow country lanes and winding roads that curve around hills opening onto scenic vistas can delight the traveler or life-long resident.

The town’s land use regulations are intended to preserve the scenic character of Cornwall’s roads through measures such as protecting existing features like tree canopies, stonewalls, hedgerows and significant old trees. The view from the road could be considered when developing regulations related to signage and requirements for planting of street trees along some roads. Cornwall could also consider the capacity of its existing system of town roads and establish development densities that would not exceed that capacity thereby preventing the need for excessive road widening or straightening. New roads should also be designed to enhance the town’s rural character. Construction elements associated with suburban subdivisions, such as wide asphalt roads and concrete curbing, should be avoided.

RECREATION

Planning for the recreation needs of town residents and visitors can enhance the character of a community, attract tourists and be beneficial to the quality of life within the community. Small, rural towns like Cornwall often have an abundance of outdoor recreation resources. These resources, however, are usually on private land and continued public access to them is based upon the generosity of the landowner.

INVENTORY

Cornwall has limited public recreational facilities and areas, which include: fields and a playground at the Bingham School; a softball field owned by the Synotts; and the recreation area at Douglas Pond. The silt and weeds have become an issue at Douglas Pond and limits pond use, but ice-skating has not been affected by this. The Town Hall has dancing available to residents. Notifications of these events are posted in front of the Town Hall, on the town website and in the Addison Independent. Town roads are used for bicycling, hiking, dog walking, walking/running and rollerblading. The Trail Around Middlebury (TAM) crosses briefly into Cornwall's northeast corner along Route 125.

Private land in town is available to the public, by request/permission for hiking, hunting and viewing wildlife. Cross-country skiing and horse-back riding are done on private lands or done on land owned by the Nature Conservancy. Some private lands have hills for sledding. All-terrain vehicles and snowmobiles are ridden on private property. A snowmobile trail – part of the Vermont Association of Snow Travelers' (VAST) trail system – runs through Cornwall on private land. VAST maps are available at Champlain Valley Motorsports.

The State Fish and Wildlife Department has a boat launch at the Swamp Road bridge, and at various times of the year, the Lemon Fair River is accessible for small boat crafts and fishing. Boating is available in nearby lakes such as Lake Champlain, Lake Dunmore, Hortonia, Bomoseen, Burr Pond, and Lakes Sunrise and Sunset.

ANALYSIS

Cornwall residents do much of their outdoor recreation on private lands in Cornwall, as well as travel outside town for recreational pursuits. Many residents would like more places for picnicking and outdoor gatherings/team sports. An off-road connection to the Trail Around Middlebury (TAM) is of interest to the town. Residents would also like to see public access to local streams and rivers for small craft boating/fishing.

Most activities that residents participate in are things they can do on their own, rather than a group sport. In addition to outdoor recreation, it is likely that many residents engage in a variety of indoor recreation activities at facilities out of town. In the absence of public facilities, people build their own rinks, pools and courts and stay in their own yards.

Extensive indoor and outdoor recreation facilities and programs are available in Middlebury, and many Cornwall residents take advantage of them. In the absence of public transportation, those who are too young or too old to drive to Middlebury may be excluded from these resources. Additionally, some of the recreation opportunities in Middlebury require an association with Middlebury College, membership in a club, or are pay-for-service. The Middlebury Recreation Department does extend its offerings to "out of town" residents including the residents of Cornwall. Also available are many pick-up sports which are played on the many fields available in Middlebury, which fortunately are only minutes away from Cornwall and very accessible.

A large amount of open space still exists around the Town Hall and the school, but is privately owned. Some of this privately-owned land is already used for recreational purposes, such as the firemen’s ball field which was constructed in the 1980s. If the Town could eventually purchase the land, it could extend the existing recreational facilities at the school, creating additional playing fields and trails for walking, biking and cross-country skiing. There is a lot of support for recreational trails, sports fields, and public green space in the village center.

Cornwall residents looking for recreational opportunities can do so by checking the board at the Town Hall. Inquiries and postings can be made here. The newsletter is also available to people who want to inquire or post happenings on a quarterly basis.

NATURE AND THE ENVIRONMENT

This section of the town plan describes the natural features and resources that help shape Cornwall's rural character. It also recognizes and discusses threats to those resources and identifies appropriate strategies for their use and protection. The integration of the natural environment with the town's built environment and cultural heritage has created a distinct sense of place that is easily recognized and valued by residents.

INVENTORY

Natural Communities

Cornwall's natural communities include upland and wetland forest types, streams and ponds, non-forested wetlands and open uplands such as cliffs and bedrock outcrops. Part of maintaining a quality environment in our town includes wise stewardship, protection and sustainable management of Cornwall's natural communities.

Topography

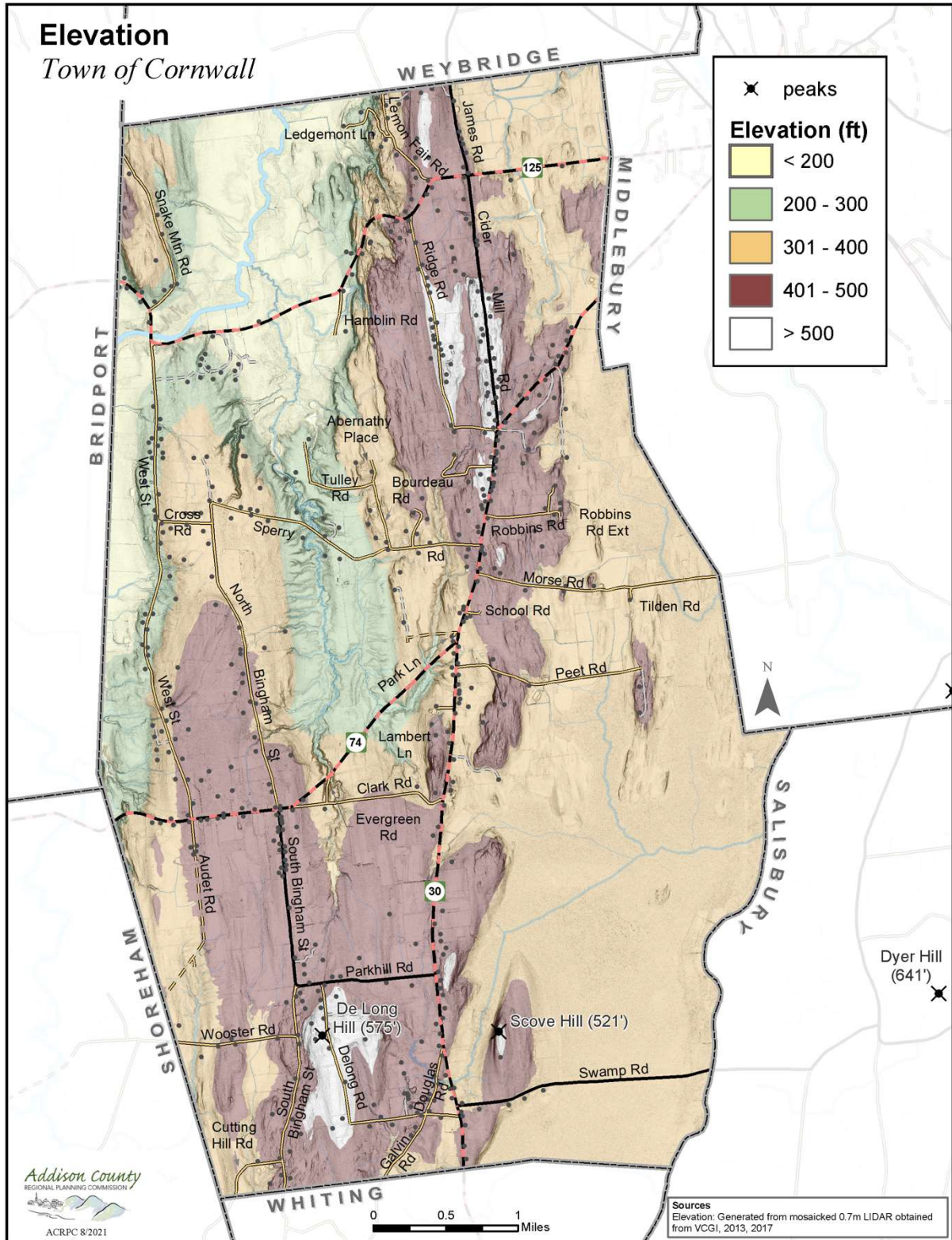
Cornwall's topography is for the most part gently rolling, with some flat terraces and a few steep pitches. Elevation varies from 180 feet above sea level along the Lemon Fair to 550 feet at "550 Hill" near South Bingham Street and DeLong Road.

Several ridges run north to south through the town. The eastern third of the town is dominated by a large, flat expanse created by Cornwall Swamp. The western third of the town consists of a large terrace separated from the central hills by the valleys created by Beaver Brook and the Lemon Fair.



View of the Ledges

The hills on one ridgeline become particularly noticeable in an area known as The Ledges near the boundary with Weybridge. The Ledges is a 50- to 60-foot cliff with a vertical face of limestone, dolomite and marble that runs for approximately 1,000 feet. The cliff is highly visible from Route 125 and is a striking feature rising up from flat agricultural fields. The Ledges are part of a four-mile calcareous, ledgy woodland that extends through the northern part of town into Weybridge, ending slightly north of Bittersweet Falls on Beaver Brook.



Map 1 Elevation Characteristics (Source: ACRPC)

Soils

Soils in Cornwall range from heavy clays to light loams to bedrock. Most of them are classified as Vergennes Clay, a soil that is inherently fertile yet very heavy. Vergennes soils are not easily developed because of their wetness and slow permeability. However, these soils have high potential for agricultural production and moderate potential for forestry production. They are considered soils of statewide importance by the USDA Natural Resource Conservation Service (NRCS). Vergennes soils were also considered suitable for the manufacturing of bricks at one time.

Areas of lighter, loamy Nellis soils occupy parts of the upland terrace in the center of Cornwall. These soils have high agricultural potential. Because of their scattered distribution and irregular shape, they are difficult to farm effectively. Certain Nellis soils have been classified by the NRCS as being of national importance (prime) for agriculture, and others have been classified as being of statewide importance. Nellis is extremely productive for forest growth and orchards and has few limitations for development.

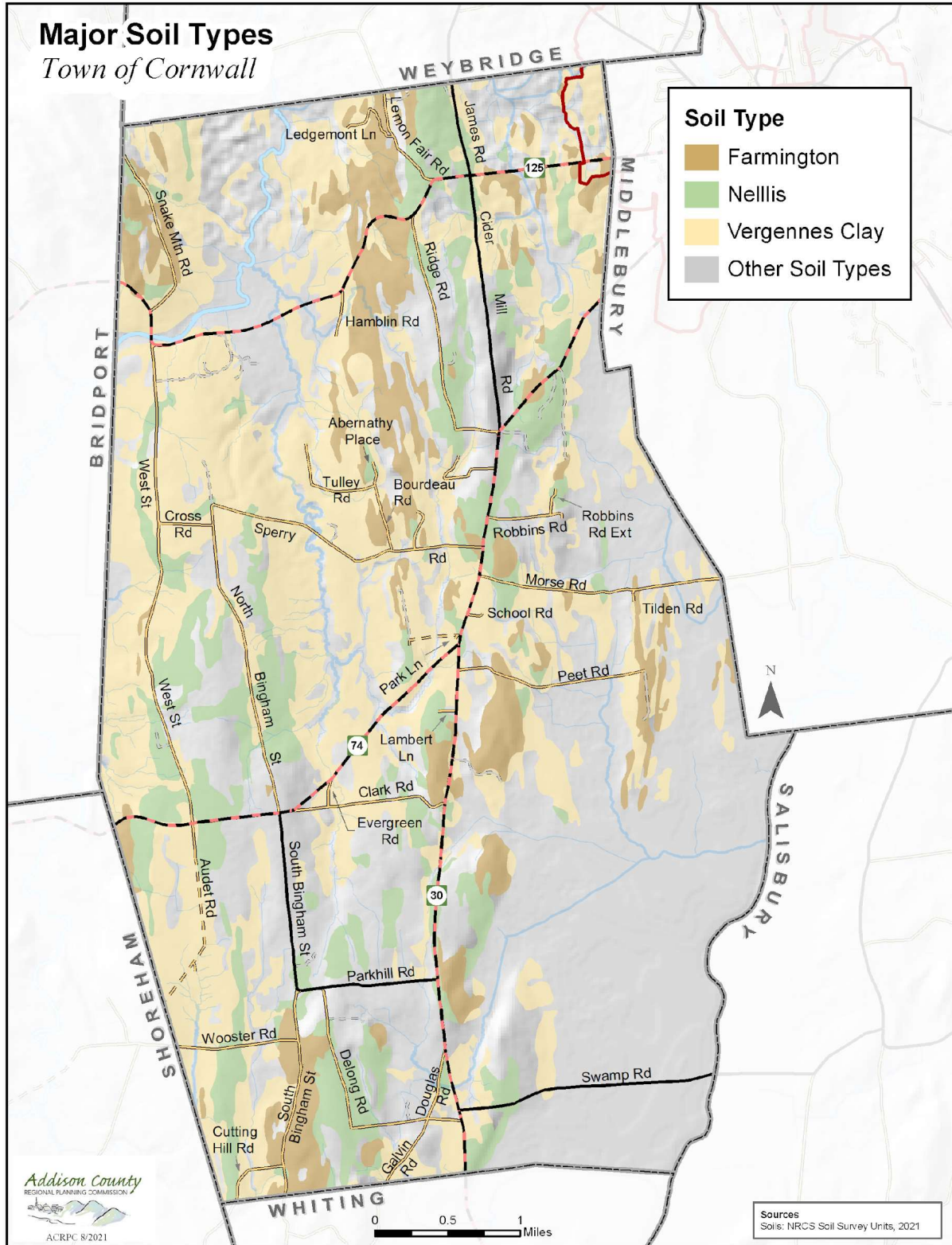
Farmington silt loams, found along many ridgelines in the town, have low productivity ratings for agriculture and forestry. They also have low potential for development due to their shallow depth to bedrock.

Creation of the town's current soils began over 10,000 years ago when a large sheet of glacial ice covered Cornwall. When the ice began to melt and receded, the soil, dirt and rocks that the ice had scraped off the mountains were deposited throughout Vermont. The retreat of the glacier also led to Cornwall being submerged underwater. Glacial meltwater filled much of the Champlain Valley, creating Lake Vermont, the predecessor to Lake Champlain. These episodes together explain much about Cornwall's soil and landforms. The town's clay deposits were formed from many centuries' accumulation of lake sediments, while rocky and gravelly areas resulted from the "bulldozer" action of the glaciers.

Mineral Resources

Cornwall has a limited number of deposits of high-quality mineral resources. These resources include sand, clay and gravel, as well as slate and limestone. Probably the most significant by current economic standards are sand and gravel. There is a significant deposit of sand and gravel in the south end of Cornwall, west of Route 30.

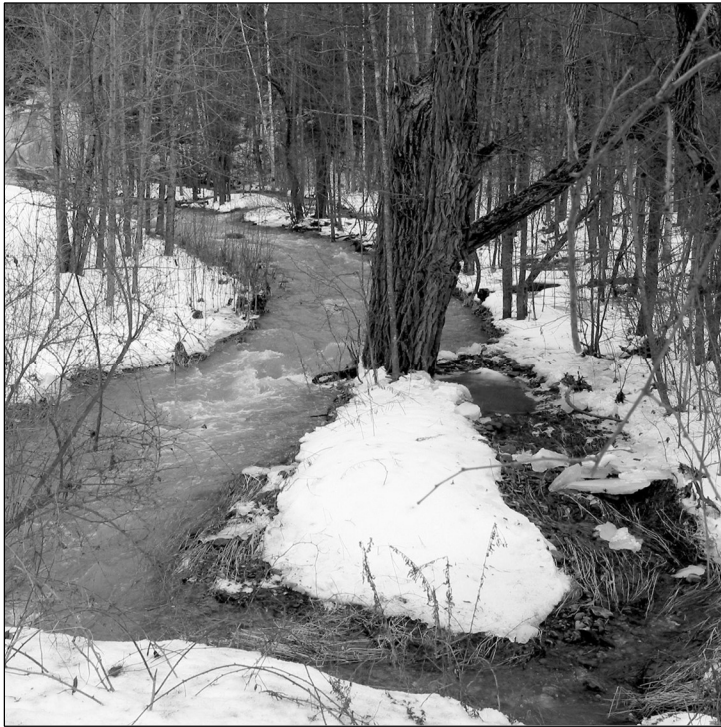
Starting near the geographic center of Cornwall and running north into Weybridge, are "The Ledges," which play an important role as habitat for deer, fox, bobcat and coyote. The limestone, which was used to construct Mead Chapel at Middlebury College, came from a quarry in southwest Cornwall known as "Peck's Ledge" near Wooster Road. Deposits of white marble, flagstone and slate can also be found but are no longer quarried, however, because they can no longer be economically extracted.



Map 2. Major Soil Types (Source: ACRPC)

Surface Waters

Surface waters in Cornwall include Otter Creek, Lemon Fair River, Beaver Brook, Douglas Pond, Davydov Pond, numerous small streams and a variety of beaver ponds. Many constructed ponds also dot the town's landscape.



Beaver Brook

Otter Creek runs along the southeast corner of Cornwall and supplies water to the Cornwall Swamp. The creek continues to flow north and empties into Lake Champlain. The Lemon Fair begins in Orwell south of Richville Pond. It flows north, through the western side of Cornwall, and then flows into the Otter Creek. The Beaver Branch originates in Cornwall and flows north to the Lemon Fair. The Beaver Branch and the Lemon Fair meet on the north side of Route 125.

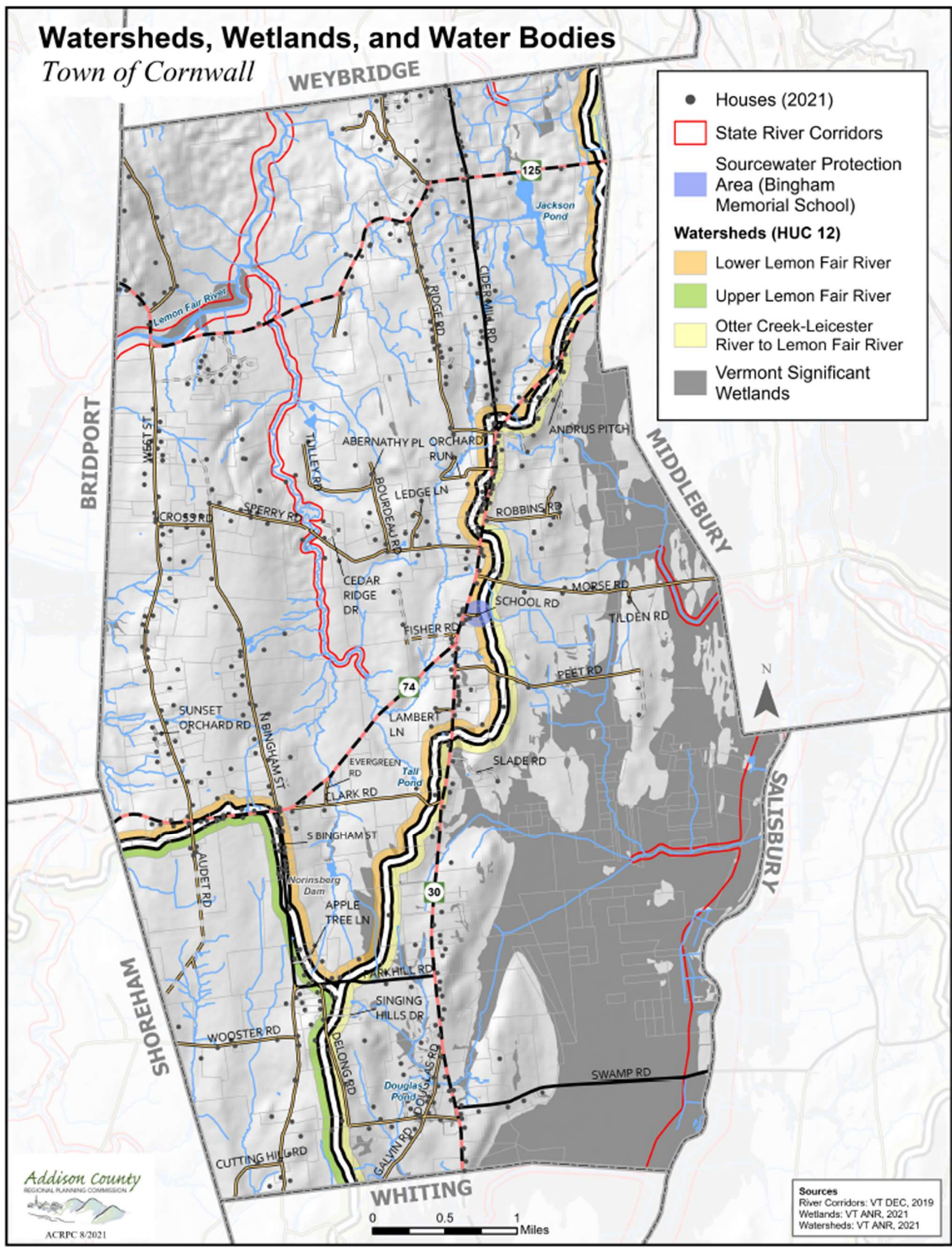
The State of Vermont Water Quality Division considers all of these surface waters Class B waters. Class B waters are managed to be safe for swimming, fishing and boating.

They must be treated, filtered or boiled before drinking, however. Many areas in town, particularly along the Lemon Fair and Otter Creek, are prone to springtime flooding.

Cornwall residents can stay informed on the quality of the Lemon Fair River by keeping up on results obtained by the Addison County River Watch Collaborative. There are currently two monitoring stations in the Lemon Fair River in which this volunteer group checks e coli, phosphorus and nitrate levels as well as turbidity levels. More information can be found at: <https://acrpc.org/regional-programs/natural-resources/acrwc/>

There are several ponds in Cornwall, ranging in size from less than one acre to over 20 acres. These ponds provide drinking water for livestock and wildlife, as well as recreation opportunities for residents. Davydov Pond and Douglas Pond are two of the better-known natural ponds in Cornwall. Davydov Pond is a small, shallow pond located adjacent to Cider Mill Road and is primarily used for recreation purposes. Douglas Pond, located off of Route 30 on Douglas Road, was deeded to the town after several local residents opposed the sale of the pond to a developer.

There are several man-made ponds in Cornwall. The largest of these is Jackson Pond, a private pond that covers approximately 25 acres and is located off of Route 125. Tall Pond, located off of Clark Road, is considerably smaller and is used by local trout fisherman.



Map 3. Watersheds, Wetlands, and Water Bodies (Source: ACRPC)

Wetlands

Cornwall Swamp, a *National Natural Landmark*, is located almost entirely in Cornwall. Cornwall Swamp is part of a larger system of wetlands along the Otter Creek basin in Addison and Rutland counties. In spring, all the swamps are connected by floodwaters forming a landscape of water from Brandon north to Middlebury. This system – Long Swamp, Brandon Swamp, Salisbury Swamp, Whiting Swamp and Cornwall Swamp – form the



Cornwall Swamp

largest interior wetland complex in Vermont. Cornwall Swamp is an approximately 3,200-acre, Class II wetland that is largely forested with virtually no development and a limited amount of land in agricultural use. The swamp features an array of natural community types and supports a number of rare and uncommon plant species. The swamp contains very good examples of red maple-back ash swamp and floodplain forest. Within the swamp, 1,200 acres are part of a state-owned wildlife management area. The Nature Conservancy owns around 300 additional acres in the swamp.

Another large wetland area in the Lemon Fair River valley includes portions in Cornwall. Additionally, there are many smaller Class II and Class III wetlands located within the town.

Groundwater

Cornwall has sparse groundwater potential and every effort needs to be made to maintain its quality and quantity and protect recharge areas and aquifers. Most of the areas with good groundwater potential are near the Cornwall Swamp and the Lemon Fair. The quality of groundwater varies with some areas of town reporting varying concentrations of sodium and sulfur in the groundwater, while others report good quality. There are no Source Protection Areas in Cornwall, since there are no public water supplies. All residents in Cornwall rely on private wells for all water needs. Due to this reliance, underground utility transmission lines should not be constructed near these water sources.

Stewardship and Conservation

To plan for maintaining and protecting the town's significant natural communities, it is necessary to identify and describe those areas through a thorough inventory that utilizes both existing information and acquires new information through interviews with knowledgeable locals as well as ground truthing sites. Although the Vermont Fish and Wildlife Department has identified some of Cornwall's significant natural areas, a systematic ecological inventory was done in 2015 to supplement this data.³⁵

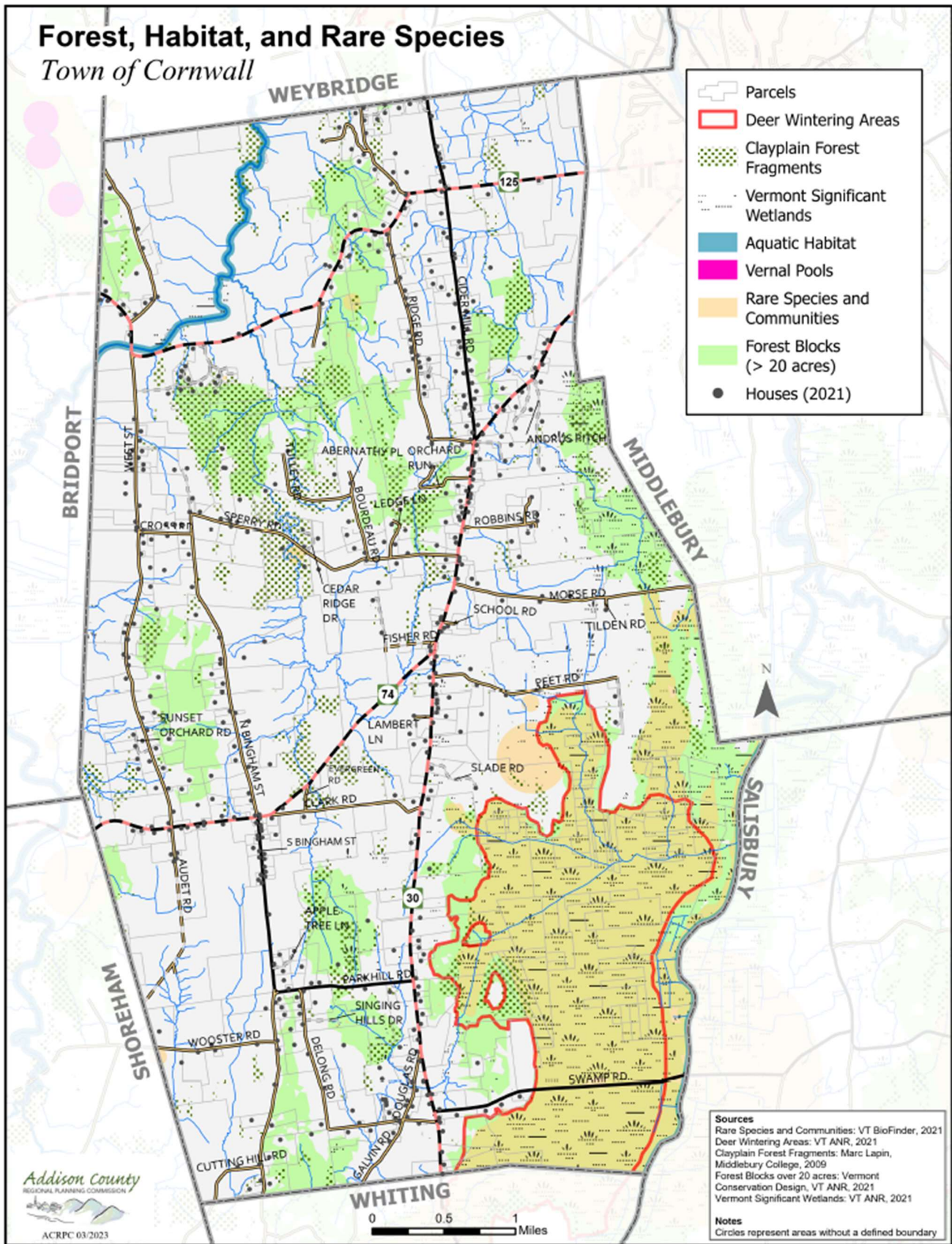
The Cornwall Development Review Board and Conservation Commission have formalized the role of the Conservation Commission in the subdivision application process, in order to ensure minimal impact to Cornwall's natural systems during any new development plans.

Beaver Brook Watershed Conservation Plan

The Beaver Brook watershed covers 7.5 square miles of land in the center of Cornwall, or 4,822 acres. There are 151 residents living in this watershed. In July 2010, at the request of a resident living in this area, the *Beaver Brook Watershed Plan* was completed by a private consulting firm³⁶. This conservation plan highlights land uses, soils types, pre-settlement and existing natural communities, wildlife habitats and corridors, conservation priorities and management recommendations. The Beaver Brook Conservation Plan is an example of the kind of inventory and mapping that could be done throughout Cornwall in order to adequately protect ecological and scenic resources in the future.

³⁵ Engstrom, Brett. *An Ecological Inventory of Cornwall, Vermont*. Cornwall Conservation Commission, May 2015, https://cornwallvt.com/conservation/inventory/Cornwall_NRI_Report_Final_2015.pdf.

³⁶ Landslide Natural Resource Planning. *Beaver Brook Watershed Cornwall Vermont Conservation Plan*. Middlebury, Vermont: Middlebury Area Land Trust, July 2010.



Map 4. Forest, Habitat, and Rare Species (Source: ACRPC)

Forest Blocks and Connectors

Vermont Act 171 encourages municipalities to address the conservation of forest blocks, wildlife habitat, and habitat connectors, as well as to support local forest products businesses, in their town plans. The statute states that "Vermont's forestlands should be managed so as to maintain and improve forest blocks and habitat connectors."³⁷ A land use plan is suggested, which consists of a map and statement of present and prospective land uses, that indicates those areas that are important as forest blocks and habitat connectors and plans for land development in those areas to minimize forest fragmentation and promote the health, viability, and ecological function of forests. A plan may include specific policies to encourage the active management of those areas for wildlife habitat, water quality, timber production, recreation, or other values or functions identified by the municipality.³⁸

Forests are integral to the character and functionality of Cornwall's landscape. They provide numerous services to the town and the people and wildlife which live here. Forests play a role in maintaining clean groundwater for our wells, help to absorb contaminants from air pollution to clean the air we breathe, and provide a place of respite and peace which contributes to our quality of life. Forests provide natural flood mitigation, both through absorption of water and moderating its movement over land. The forests of the Cornwall Swamp provide critical habitat to numerous unique and threatened species and the mature oak and beech forests of the Ledges and Snake Mountain provide food sources to wildlife, like bear and deer. Aside from the value they provide in the robust ecology, the creatures and plants our forests harbor can reduce and manage pests for us.

Forests also are a significant part of Vermont's economy. According to the Vermont Agency of Natural Resources (2018) 12% of Vermont's GDP (20,000 jobs) has been associated with forests annually generating \$1,500,000,000 from forest products, \$1,900,000,000 from forest recreation and tourism and \$685,000,000 from hunting, fishing and wildlife viewing. Fall foliage tourism has made up 25% of Vermont's income from tourism.³⁹ In Cornwall, forest products such as maple syrup and firewood have provided income for some residents.

Forests in Vermont have a dramatic history. Cut heavily for timber in the early decades of European colonization and settlement, clearing continued for agriculture purposes until the 1880s, when estimates suggest that 63% of the state was cleared of forest. Steady reforestation across the state started from that time until the late 20th century when population increases and development patterns began to encroach on the reforested land. Cornwall's development pattern matches this state-wide trend towards prioritizing privacy and scenic views. This pattern leads to greater "parcelization" - larger blocks of land and forest are subdivided into smaller parcels for residential development. This development, with its attendant infrastructure (roads, utilities, and buildings), affects the internal workings of forest blocks. Resulting breakup, or fragmentation, of the forest, can affect the landscape beyond the footprint of these built elements for a distance of as much as three hundred feet. Over

³⁷The Vermont Statutes Online. 24 V.S.A. § 4302(c)(6)(C).

<https://legislature.vermont.gov/statutes/section/24/117/04302>

³⁸Vermont Agency of Natural Resources. *PLANNING: A Key Step Towards Protecting Forest and Wildlife Resources, Act 171 Guidance*, March 2018, pp. 7-8,

<https://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Act171Guidance.pdf>.

³⁹ Implementing Act 171: Land Use Planning to Address Forest Fragmentation, 2018, 3rd Edition.

time progressive parcelization, even at low density, can have a cumulative effect of much wider clearing and makes forests less effective at performing the services and functions discussed above. For a more detailed discussion of the effects on forest fragmentation, please see the 2015 Vermont Forest Fragmentation Report to the Vermont Legislature.

While the amount of forested land in Cornwall has increased since the late 19th century, forest fragmentation remains a significant threat to the town's natural heritage because of our pattern of development. It is likely that in the past nearly all of the upland forests were entirely cleared for grazing and fuelwood, and even the large forested wetlands along Otter Creek were selectively harvested for cedar poles and firewood. This history has left its mark on today's forested areas.

Although the total forested area is likely greater now than at any point since the mid-1800's, when Cornwall's sheep industry relied on extensive land clearing, the town's tendency toward smaller parcels and higher value development increases the threat of fragmentation. The three most common upland forest types in Cornwall include one rare type, Mesic Clayplain Forest, and two uncommon types, Maple-Ash-Hickory-Oak Forest and Dry Oak-Maple Limestone Forest.

The Vermont Agency of Natural Resources through its Vermont Conservation Design initiative has generated maps identifying Highest Priority and Priority Interior Forest Blocks as well as Highest Priority and Priority Connectivity Forest Blocks statewide as a resource for municipal planning and conservation strategies. This mapping provides the foundation for the Town of Cornwall Forest Integrity map. The release of updated data is expected in late-2023.

Maintaining large blocks of existing forest habitat and connections between those forest blocks is one of the best ways to ensure conservation of forest-reliant species. Conservation measures that can protect and enhance native forests and wildlife include keeping existing forested areas forested; maintaining large blocks and clusters of forest; allowing abandoned fields to regrow to forest; enhancing with planting native stock; maintaining tree and shrub cover in fencerows; building structures, roads, driveways and utilities outside of forest patches; creating 'soft edges' where possible; and using a consulting or county forester to plan tree harvests.

Cornwall has a number of excellent resources to draw from in identifying ecologically important forested areas and wildlife. The Cornwall Conservation Commission initiated and contracted Brett Engstrom, consulting Botanist and Ecologist, to conduct an Ecological Inventory (2013-2015) which includes a map of Potential Connectivity Habitat for Wildlife. The primary focus of the inventory was to identify natural communities of state and local significance, species of greatest conservation need, large and more intact forest blocks, riparian areas of special importance for watershed health, and potential connectivity habitat. In 2016, the Cornwall Planning Commission, the Cornwall Conservation Commission, and the Cornwall School organized and conducted a workshop where Cornwall residents defined on maps areas of Historic, Community Place, Scenic, Recreation, Wildlife, Farm and Working Land, Potential Energy Location and Hunting & Fishing values. The result was a collection of maps showing the different areas of value plus a composite map showing all the areas of value and how they overlapped. The workshop was directed by Jens Hilke, Conservation Planning Biologist from the VT Fish & Wildlife Department and included sixty participants. Furthermore, for many parts of town, aerial photos of the landscape exist from 1942, which allow the identification of locations that have remained forested from that time to the present. Historical aerial imagery from 1942 and 1962 can be found in an interactive map here: <https://www.arcgis.com/home/webmap/viewer.html?webmap=6dfd5c4cf59c4ef482cdab41cfe4edc7&extent=-73.3169,43.9356,-73.0049,44.0793>

These forested areas tend to have few invasive species and have greater natural integrity.

Cornwall contains several large areas of contiguous forestland that have been identified and mapped as "Highest Priority" and "Priority" Forest Blocks through Vermont Conservation Design by the VT Agency of Natural Resources. The Cornwall Ecological Inventory⁴⁰ describes the ecological characteristics and conditions of these forested areas, which contain the greatest diversity of both natural communities, and native plant and animal species, in the municipality.

Highest Priority Forest Blocks

These Forest Blocks have been identified as the highest priority across the state for maintaining interior forest. These are the largest and highest ranked forest blocks from all biophysical regions that provide the foundation for interior forest habitat and associated ecological functions. In the Champlain Valley, these blocks are larger than 250 acres. Two Highest Priority Forest Blocks have been described in Cornwall and are identified as Cornwall Swamp and Snake Mountain South.

Cornwall Swamp

The Cornwall Swamp in southeastern Cornwall, sometimes referred to as Otter Creek Swamp or the Cedar Swamp, is part of an enormous, 15,000 acre wetland complex along Otter Creek from Brandon north to Middlebury. The Otter Creek Swamp complex is the most biologically diverse wetland complex in New England. The complex is an important lowland habitat bridge for wide-ranging animals including bobcat and bear and is an important stopover area for migratory waterfowl in the region. Cornwall Swamp was designated a National Natural Landmark by the U.S. National Park Service in 1974, and a substantial part of the swamp is protected through conservation ownership by the Vermont Agency of Natural Resources and The Nature Conservancy.

As the largest and wildest forest block in Cornwall by far, Cornwall Swamp is a major wildlife area for the town. Because of its size and unfragmented character, it can act as a "source" or production area for a wide variety of wildlife to leave and inhabit riskier and less productive habitats in town (Engstrom 2015, pp. 58-61). Part of the forest block is upland area on the Swamp Westside Hills, which contains mapped deer wintering area and a variety of large mammals, including bobcat and catamount, have been reported in the area. (Engstrom 2015, pp. 54-57).

These adjoining wetlands and upland buffer are the only mapped deer wintering area in Cornwall, and the only noted bear habitat.

In the 2016 Cornwall community values mapping workshop, the Cornwall Swamp block was identified by residents as one of the areas of town with the greatest number of values, primarily those of scenic, recreation, wildlife, and hunting and fishing.

Snake Mountain South

The Snake Mountain South forest block extends south into northwest Cornwall from Bridport. The block provides a connection to the larger forest block around the Snake Mountain peak on the Addison-Weybridge town line. Parts of that larger forest block are owned by the Vermont Fish & Wildlife Department as a Wildlife Management

⁴⁰ Engstrom, Brett. *An Ecological Inventory of Cornwall, Vermont*. Cornwall Conservation Commission, May 2015, https://cornwallvt.com/conservation/inventory/Cornwall_NRI_Report_Final_2015.pdf.

Area, and other pieces are owned by The Nature Conservancy. The portion in Cornwall is west of Snake Mountain Road and is privately owned.

The Snake Mountain South forest block is located on a quartzite hill produced by an ancient thrust fault, where older, limestone-containing rock was pushed up over younger rock. The limestone greatly enhances the fertility of the soils, allowing a small band of the diverse Dry Oak-Maple Limestone Forest community type on the steep, rocky, west-facing slope. The more gently sloping terrain is a Mesic Maple-Ash-Hickory-Oak Forest natural community. The top portion of the hill was already forested in 1942 and has fewer invasive species like common buckthorn and honeysuckle.

Priority Forest Blocks

Priority Interior Forest Blocks are highly ranked forest blocks from all biophysical regions that contain important interior forest habitat and provide ecological support to the Highest Priority Forest Interior Blocks. Seven Priority Forest Blocks have been described in Cornwall and are identified as The Ledges North, The Ledges South, Beaver Brook/The Gully Forest, Ledge Creek, West Cornwall Ridge, Otter Creek Swamp north of Morse Road, Parkhill and Delong Hill.

Many of these blocks of land feature prominently in the Cornwall landscape and in the daily lives of the people in town. Beyond the ecological value, these landscapes are part of the fabric of what makes Cornwall the town it is for the people who live here and travel through. Planning for these areas means we are not just considering the ecological or economic impact of forests, but the experience of residents and travelers through our town. Please note the number associated with each section heading provides location references for the Forest Block map.

The Ledges North (1)

The Ledges are the west-facing limestone cliffs and forested ridge that can be seen driving east on Route 125 from the Lemon Fair floodplain. It is part of a major limestone ridge system that extends from Sperry Road into Weybridge. This rocky forest is the largest single block of upland forest in Cornwall and is a site of unusually high biodiversity significance. The Ledges North has a high biodiversity strongly associated with limestone, with uncommon and state-significant natural communities (Engstrom 2015, pp. 34-37).

It likely has wildlife corridor connections to Weybridge and the Ledges to the south across Route 125, and potentially the Lemon Fair.

The Ledges South (3)

This southern continuation of The Ledges rocky ridge system is bisected by Route 125 from the forest area to the north. It also has high biodiversity strongly associated with limestone. The cliffs and the apron of rocky woods in the talus below the cliffs host significant examples of uncommon natural communities in Vermont, and the rocky limestone forest found above the cliffs is unusually extensive and contains remarkably few invasive plants, hence significant on the state-level. Several small water features, such as a spring, small perched marsh and shrub swamp, and vernal pool, provide important ecological/habitat diversity to the site. There are at least ten uncommon plants and two state-threatened plant species (Engstrom 2015, pp. 22-25).

The wooded area north of Tulley Rd. and east of Beaver Brook makes up the western part of this forest block and provides a Beaver Brook-Ledges Connection. It is made up of a pre-1942 band of dry oak-maple limestone forest and temperate hemlock-hardwood forest associated with the north-south aligned limestone ledge system, along with successional clayplain forest areas to the west (Engstrom 2015, pp. 1-3).

Altogether, this is the largest upland forest block in Cornwall, which is important to a wide variety of forest dwelling animals, including large mammals, such as deer and bobcat, forest interior songbirds, and salamanders.

Beaver Brook/The Gully (2)

The Beaver Brook drainage and adjacent uplands extends from Route 74 downstream (northerly) to Route 125. It contains two rare natural communities in Vermont: Mesic Clayplain Forest and Sand-Over-Clay Forest. Because it has been continuously forested for over 75 years (and likely never cleared), the clayplain forest has remarkably few invasive plants. The area is dissected by several stream drainages, the largest locally referred to as "The Gully". The east and south sides of the forest block abut wetlands associated with Beaver Brook, all influenced by the hydrology of the Lemon Fair River. The wetland types within this area are diverse, including seeps, cattail marshes, and alluvial meadows, with beaver activity creating its own habitat.

The mature clayplain forest, ravine forest, successional clayplain forest, and variety of riparian features make this great wildlife habitat that has been noted by residents. Wildlife likely travel from this block to the Lemon Fair River across Route 125, continuing to Snake Mountain South, as well as to the Priority Connectivity Blocks (E) along Sperry Road. (Engstrom 2015, pp. 42-45).

Ledge Creek (4)

This forest block includes Ledge Creek headwaters from Cobbs Corners north to Route 125. A large portion of the area is owned by Middlebury College and has been ecologically evaluated and inventoried (Lapin, 2011).⁴¹ A large acreage of former fields has been reforested in the form of conifer plantations and now include an understory of native hardwood species beneath the overstory of White and Red Pines (*Pinus strobus*, *Presinosa*, respectively), White Spruce (*Picea glauca*), and to a lesser extent, European Larch (*Larix decidua*). The block also contains a 25-acre pond, open wetlands, Beaver Brook, agricultural hay fields and hedgerows, and old fields in various states of succession that are dominated by white pine or are shrubland (Lapin 2011, pp. 1-9).

The forest block includes excellent examples of the two dominant ecosystem types of the southern Champlain Valley—dry oak-maple limestone forest and clayplain forest, as well as an area of mesic maple-ash-hickory-oak forest that was used as a sugarbush and never cleared. (Lapin 2011, pp. 2-4).

The diverse habitats in this forest block support numerous species of birds, small and medium-sized mammals, and reptiles and amphibians that utilize the brook and wetlands. One landowner within the forest block has observed and recorded more than 128 bird species and observed White-tailed Deer, Moose, Bobcat, Red Fox, Eastern Coyote, and Beaver. Wild Turkeys, Porcupines, Red-spotted Newts and several species of frogs and turtles have also been observed on the property. The section of Route 125 due north of the forest block is modeled to have the highest wildlife crossing value possible, with the section of Route 30 south of the lands receiving a moderate score, illustrating the important role that this forested area plays in the larger landscape (Lapin 2011, pp. 9-10).

⁴¹Lapin, Marc. *Ecological Evaluation and Management Plan, Lands of Willard and Carolyn Jackson and Adjacent Properties of Middlebury College*, 2011.

West Cornwall Ridge (5)

This forest block sits on the top of the broad, flat-topped ridge that runs north to south on the west side of Cornwall, between West Street and N. Bingham Street. Woodlots in the block were present in 1942 aerial photographs, which suggests that it may never have been cleared for agriculture.

These woods are known by town residents for good wildlife habitat, including turkey, deer, fox, porcupine, bobcat, coyote, opossum, painted turtle, bluebird, and migratory raptors (Engstrom 2015, pp. 10-12).

Otter Creek Swamp north of Morse Road (6)

This large forested wetland straddling the Middlebury town line north of Morse Road drains south into Cornwall Swamp, hence should be thought of as the north arm of Cornwall Swamp. It contains a combination of Red or Silver Maple-Green Ash Swamp and Red Maple-Black Ash Seepage Swamp natural communities, with a peninsula of Mesic Clayplain Forest. As part of the large Otter Creek swamp complex, these maple-ash swamps are recognized as significant on the state-level. The 5-acre Mesic Clayplain Forest is a locally significant natural community and lacks invasive plants, it appears to be a very natural example of clayplain forest. (Engstrom 2015, pp. 62-65).

Parkhill (7)

This Forest Block is divided into two sections by Parkhill Road. The area north of Parkhill Road is the headwaters of Beaver Brook. Only the western corner was forested in 1942, but the area has regrown and now forms part of the forested corridor connecting Cornwall Swamp to the Lemon Fair via Beaver Brook. It was not inventoried in 2015. The area south of Parkhill Road is a 150-acre site with an impressive diversity of both upland and wetland habitats and natural communities

The bulk of the upland forests are mature hardwoods of the Mesic Maple-Ash-Hickory-Oak Forest natural community, and there is an adjacent pocket of Dry Oak-Maple Limestone Forest associated with limestone ledges. Wildlife travel corridors were reported both due east of the site, leading directly to Cornwall Swamp, and crossing DeLong Road to the southwest (Engstrom 2015, pp. 50-53).

DeLong Hill (8)

DeLong Hill is the highest point in town at an elevation of 580 feet. This forest block is narrow, but extends south into Whiting, and the Cornwall Swamp and adjacent wetlands to the south are only about one mile away and likely connected by wildlife moving across Route 30. The area contains Dry Oak-Maple Limestone Forest, Mesic Maple-Ash-Hickory-Oak Forest, along with limestone slabs and solution cavities. In some areas, invasives like honeysuckle and buckthorn crowd out native species thereby diminishing the diversity and condition of the native species, and the quality of the limestone forest natural community. In the closed canopy limestone forest areas which were forested in the 1942 aerial photos, the invasives are mostly kept in check. (See Engstrom 2015, pp. 46-49).

Other Important Forest Areas

Bingham's Woods

Though not a large forest block (73 acres), Dr. Bingham's Woods is an important piece of intact, natural forest in the upper Beaver Brook drainage. Dr. Bingham's Woods is located just north of the intersection of Route 74 and Bingham Street. The unique site features a beautiful wooded ravine and adjacent gently sloping terrain with a variety of soils, which stands out clearly in the 1942 photos as mature, intact, mixed forest. Within the ravine hemlocks grow to over 100 feet tall. This forest block is and will continue to be an important wildlife linkage habitat in the Beaver Brook watershed. (Engstrom, pp. 38-41).

A recently approved subdivision by Beaver Brook Properties LLC (2020) in the area of the Dr. Bingham's Woods involved the conveyance of a conservation easement on 125 acres out of the 167 acre development property to The Vermont Land Trust which will restrict future use for agricultural and forestry purposes. In addition, the developer plans to permanently protect another 20 acres of the property from development.

Clayplain Forest Fragments

Clay-soil lake plain or "Clayplain" forest, dominated the clay soil areas of the Champlain Valley prior to European settlement. Due to the fertile soil's suitability for agriculture, much of the original extent of this forest type has been cleared, leaving only fragments. These areas are important "stepping stones" for wildlife and are a regional priority for protection and enhancement.

Clayplain forests are home to a diversity of trees, shrubs and herbs due to the soil's high fertility, the moderate climate, and a patchy mosaic of scattered wet depressions. The tree species include shagbark hickory, white, bur, swamp, and red oaks, sugar, red, and silver maples, white, black, and green ash, American elm, basswood and American beech. These species, and the large nut crops they produce, provide great habitat for wildlife including bobcat, wild turkey, white-tailed deer, and gray squirrel.

Habitat Connectivity Blocks

Habitat Connectivity Blocks are the forest, riparian and surface waters that provide connectivity at a local, state and regional scale (across Vermont and to adjacent states and Quebec) as well as connectivity between all Vermont biophysical regions. These blocks connect core habitat, allowing for genetic exchange across populations of far-ranging animal species, with places of diversity in the physical landscape as well as the riparian network.

Two Highest Priority and Four Priority Connectivity Blocks have been described in Cornwall and are identified below. Protection and enhancement of the margins of these blocks especially where they intersect other habitat and forest blocks can be accomplished by maintaining natural stream buffers, shrub and tree cover and limiting development in these areas of connectivity. Please note the letters associated with each block are references for the Forest Block map.

Highest Priority Connectivity Blocks

- A. North Cornwall, along the Lemon Fair River. Primarily clayplain forest.
- B. North Cornwall, along Lemon Fair Road- the remnant woodlands at this site and the site not visited downstream (#9) on the west bank are important for wildlife and ecological diversity of the river valley. (See Engstrom 2015, pp. 30-33).

Priority Connectivity Blocks

- C. Northeast Cornwall, on either side of Route 125 with significant wildlife crossing (habitat connectors) predicted.
- D. Northeast Cornwall, between Ridge Road and Cider Mill Road.
- E. Central Cornwall, on either side of Sperry Road. Primarily clayplain forest. (See Engstrom 2015, pp. 4-9).
- F. Several forest fragments, some clayplain forest, in Central Cornwall, along Routes 30 and 74.

Wildlife Connectivity

Cornwall's forests, like many in the Champlain Valley, exist as islands in a chain. Maintaining sufficient corridors for the passage of wildlife is as important as maintaining the forest blocks themselves. The many species that populate Vermont's forests have varying needs from forests in size and scale. Larger species like coyote, bear, and bobcat (all regular residents of Cornwall) need large areas of connected habitat to ensure sufficient genetic diversity and healthy populations. Other species like deer can exist on the edge of forests, but again need the ability to travel and have forest cover to limit snow depths for their wintering areas.

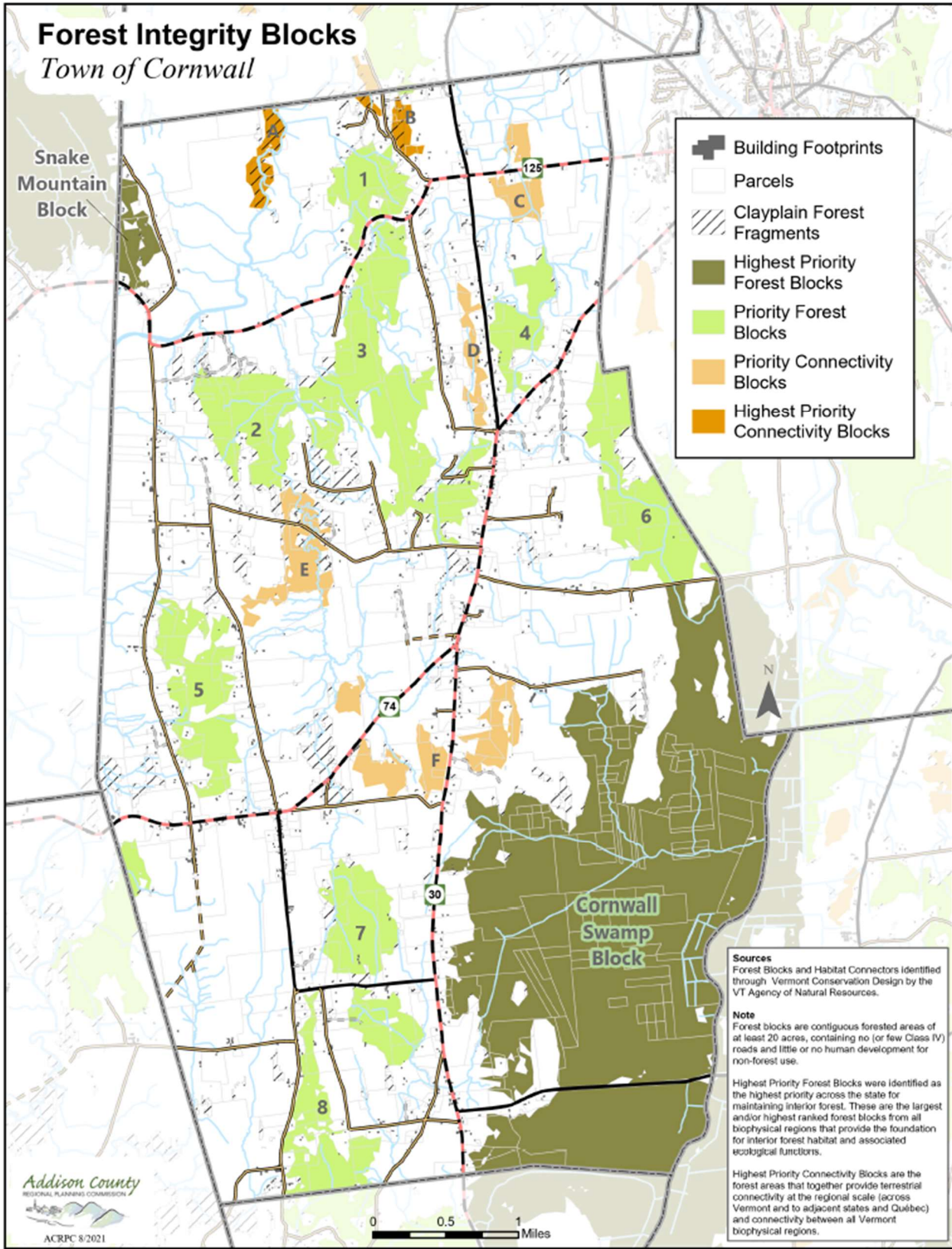
Wetlands, shrublands and other natural vegetation connect the town's priority forests, creating larger areas of connected habitat that can support the town's diverse, forest-reliant wildlife species. In addition, nearby "habitat connectors," while separate and small in acreage size, also play an important role in supporting the movement, migration and dispersal of animals and plants. While Act 171 focuses primarily on forested areas, maintaining these habitat blocks and adjacent connectors is critical for both forest-dwelling, as well as non-forest wildlife species. Riparian Areas are ecosystems extending up and down rivers, streams and along lakeshores, in which natural vegetation occurs, providing natural cover for wildlife movement and plant migration. The greatest wildlife linkages in Cornwall are predicted along Beaver Brook and its tributaries and the Lemon Fair River, as well as within the Cornwall Swamp and Middlebury Swamp forest blocks.

Cornwall residents have identified wildlife travel corridors across Route 30 from Cornwall Swamp to the Delong and Parkhill Forest Blocks, as well as the Priority Connectivity Blocks (F) along Route 30 and Route 74. Wildlife also has been observed moving from Middlebury Swamp and crossing Route 30 to reach the Ledge Creek Forest. Swamp Road and Morse Road are likely crossed by significant wildlife, including the uncommon Blue-spotted salamander, within and between Cornwall Swamp and Middlebury Swamp, but these roads have relatively little traffic. Blue-spotted salamanders, as well as other amphibians, have been documented in significant numbers during the spring and fall migration period along sections of West Street. A 2006 analysis (Vermont Wildlife Linkage Habitat Analysis) was conducted along State highways and identified areas along Route 125, primarily at the Beaver Brook and Lemon Fair Crossing, as well as below the dam at Jackson Pond (Ledge Creek Forest Block to Priority Connectivity Block C), as areas of significant wildlife crossing value.

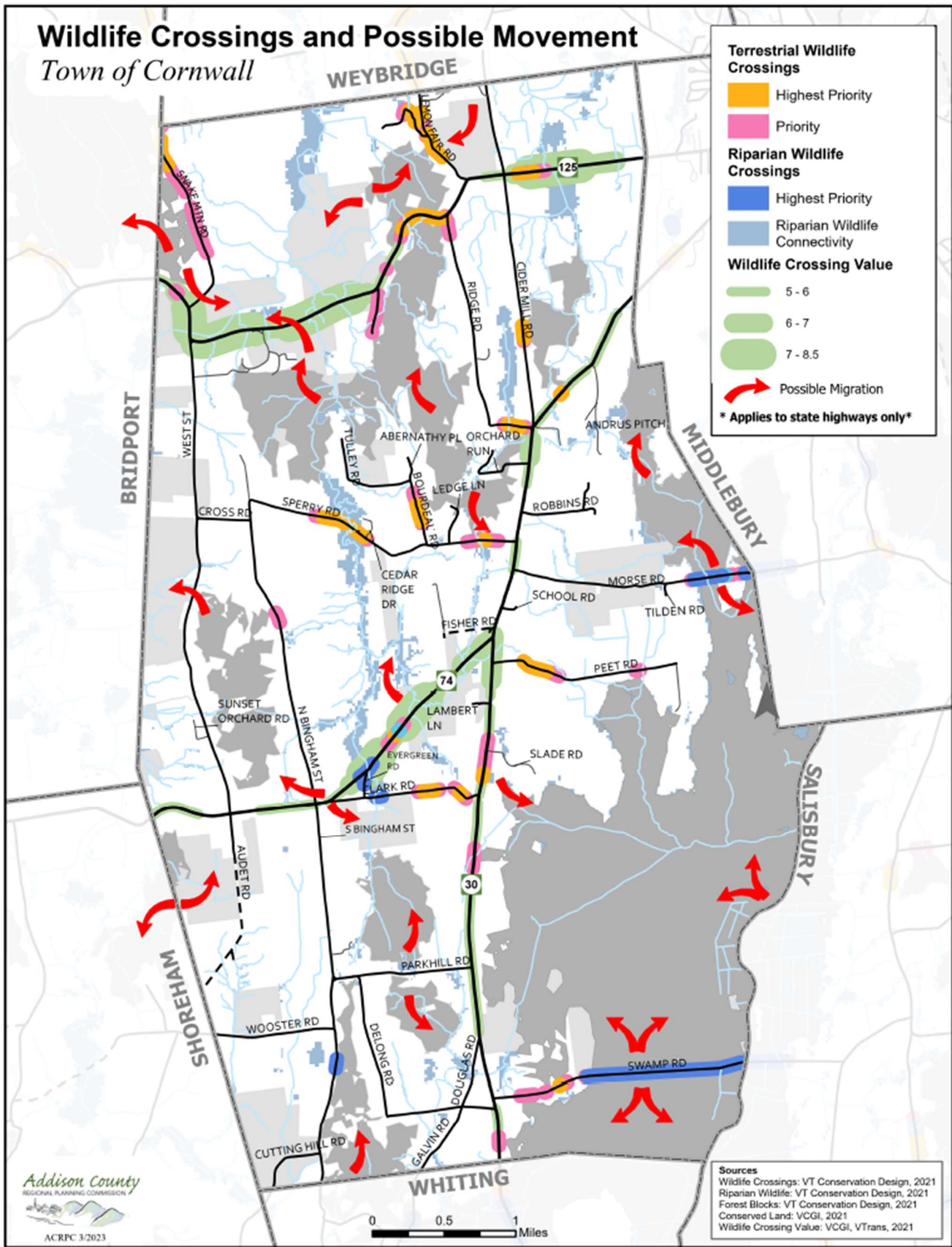
Conserved Lands

Over the years a fair amount of land has been conserved in Cornwall as can be seen in the Forest Blocks and Conserved Lands map. The State owns as Wildlife Management Areas, a significant portion of the Cornwall Swamp in the southeastern corner of town as well as the portion along the Lemon Fair River south of Snake

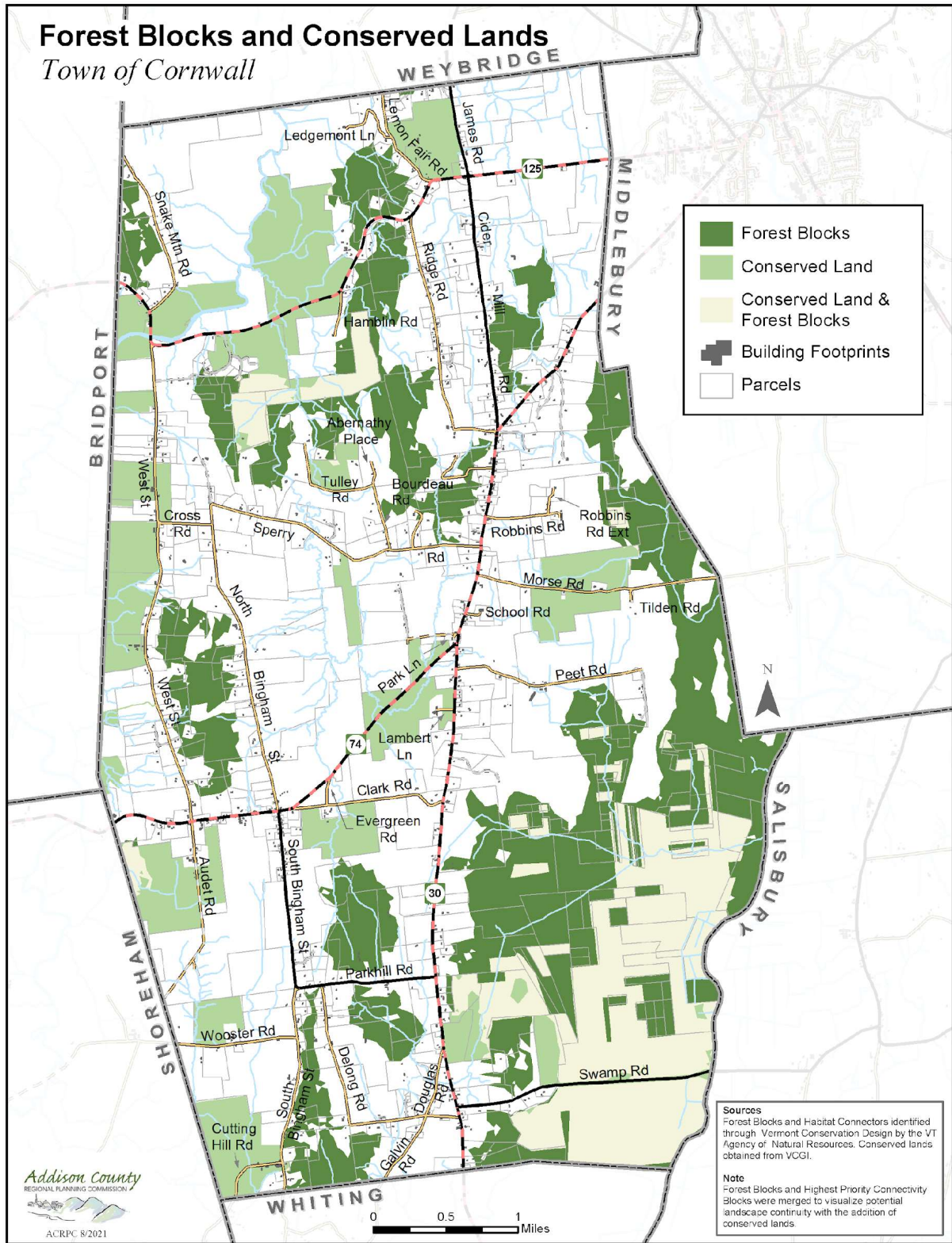
Mountain. Additional land throughout Cornwall, primarily agricultural, has been conserved by private property owners through conservation easements with the Vermont Land Trust and the Middlebury Area Land Trust. In terms of forest conservation, there are private properties with conservation easements covering portions of the Cornwall Swamp Highest Priority Block and the Ledges South and Beaver Brook/Gully Priority Forest Blocks where Clayplain Forest fragments occur.



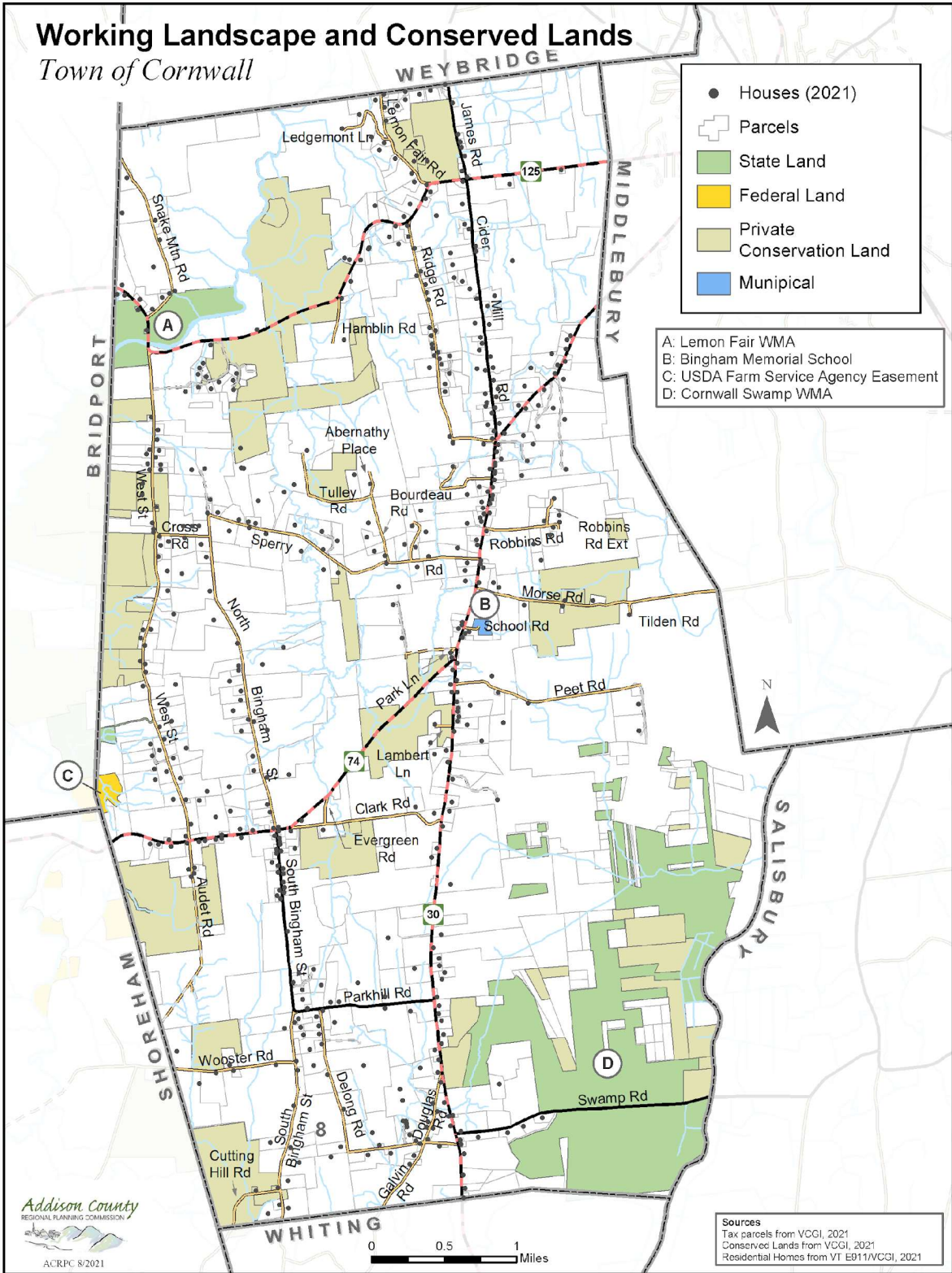
Map 5. Town of Cornwall, Forest Integrity Blocks (Source: ACRPC)



Map 6. Town of Cornwall, Wildlife Crossing and Possible Movement (Source: ACRPC)



Map 7. Forest Blocks and Conserved Land (Source: ACRPC)



Map 8. Working Landscapes and Conserved Land (Source: ACRPC)

Water Resources

Flood Mitigation

Cornwall's wetlands, ranging from the large, nationally significant Cornwall Swamp to the smallest Class III wetland, are recognized as performing numerous ecological functions of importance to the broader ecosystem of the town and the entire Champlain Valley. Some, if not all, of these functions are very important to human communities and human welfare. As such, wetlands are protected by both federal and state regulations, and Cornwall must do its part to ensure that wetland degradation does not occur in our town. Tropical Storm Irene, which destroyed many areas of Vermont in 2011 due to excessive flooding, did little damage in Cornwall. The scale of Cornwall's swampy areas no doubt contributed to this outcome. Wetlands cannot be underrated for their ability to absorb and filter massive amounts of stormwater, offering essential flood mitigation properties.

Sediment and Nutrient Loading

The Lake Champlain Basin Program has identified nutrient loading as one of the lake's major environmental problems; one of the goals of this federal-state-provincial collaboration is to clean the lake of point and nonpoint source nutrient and other chemical pollution. As all of Cornwall's surface waters are within the Lake Champlain watershed, it is the town's responsibility to participate in water quality enhancement efforts in the basin.

Because groundwater supplies almost all of the drinking water for residents of Cornwall, potential threats by contaminants to surface water, wetlands, and groundwater recharge areas need to be identified and the highest protection measures need to be taken.

Mandating vegetated buffers along all Cornwall water tributaries would minimize toxic sediment and nutrient run-off from roads, residential properties, and agricultural properties. Encouraging the use of Agricultural Best Management Practices would also be advantageous to this goal, as would the incorporation of vegetated swales along roadways. Design guidelines for the latter can be found in Vermont's *Better Back Roads Manual*.

As most of Cornwall's land is privately owned, home-owners should be encouraged to take steps toward minimizing their impacts on our shared water resources. As all Cornwall residents rely on their own well water and septic systems, taking care of the land surrounding these systems is essential. Phosphorus and nitrogen loading into fresh water sources can be minimized by alternative lawn care treatment (no-phosphorus fertilizers) and incorporating woody vegetation and meadowlands on private property. Incorporating Low-Impact-Design (LID)/green infrastructure techniques, such as vegetated swales, narrower/shorter driveways, gravel filter strips, rain-gardens and detention ponds, are other ways to minimize private property impacts on water quality.

Goals and actions within Cornwall's plan need to outline best practices for water resource protection. Once this has been done, zoning and subdivision regulations should reflect policies laid out in the plan, so that they can be enforced during any development process.

Resource Extraction

Although sand and gravel have been excavated over the years, no commercial resource extraction is currently happening in Cornwall. Because of the importance of sand and gravel for road maintenance and construction, there may be requests for extraction operations in Cornwall at some future time. Extraction poses the risk of adverse social and environmental impacts on the community such as reduction in groundwater recharge, possible contamination resulting from on-site storage and disposal of materials; alteration of surface drainage patterns; noise, dust and increased truck traffic; limitations on the future use of the site; and, reduction in neighboring property values.

Many of these impacts can be avoided or mitigated through careful site planning, operation and reclamation. Demonstrating that adverse impacts on neighbors and the town will be minimized and that adequate provisions for site reclamation have been made during the permitting process would avoid problems. Cornwall's regulations should be reviewed and amended to ensure policies are in place to avoid problematic extraction operations.

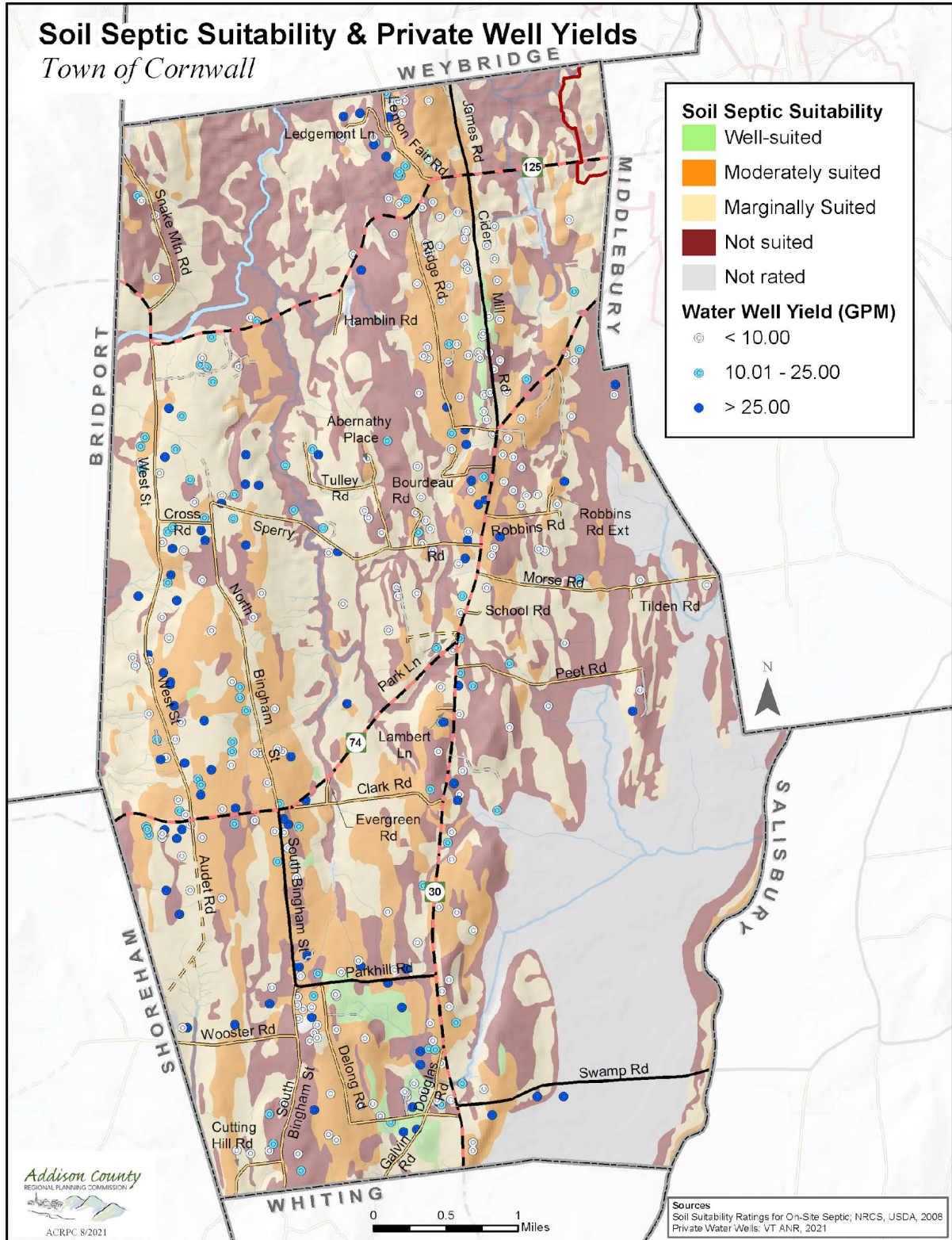
Land Suitability

New development is restricted and limited by specific physical elements. These limitations include steep slopes, wet and impermeable soils, high water tables, shallow depth to bedrock and flood hazard. Such constraints are found throughout the town. For example, shallow soils are most common along the central ridge, and steep slopes can be found in the north-central and northwestern ridges. High water tables and mucky soils dominate the eastern third of town and appear in numerous low or wetland areas.

These physical limitations have a significant impact on growth and development. Many restrict, if not rule out, the placement of safe and effective on-site septic systems, and consequently, are a major impediment to residential development. They also increase costs dramatically by requiring extensive drainage, filling, stabilization and construction reinforcement.

Flood hazards usually are limited to areas along Otter Creek and the Lemon Fair. The floodplain along Otter Creek is very large, encompassing most of Cornwall Swamp. Wet and impermeable soils, such as Vergennes and Covington, blanket many areas in Cornwall. Flood hazard areas are often associated with peat and muck soils and limit development because of the threat posed to structures by floodwater.

It is prudent for Cornwall's land use policies, in both the plan and in the zoning and subdivision bylaws, to consider the unique characteristics of the Cornwall landscape and whether or not any proposed development is suitable to any given site. No development is appropriate in the flood hazard area. Preservation and protection of the working landscape are of the highest priority.



Map 9. Soil Septic Suitability and Private Well Yields (Source: ACRPC)

Scenic Resources

As expressed in the comments from past planning surveys, many Cornwall residents highly value the town's scenic resources and want to protect them. For some that might be the view they see each day of the Adirondacks over the Champlain Valley, while for others it may be the view from their kitchen window of orchards on a neighboring property. Needless to say, Cornwall's natural and agricultural landscape is the reason many residents have chosen to live here. Considering this sentiment, 77 percent of 2011 survey participants thought Cornwall zoning regulations should make specific efforts to protect scenic views.

The waterways of Cornwall are associated with three watersheds: the Otter Creek Watershed and the Upper and Lower Lemon Fair River Watersheds. These waterways eventually flow and merge downstream through a number of other towns before they reach Lake Champlain. In Cornwall, during the course of each year, there are typically some seasonal inundation flooding events around the Cornwall Swamp (including across Swamp Road), and the Lemon Fair River valley. In the past, there have been a few-high water events that have caused erosion hazards such as washouts of culverts, for example, the erosion of a portion of Clark Road in 2012.

While flood and fluvial erosion damage have been limited, the waterways, swamp, and some of Cornwall's public infrastructure perform an important job for both Cornwall and other towns downstream. During high water events, the Cornwall Swamp, as well as other associated wetlands, can absorb a great deal of water that limits the amount of water flowing further downstream. Further preservation of land adjacent to streams, wetlands and upland forests provides additional protection to this important resource (Cornwall Swamp). Cornwall exists within a broader watershed and waterway system that extends beyond its municipal boundaries. Because of this, neighboring towns should consider working together to encourage wetland and associated buffer protection.

Flood damage has become more common and costly throughout Vermont. Achieving flood readiness through safer placement of new development and public infrastructure, protecting the functions of the watersheds that protect us, adapting our critical infrastructure and preparing for emergencies can avoid and/or reduce flood damage and costs associated with it.

Vermont State Statute 24 VSA Chapter 117 §4302 and §4382 encourage and require municipalities to include a flood resilience plan in municipal development plans adopted after July 1, 2014. Specifically, 17 V.S.A. § 4382 requires towns to identify and avoid development in flood hazard, fluvial erosion, and river corridor protection areas. If new development is to be considered in such areas, it should not increase the possibility of flooding and fluvial erosion. The statutes encourage the protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion. The development and implementation of flood emergency preparedness and response planning are critical for mitigating potential flood related risks to public safety, critical infrastructure, historic structures, and municipal investments.

The Federal Emergency Management Agency created maps in 1985 that identify areas of concern for inundation flooding. Recently the Federal Emergency Management Agency, in conjunction with the United States Geological Survey, has begun the process of updating these maps. The Town of Cornwall has accepted these maps as the basis for the Special Flood Hazard Area within its municipal boundaries.

The FEMA Maps may be found here: <https://map1.msc.fema.gov/firm?id=500317A>

The Vermont Agency of Natural Resources has created maps of river corridors throughout Vermont. The Town of Cornwall has accepted these state-produced maps (Vermont Agency of Natural Resources, Natural Resources Atlas – Updated 8/27/19) as the basis for its river corridors. Additionally, the state recommends a 50-foot setback along small streams, which it has defined as being perennial and having drainage areas of less than two square miles. These are illustrated in the above referenced Natural Resources Atlas. While Cornwall uses the Agency of Natural Resources data as a benchmark, it has not as of yet adopted Town Plan language or zoning regulations to fulfill these recommendations. Cornwall should consider looking into these

recommendations and determining their utility for the Town. Cornwall, through its municipal planning and regulations, already has accomplished much in becoming a flood resilient community and a good municipal partner in its shared watersheds. The following summarizes the actions that Cornwall has already completed in its effort to become a more flood resilient community.

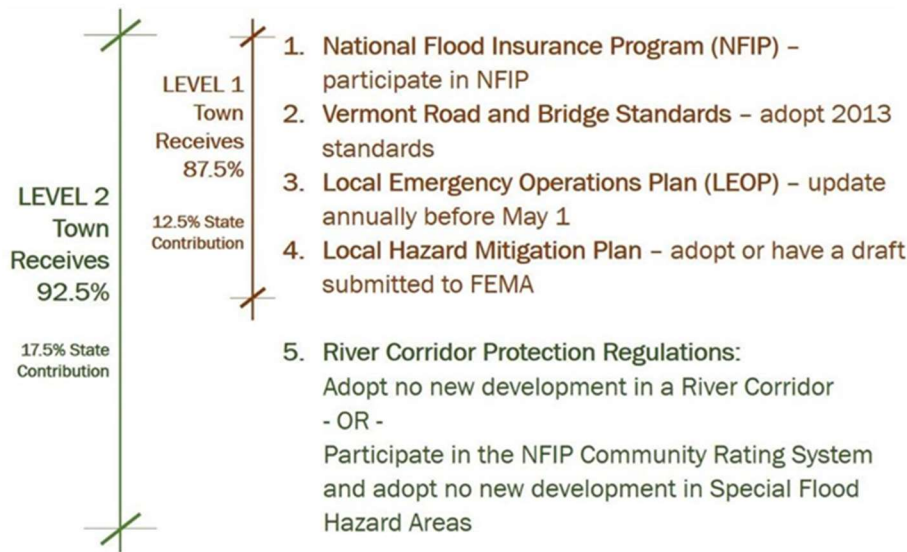
Emergency Relief and Assistance Fund

In the event of a federally declared disaster, the Town of Cornwall can make a claim for funds to assist in post-disaster relief. The Emergency Relief and Assistance Fund (ERAF) provides state funding to match federal public assistance after such disasters. Cornwall's eligible public costs are reimbursed by federal taxpayers at a rate of 75%. For disasters after October 23, 2014, Vermont will contribute an additional 7.5% toward reimbursing the Town's costs for a combined total of 82.5% reimbursement. For communities that take specific steps to reduce

flood damage, Vermont will contribute either a total of 12.5% or 17.5% of the total cost.

Steps for Municipalities to Receive Additional Emergency Relief Funds through ERAF

Municipalities normally receive 82.5% with 75% Federal and 7.5% State contributions



Actions and funding incentives from the State's Flood Resilience Checklist for Vermont Communities

At this time (2021), Cornwall qualifies for the base rate of 7.5% state reimbursement through the Emergency Relief and Assistance Fund. Cornwall participates in the National Flood Insurance Program, complies with Vermont Road and Bridge Standards, and has an annually updated Local Emergency Management Plan. Until January 2021, Cornwall had a Local Hazard Mitigation Plan (2015). The Town is currently reviewing and updating their recently

expired Local Hazard Mitigation Plan.

Cornwall River Corridor protection regulations currently are not in place, but will be considered as part of the Town of Cornwall's ongoing review and update of its land use and development regulations. Although the state's definition for small streams includes all streams with drainage areas of two square miles or less, the Emergency Relief Assistance Fund criteria for river corridor and small stream protection only require 50-foot setbacks from small streams with drainage areas of less than two square miles, but greater than a half square mile, to be eligible for Level 2 funding (the maximum - 92.5%). Cornwall's Flood Resilience map, delineates both the Vermont Agency of Natural Resources River Corridors and Small Stream Buffer Areas (0.5 – 2.0 mi² drainage areas).

National Flood Insurance Program

The National Flood Insurance Program is administered through the Federal Emergency Management Agency and provides a source of flood insurance for buildings in communities that choose to participate. Nearly ninety percent of communities in Vermont participate in the National Flood Insurance Program. Flood insurance is available for buildings and their contents anywhere in participating communities. Without access to the National Flood Insurance Program, flood insurance from private sources may be unavailable or prohibitively expensive. To participate in the National Flood Insurance Program, a community must regulate all new development in high-risk, Special Flood Hazard Areas to ensure that new development is safe from flood damage. The Town of Cornwall has been a member of the National Flood Insurance Program since September 27, 1985. At this time, only one private building (structure) appears to be located in the Special Flood Hazard Area. Only one Cornwall resident has obtained an insurance policy from the National Flood Insurance Program and no claims have been made since the Town of Cornwall has been a member of the program. No critical or public buildings (structures) are located in the Special Flood Hazard Area.

Town Road and Bridge Standards

The Town of Cornwall most recently approved its Certification of Compliance for Town Road and Bridge Standards and Network Inventory on April 5, 2022. The adopted standards meet or exceed the minimum requirements included in the June 5, 2019 State-approved template for town road and bridge standards.

Local Emergency Management Plan

The Local Emergency Management Plan (formerly Local Emergency Operations Plan), establishes lines of responsibility during a disaster as well as vulnerable (high risk) populations, hazard sites, procedures and resources. The Local Emergency Management Plan should be updated every year after Town Meeting. The Town of Cornwall updated its Local Emergency Management Plan (Short Form) on May 17, 2022, and will continue to do so annually.

Local Hazard Mitigation Plan

The Local Hazard Mitigation Plan helps communities identify important local hazard issues, prioritize next steps, and provide access to funding through the Federal Emergency Management Agency Hazard Mitigation Assistance Program. The Local Hazard Mitigation Plan also is one of the mitigation actions needed to qualify for additional post-disaster funding through the Emergency Relief and Assistance Fund. The Town of Cornwall adopted its All-Hazards Mitigation Plan on November 17, 2015, which subsequently was approved by the Federal Emergency Management Agency on January 15, 2016. At present, Cornwall's Local Hazard Mitigation Plan expired on January 15, 2021.⁴² The Town is reviewing the plan and working with the Addison County Regional Planning Commission to update and re-adopt the plan.

The Town of Cornwall's Hazard Mitigation Planning Committee conducted a risk assessment and looked at hazards, such as, risks associated with Flash Flood, Landslide/Erosion, Dam Failure, and Inundation Flooding. Results indicated that the community vulnerability rating for a Flash Flood is 3 out of 4 (with a rating of 1 being the least vulnerable and 4 being the most vulnerable) and would be considered High Priority. The

⁴² 2015 Local Hazard Mitigation Plan for Cornwall: <https://cornwallvt.com/wp-content/uploads/2022/11/Local-Hazard-Mitigation-Plan-Final-January-2016.pdf>

Town's primary vulnerability currently lies on State Highways 74 and 125 where periodic flooding has threatened to wash out these primary connectors in town. Fortunately, both eastern and western Cornwall are dominated by the large floodplains of the Lemon Fair and Otter Creek making them less susceptible to flash flooding. The community vulnerability ratings for Landslide/Erosion, Dam Failure, and Inundation Flooding are 1 out of 4 and would be considered Low Priority.

River Corridor Protection Regulations & Special Flood Hazard Area

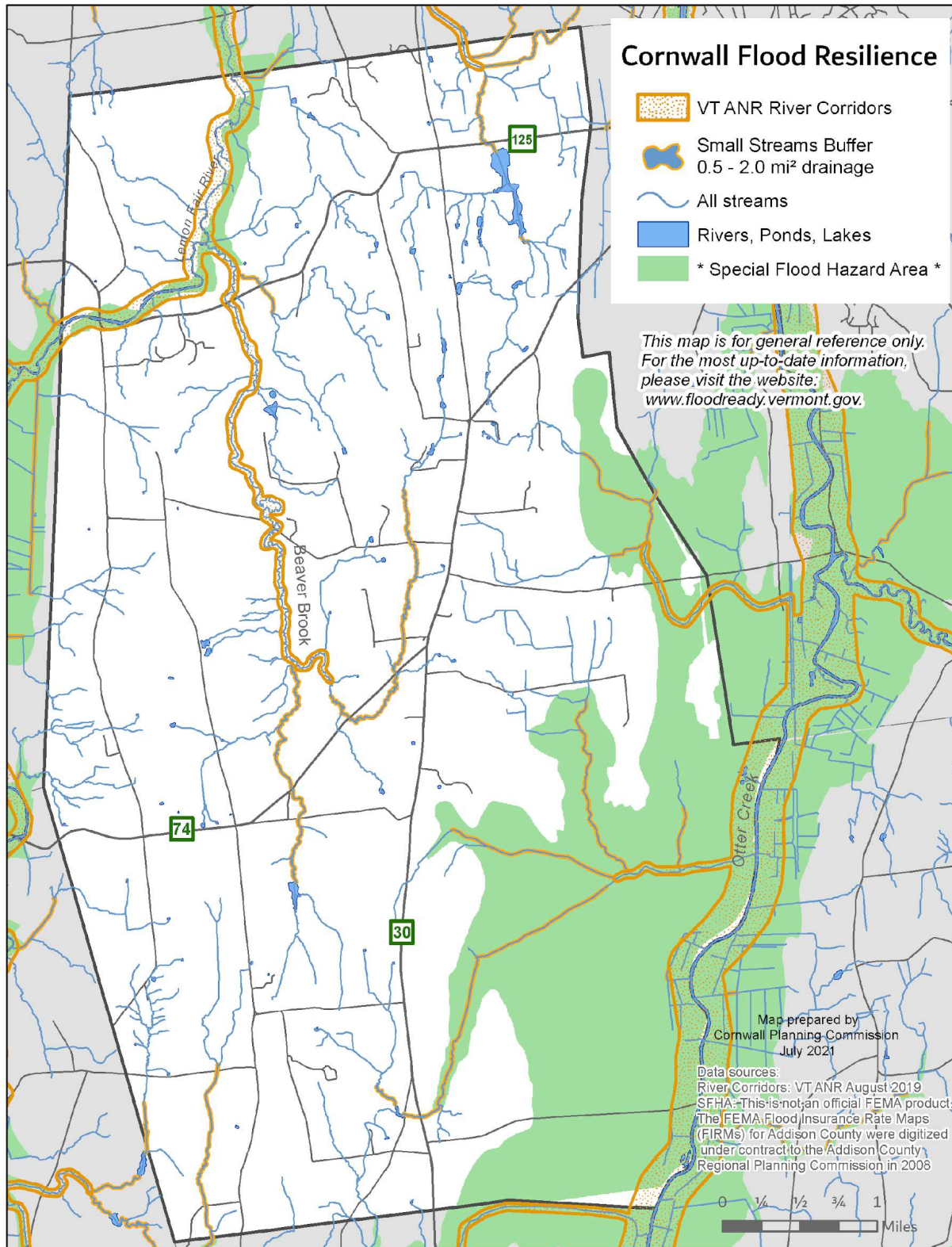
According to the Vermont Agency of Natural Resources (Flood Ready website), river corridors encompass the area of land surrounding a river that provides for the meandering, floodplain, and riparian functions necessary to restore and maintain the naturally stable or least erosive form of a river thereby minimizing erosion hazards over time. River corridors are mapped using calculations that rely on in-field and map-based measurements. Lands within and immediately abutting a river corridor are at higher risk to fluvial erosion. The Agency of Natural Resources advises that measures, such as stream armoring and berming, used to protect development within these corridors often lead to increases in erosion upstream and downstream and adversely affect public safety, riparian landowners, and river ecosystems. Giving river courses room to move is critical in maintaining equilibrium and avoiding the dangers of flood erosion to property and lives.

In Vermont, most flood-related damage occurs outside the Special Flood Hazard Areas. The Special Flood Hazard Areas are delineated based on the 1985 work of the Federal Emergency Management Agency for the National Flood Insurance Program. The Special Flood Hazard Areas are the areas where the National Flood Insurance Program floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. This is also commonly referred to as the base flood or "100-year flood" area. Much of the damage that does occur is due to the erosive power of water causing damage to critical public infrastructure such as roads and stream-crossings. Homes, businesses, and community buildings have also been damaged by flooding-related erosion. The Agency of Natural Resources advises that where stream meanders are confined by human activity, streams lose their equilibrium and become steepened, straighter, and more powerful. The more powerful the flooding streams are the higher the risk for damage from them.

In Cornwall, approximately 724 acres are contained within the State-created river corridors, including the waterways and the land around the Otter Creek, Lemon Fair, and Beaver Brook. This represents about 4% of the area of the Town. There are currently two buildings within those boundaries along these waterways. The river corridors along the Otter Creek and the Lemon Fair River fall within the current Conservation District. At present, the Beaver Brook falls entirely within the Low-Density Residential neighborhood. Throughout Cornwall, all non-exempt structures, as defined by current zoning regulations, are required to meet regulatory setback requirements for the Lemon Fair River as well as year-round and seasonal streams and brooks. The Conservation District requirements and waterway setbacks associated with current zoning regulations limit development along these waterways, but the regulations do not prohibit all development in the river corridor areas. If the Town of Cornwall were to do so, it would be eligible for increased funding in the event of a federally declared disaster. It may be beneficial to consider a more uniform approach, both for simplicity and for making a more flood resilient community.

The Cornwall Select Board and Planning Commission are in the process of reviewing and updating its land use and development regulations partly in an effort to reduce the risk of flood damage to the Town of Cornwall. The purpose would be to regulate river corridor protection in order to promote public health, safety, and

general welfare; prevent increases in flooding caused by the uncontrolled development of lands in areas at risk of flood damage; minimize losses due to floods; and qualify for the highest level of flood related aid from state and federal sources.



Map 1. Watercourses, River Corridors, and Special Flood Hazard Area

CURRENT LAND USE

This section of the plan describes the current character and use of land within the town's land use areas. It also discusses the threats to the town's rural character and strategies for guiding new development to be in-keeping with the existing character of the community.

INVENTORY

Cornwall Village (Zoning District V1)

Cornwall village developed at the intersection of what are now Routes 30 and 74 in the 1790s. At that time Route 30 was a stage road between Castleton and Middlebury and Route 74 provided a connection west to Lake Champlain. These roads were important trade routes. Early homes were built in a linear fashion along the main roads as well. While it was always a small center, it provided a vibrant mix of public, business and residential use throughout the 1800s and into the early 20th century.

From the earliest colonial settlement, this area of Cornwall functioned as a town center; a role that continues to the present. Within Cornwall village are important community institutions including the Town Hall, Cornwall Elementary School, the D.A.R. building, the Cornwall Congregational Church and cemetery, and a town green.

Currently, there are two businesses operating within the village: a motorsports store and a plant nursery. There has been little new residential development in the village since the late-1800s.

Within Cornwall village, approximately 12 acres are currently in public use and unlikely to be further developed in the future. Two acres adjacent to the elementary school parking lot are owned by the town and have not been developed. Around ten homes sit on an area of 20 acres. Champlain Valley Motorsports and the former Cornwall General Store properties comprise another five acres. The remaining land, most of which is currently owned by the Peet and Synnott families, is in agricultural use.



View of the Town Hall and the old Lavalley Store

West Cornwall Area (Zoning District V2)

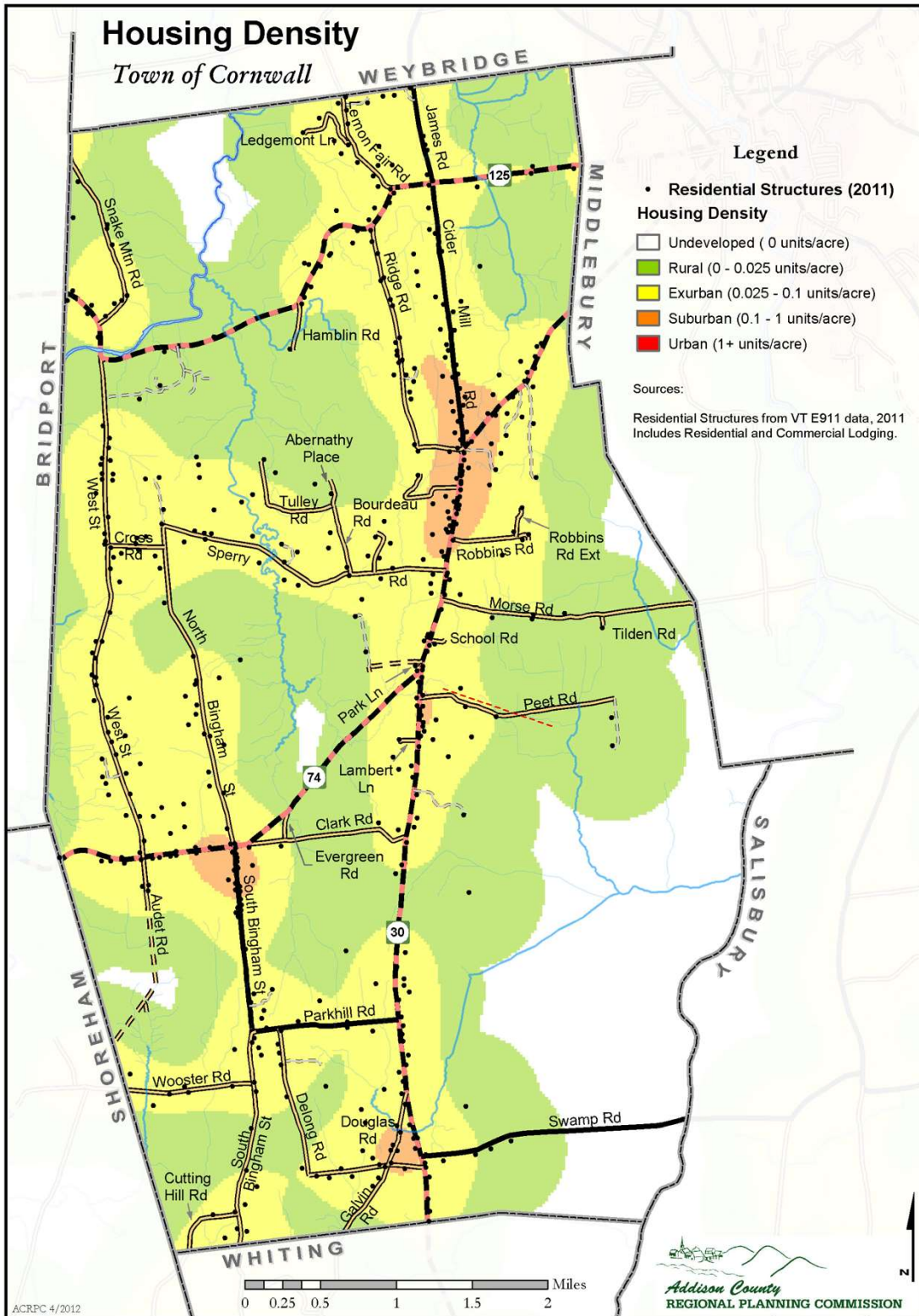
West Cornwall developed at the intersection of what are now Route 74 and North and South Bingham Streets around 1810. At that time Route 74 provided a connection west to Lake Champlain. West Cornwall developed mainly along South Bingham Street near the four-corners as a small social center within a prosperous agricultural area.



Former Baptist Church in West Cornwall

Historically, this settlement was primarily residential with public buildings, including a church, post office and school, and limited commercial activity. This remains the pattern today with around 10 residences with lots varying in size from ½ acre to five acres. Most of these homes were built between 1810 and 1880. In addition to the pattern and style of the historic homes, the mature street trees that provide canopy over South Bingham Street are a distinguishing feature of

West Cornwall. The only active public use remaining in West Cornwall is a fire station and the only commercial activity currently remaining within the core settlement area is the Cornwall Auto Body shop; there are two additional businesses on the fringe of this area: Dewitt Insurance Company and a dog training facility. In more recent years, residential development has continued down South Bingham Street. These newer homes are located on lots ranging between 2 and 3 acres in size and are set back a bit further from the road.



Map 1. Housing Density (Source: ACRPC)

Route 30 North Area (Zoning District *Medium Density Residential MDR*)

Route 30 south of Cider Mill Road has historically been a residential corridor with homes on lots typically ranging from 1½ to 3 acres built close to the road. Many of these homes were constructed in the 1800s, although there has been some additional infill since the mid-1900s. There are approximately 20 homes along this section of the highway and a handful of undeveloped parcels. This area is closer to commute to Middlebury's services and amenities than most areas in Cornwall. Current zoning allows little room for additional development in this historically dense, residential area. Most of the existing homes are set back from the center of the road 50 to 60 feet with lot frontages of 100 to 300 feet. There are several home-based businesses in this area, including Cornwall Orchards Bed and Breakfast, Windfall Orchards, and a home-based architectural office.

North of the Cider Mill Road intersection, development along Route 30 is less dense. There are around five homes on lots ranging from one to five acres in size and there are a number of parcels with significant undeveloped road frontage. Over the past 20 years, development has been occurring further back from Route 30 on large lots 10 acres or more in size that are accessed from long drives off the highway.

The amount and speed of traffic on Route 30 is a concern of residents. Currently the speed limit is 50 mph even though this is one of the densest residential areas in Cornwall.

In 2010, three-foot shoulders were added to this section of Route 30, and travel lanes were narrowed to eleven feet. The impetus for this project was to provide safer cycling and pedestrian opportunities from Cornwall to Middlebury. More information on this project can be found in the transportation section of this plan.

A large area of agricultural and forest land within this planning area was gifted to Middlebury College.

Route 30 South Area (Zoning District *Low Density Residential LDR*)

This area is another traditional settlement area within the town, and a southern gateway, located in the triangular area formed by Route 30, DeLong Road and Douglas Road. There are approximately 20 homes in this area on lots averaging between one and five acres in size. There are two commercial businesses in this area – Williams Sugar House and a car-repair shop. The town owns about seven acres around Douglas Pond. The remainder of the land is largely open agricultural fields. In 2011, a four lot Habitat for Humanity project was proposed for an area of land off of DeLong Road, close to Route 30. This proposal was accepted, construction began in the spring of 2012 and is now complete.

Cider Mill – Ridge Road Area (Zoning Districts *MDR and LDR*)

This planning area is north of the village center and includes Sperry Road to the south and James Road to the north. Both Cider Mill Road and Ridge Road run north to south. This planning area is the most recently developed residential area, and is distinguished by the surrounding open space, natural habitat, and views to both the Adirondacks and the Green Mountains. There are approximately 70 homes in this area.

Cider Mill Road is significantly developed with homes built on five to ten-plus acre lots that have been constructed largely over the last 40 years on once active farmland. On the southern end of the road near the intersection with Route 30, homes are located on smaller lots generally one to three acres in size. There are a few large agricultural parcels left with developable frontage mainly near the north end of Cider Mill Road.

The majority of Ridge Road is less densely developed compared to Cider Mill Road. While there is a cluster of smaller, 1 acre lots toward the middle section of this road, there are more large parcels with undeveloped frontage remaining on Ridge Road than Cider Mill.

In recent years, development has been occurring further back from the main roads on long private drives. There are still a few historic farmsteads along these roads, but agricultural use in this area is declining in quantity of productive acres and intensity of use. There are two Christmas tree farms in this area.

The amount of forested area has been increasing as once cultivated fields have begun transitioning back to their natural forested state. To the west of Ridge Road much of the land is forested, a significant percentage of which was part of the former Foote farm. One of the forks of Beaver Brook originates between Cider Mill and Ridge Roads and flows south.

Rural Area (Zoning District *LDR*)

The rural planning area is sparsely populated and holds the majority of Cornwall's farmland. Ironically, there has been more development in this area than any other planning area in town. This is likely due to large land parcels that can be subdivided easily. There are 140 homes in this planning area. For the most part, development in this area has been occurring along the roads, leaving larger, interior acreage intact.

In 2008, the Foote Farm obtained permits to create a Planned-Unit-Development (PUD) on land off of Route 125. Twenty-two, one-third acre lots were sited with the intent of conserving as much natural area/open space as possible, including the conservation of 100 acres of land adjacent to the project, on the north side of Route 125. A community septic system was incorporated into the site. See the analysis section below for more information on this project. In the northeastern corner of town, the rural area forms a boundary between Cornwall and the neighboring towns of Middlebury and Weybridge. Currently, this area remains largely open land, although there has been recent residential development on lots generally over 10 acres in size along James Road, the Lemon Fair Road, and to the east of Route 30. Middlebury College has significant landholdings in the northeastern corner of town. At this time the land remains in agricultural use as hayfields. The agricultural land associated with the Border Acres Farm located on Route 30 on the Cornwall-Middlebury line creates a demarcation between Middlebury College and Cornwall.

This area in the southwest corner of town remains largely agricultural with several significant areas of conserved land. The amount of residential development in this part of Cornwall over the past 20 years has been significantly less than areas of town closer to Middlebury.

The Ledges Area (Zoning District *LDR*)

The Ledges are a unique geologic formation and natural community. The rocky, steep terrain has never been conducive to development or agricultural use, so the land remains largely undisturbed in a natural forested state. Early in the town's history, there were some attempts at quarrying rock from this area, but such operations were not viable in comparison to those in Middlebury and other communities in the region. In recent years, there have been some homes built within this area, but the amount of developed land remains very low. There are approximately 25 homes in this area.

Lemon Fair-Beaver Brook Area (Zoning Districts *Conservation (CON)* and *LDR*)

This area comprises the floodplain for the Lemon Fair River, wetlands south of Route 125 along the Beaver Brook, and the land west of West Street that slopes down into the Lemon Fair floodplain. Beaver Brook is a tributary of the Lemon Fair River and has a significantly large watershed, encompassing 7.5 square miles of land in Cornwall. Beaver Brook passes through open agricultural fields and wooded land, forming an important habitat connector through the center of Cornwall. It connects several natural areas along its route including the forested areas on Delong Hill and the Ledges.

Due to regular flooding and generally wet conditions of much of this area, the intensity of development is very low within the area. The soils are generally poorly suited for on-site septic systems. There are approximately 10 homes within this area. The area is predominately in agricultural or open space use and there is significant acreage along West Street that has been conserved.

Fifty-three acres of land have recently been conserved in this planning area – a forested area between Sperry Road and Route 125, recognized for its wildlife habitat quality within the Beaver Brook watershed.



Former Schoolhouse near the Lemon Fair

Cornwall Swamp Area (Zoning District *CON*)

This area is an approximately 3,400-acre area in the southeastern corner of town. Most of the area comprises Cornwall Swamp, a Class II wetland that is largely forested. A more thorough description of the swamp can be found in the Natural Resource section of the plan. There is no development within the Cornwall Swamp Area. Most of the land is forested with a small amount of open agricultural land along Otter Creek.

Looking at the town's parcel maps, the swamp is divided into many small woodlots, most ranging between 5 and 20 acres in size. Most of the swamp was logged at least once, and some areas have been

cleared several times. Limited timber harvesting continues on some of the privately-owned parcels, mainly to provide firewood for personal use. Within the swamp, 1,200 acres are part of a state-owned wildlife management area. The Nature Conservancy owns around 300 additional acres in the swamp.

There are two town roads that cross the swamp, Morse Road and Swamp Road. Swamp Road crosses the Otter Creek into Salisbury. In 2016, the historic covered bridge at this location was destroyed by fire. A new bridge is currently being designed for this site. Morse Road at one time also crossed the Otter Creek in Middlebury over Three Mile Bridge, which burned in the 1950s and was not rebuilt. Morse Road now connects to South Street Extension, which provides an alternative route into downtown Middlebury.

ANALYSIS

Residents of Cornwall have strongly voiced their desire for the town to remain primarily a rural residential and agricultural community. Maintenance of the town's rural character can only be achieved by supporting creative agricultural enterprises, using a variety of innovative planning techniques for development in all parts of town, and encouraging growth in existing areas of higher density development.

Each land use planning area, defined by a common set of characteristics, needs its own set of planning goals in order to maintain and/or cultivate it into the unique part of town that it is. When planning decisions, including zoning regulations, are guided by these goals, agricultural land, open space, and the scenic and cultural resources that define Cornwall's rural character can continue to enhance the quality of life.

Preserving Community Character

Conventional zoning determines the number of residential units allowed on a parcel largely by setting minimum lot sizes. While most of Cornwall has been zoned for four or two acre lots for the past two decades, until recently, state septic regulations had promoted development on lots larger than ten acres. The results of these regulations can be seen in Cornwall's landscape, as a large-lot suburban pattern of development has overspread the historic settlement pattern of small centers surrounded by agricultural land. Even though this regulation is no longer a development restriction, the current two to four-acre minimum lot size across an entire rural town, does little to distinguish one area from another, and provides just as much risk of rural sprawl as ten-acre lot development. In order to move toward preserving rural character, Cornwall's 2008 zoning update, guided by the 2004 public survey and plan update, decreased the minimum lot size for village areas from one acre to ½ acre lots to encourage increased development in areas already designated as dense-residential. Cornwall's subdivision regulations were also updated in 2008 and set specific criteria and design standards for major and minor subdivisions that encourage the protection of natural landscape features such as tree canopy.

A two-acre lot minimum was kept for the medium density residential. The four-acre minimum lot size was maintained for the low-density residential areas. The argument from residents for keeping this relatively small (for the most rural areas of town) lot size, was that property owners have a right to maximize the value of their land by selling off as many lots as possible. As most development in Cornwall has occurred within this low-density planning area, there is an obvious conflict between desiring property rights and maintaining the integrity of the rural landscape.

Encourage Conservation Subdivisions

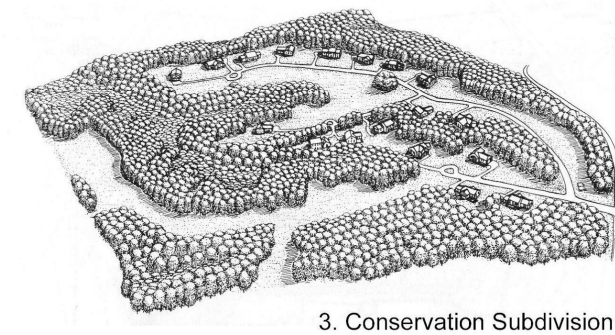
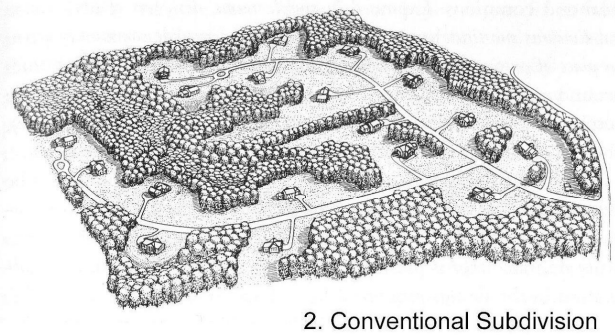
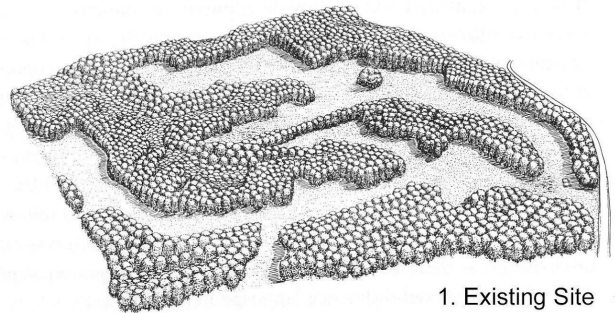
Conservation subdivision is a method that includes a range of strategies that use land development regulations to direct growth away from landscape assets such as: prime agricultural soils, surface waters, wetlands, steep

slopes, wildlife habitat, scenic views and other sensitive resources. The terms ‘clustering’ of homes and ‘density averaging’ are associated with conservation subdivisions and are explained throughout this section. Conservation subdivisions separate density from lot size, permitting property owners to develop at the allowable density on small lots in exchange for permanently protecting the remainder of the parcel as open space. A number of studies have shown that compact development with proximity to permanently protected open space enhances property values because homeowners are willing to pay a premium for the assurance that adjacent open land will never be developed. Clustered homes can be more cost effective – sharing utilities, services and access.

The first step in conservation subdivision design is to identify the resources that are to be preserved (see ‘*Understanding our Natural Resources*’, below). Portions of the site that are not constrained by these features become the potential development areas. Calculations are then made to determine the number of dwellings the zoning allows on the parcel, this is sometimes referred to as *density averaging*, and used instead of a minimum lot size regulation. For example, under conventional RA-10 zoning, a 50-acre parcel could be subdivided into a maximum of five 10-acre lots. Using density averaging, the parcel remains limited to 5 total homes/lots, but the landowner can subdivide into lots of various sizes, and clustered placements. These conservation subdivision concepts can be applied to both minor and major subdivisions.

Currently, Cornwall’s zoning regulations can apply conservation subdivision concepts through the Planned Unit Development (PUD) provisions. Cornwall’s current regulations provide density bonuses as an incentive for developers to use the PUD provisions. Density bonuses allow developers to build more units than would be allowed under the zoning regulations in exchange for developing the land in a manner that meets the town’s goals. In Vermont, density bonuses have typically been linked to the provision of affordable, elderly housing or public trails and open space, but are also used to promote design and development practices desired by town residents.

PUD’s are typically associated with larger subdivisions, and Cornwall’s minor subdivision applications typically do not go through this process. In order for Cornwall to promote conservation subdivision concepts on *minor*



Comparison of Alternative Development Patterns illustration from Growing Greener: Putting Conservation into Local Plans and Ordinances (Arendt, 1999)

subdivisions, a *conservation subdivision overlay* could be placed over Cornwall’s entire low-density residential area, creating a non-mandatory option for property owners seeking to protect the natural features of their land.

Since 2008 Cornwall has approved three major subdivisions applications, one of which was the 22 lot Foote Farm subdivision. This is considered a conservation subdivision, setting aside 100 acres of open space and Clay Plain forest for common access by property owners. In lieu of dedicating land for affordable lots/housing, the Foote Farm project gave the town \$75,000 to be used toward a separate affordable housing project. These funds were used in Cornwall’s most recent PUD: a four-unit Habitat for Humanity project. This project seeks to provide affordable units, fitting with the cultural and historic character of Cornwall, while setting aside common open space for the residents. This kind of project aids Cornwall in diversifying its housing stock and demographics – both of which provide a town with resilience to economic fluctuation. The planning commission could consider imposing a conservation fee for all subdivisions.

While conservation subdivision and the planning strategies it houses do work to protect the rural landscape it is advantageous to promote growth in existing residential areas before developing more rural areas of a town. Homes built closer to services and amenities can more easily provide alternatives to daily car commuting, such as walking, biking and public transit.

Follow Historic Settlement Patterns

As previously mentioned, development of homes, businesses and services within historic settlement areas, encourages a landscape of villages and hamlets surrounded by expanses of agricultural and natural areas. This also provides opportunities in the future for more residents to access services and amenities by bicycle or foot. Route 30 North, Cornwall Village, and West Cornwall are the historically more settled areas of Cornwall and are still the most densely populated today. Allowing pan-handle lot development –where homes could be built behind those existing, would allow for the continuation of higher density in this residential area, instead of seeing all new development in historically agricultural/open space areas. Adequate space for septic and well requirements is a limiting factor to the lot size within this scenario.

Cornwall’s Village Center

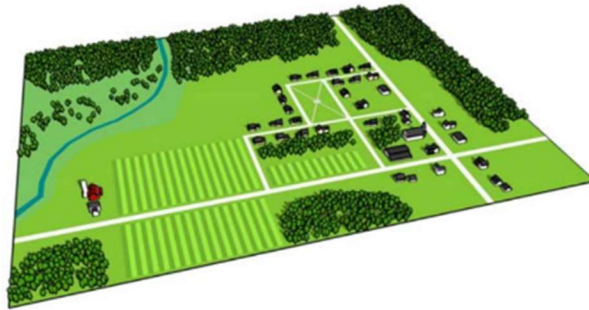
There has been much discussion on the opportunity and challenges of additional housing and amenities in Cornwall’s Village Center. In the 2011 planning survey, almost 80% of respondents would like to see a general store here. In the 2004 survey, many wanted to see additional open space and a safer pedestrian environment connecting existing civic buildings. While this area does house the majority of Cornwall’s public facilities and buildings, and a denser residential settlement pattern is appropriate, there is currently little available land for growth or public outdoor space.

At the present time, lack of available land and lack of water and wastewater infrastructure are hurdles to developing Cornwall’s village center. However, when land becomes available, or a development proposal is presented to the town, Cornwall needs to be prepared with a vision for its future.

This:

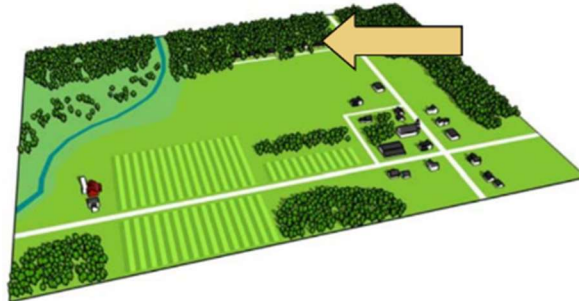
The Village of Tomorrow: Planned Development (Village)

Updated Village zoning will enable additional housing in and around the village, at traditional densities, scale and settlement patterns.



The Village of Tomorrow: Planned Developments (Rural)

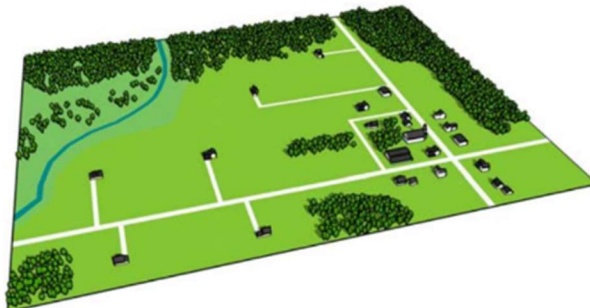
In order to accommodate new homes outside the village, the updated zoning considers the context and sites new homes so that they blend into rural settings and maintain open space.



Not this:

The Village of Tomorrow: Under Previous Zoning

While few houses have been added in this visual, the large lots, each with their own driveway, gradually erode the character of the village, depend entirely on the automobile and decrease traffic safety.



Above, Illustrations from the 2008 Smart Growth Vermont report: Cornwall Village Center Zoning: A Visual Overview, showing how smaller lot sizes and frontage requirements can help maintain a clustered village center, surrounded by a productive working landscape.

Zoning was reviewed and updated in 2008 which created smaller minimum lot lines and frontage dimensions. In the future, Cornwall's zoning regulations should be reviewed to ensure that design standards, such as

building size, permitted uses, signage, lighting and parking promote only small-scale commercial activity that would support a stronger local economy and complement the character of the village. Investigation of potential wastewater infrastructure in the village is also recommended.

Understand Our Natural Resources

A critical piece in cultivating better development patterns lies in understanding what the resources are that you wish to protect. As mentioned earlier in this plan, in 2015 the Cornwall Planning Commission and Conservation Commission developed a Natural Resources Inventory for the town⁴³. Databases such as these provide critical planning tools when subdivision proposals are submitted. In the 2011 survey, respondents agreed this was a critical role of the Cornwall Conservation Commission.

The Cornwall Conservation Commission has a formalized role in the subdivision proposal process.

Creating a master open space plan with potential trail connections on both public and private land would be another way to understand future opportunities for maximizing the natural resources available to Cornwall residents, and alternative ways to connect residential areas to more rural areas, other than by car.

⁴³ https://cornwallvt.com/conservation/inventory/Cornwall_NRI_Report_Final_2015.pdf

CORNWALL TOMORROW



VISION STATEMENT

When updating a town plan and establishing a current vision statement, it is important to acknowledge **where we are coming from, where we are now, and where we want to be in the future**. This plan outlines challenges and opportunities for Cornwall, some of which have been consistent for the past ten years or more, and others have emerged in light of current state of affairs such as a significant economic recession, peak oil and the price of commuting, and also demographic and lifestyle trends.

The following is taken from the vision statement from 2004:

“The Planning Commission sees Cornwall on the brink of significant changes in land ownership within the next decade when much of the remaining non-conserved farmland may be purchased by people who will hold the land as an investment to be developed in the future or who will build on large tracts of land. This type of large-lot development could fragment the land and may be worse for the environment than well-planned clusters of housing that have been sensitively located. Much of the land purchased by investors will not be developed immediately, but will slowly be built upon as the market demands. It is likely that, over time, developments that offer “country club” living for an active, retired population could be built in town. Land will continue to be expensive and affordable housing opportunities are extremely limited. Most young families will find it difficult to live here and the school population will continue to decline, perhaps reaching a point that would force the elementary school to close.”

The trends identified in 2004 have largely continued. Cornwall still inspires great loyalty from its residents but there is an acute acknowledgement that there are weaknesses that must be addressed. Among the weaknesses identified are affordability, the growing potential for loss of rural character, and lack of a focal point for community activities that would be afforded by a more robust village center. The statements below are based on community feedback.

Creating a strong sense of community

This plan supports Cornwall in maintaining its own unique, rural identity, where neighbors know each other and help each other; and which offers a high quality of life for a diversity of residents young and old alike – to live, work and access safe recreational opportunities. This plan encourages local agricultural businesses and other local businesses that are in keeping with the goals of this plan.

Preserving rural character

To maintain its unique, rural character, Cornwall must protect its working, agricultural landscape, its natural systems, and its historic and scenic resources – holding them in highest regard during any development decision. This plan suggests that the town once again refine its current zoning and permitting practices and determine whether the

existing regulatory structure is working satisfactorily to protect these assets. If it is not, the plan suggests how the town might amend its regulations and permitting procedures to attain the goals of this plan.

Supporting a more robust center

While this plan recognizes the current restraints on creating a more robust village center, it seeks to maintain this vision for the future. Many residents support a village center that would provide Cornwall with a better sense of identity, opportunities for neighbors to see each other outside of their homes, and one day, house a general store/café and a farmers' market. Improved pedestrian crossings, traffic calming, and pedestrian access on the associated road networks and between community buildings and the Town Green would also be welcome.

In order to achieve this vision, the following goals and future land use plan have been set forth for the town of Cornwall.

FUTURE LAND USE

The town has been divided into land use planning areas as shown on the Land Use Map. The boundaries are not legally binding, and should not be interpreted as zoning districts but are generalized areas of town with common features, characteristics and development goals. This Land Use Plan and map should be used to guide future growth and development, and form a strong foundation for Cornwall's zoning regulations.

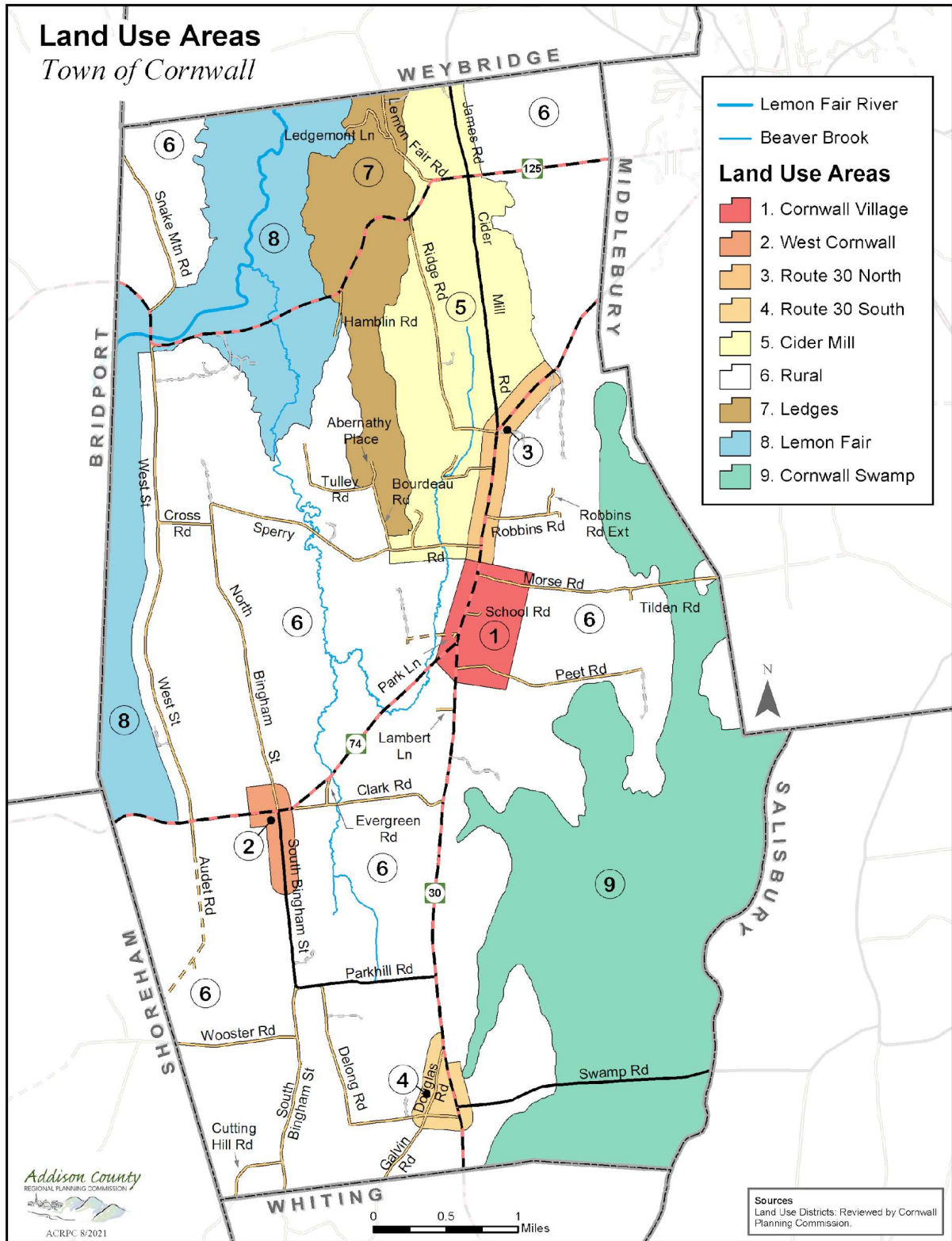
CORNWALL VILLAGE AREA

Cornwall Village will be a vital civic center with a mix of residential, business and public uses.

- a. **Agricultural:** Agricultural use will continue to be low intensity with open lands in production for hay, corn and similar crops. Small scale, innovative agricultural enterprises are encouraged, providing operations do not negatively impact the health, welfare or safety of nearby residents. Intensive agricultural activities – such as storage of waste materials or chemicals, or housing of large numbers of animals – that have the potential to conflict with residential, business or public uses should be discouraged.
- b. **Residential:** Existing residential uses will be supported and future residential development will be encouraged to match traditional New England village settlement patterns. The possibility of developing lot sizes, setbacks and frontages should be based on traditional village patterns rather than suburban subdivision standards. Homes within the village center should be encouraged to be of a style and scale similar to existing historic homes. While promoting compatible building types, a range of housing options such as multi-family housing and accessory apartments should be allowed. Adaptive reuse of historic buildings should be supported over new construction or demolition of significant buildings. PUD's should be encouraged in the village center that are guided by standards set forth in the 2008 *Smart Growth Vermont: Cornwall Village Center Zoning: A Visual Overview*. This document can be found in the appendix of this plan.
- c. **Commercial:** Business activities, appropriate in scale and character to a traditional New England village center, and fitting with the unique character of Cornwall, will be encouraged in this area. Large, big box, and/or franchise operations or strip development along state highways should not be allowed. Development in this area should support and encourage pedestrian and cycling activity. Priority should be given to re-establishing businesses in the village like a general store, café, or pub that provide gathering places for Cornwall residents, promote community interaction and strengthen the resident's sense of community. Other businesses, such as professional offices, small retail shops, restaurants, inns or bed-and-breakfasts, should be accommodated within this area with adequate regulation to ensure their compatibility with neighboring uses. Restrictions should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners. Home occupations and home-

based business that will not negatively affect the quality of life for neighboring property owners should also be encouraged.

- d. **Public:** The majority of the town’s public buildings and services will continue to be based within the village area. These places, along with the Cornwall Congregational Church and Town Green, provide a civic hub for Cornwall residents. The Town intends to preserve the Town Green for its current function as a cultural and recreational resource and will maintain the green as a public investment. The Town will seek opportunities to enhance or promote the function of the Town Green as an open space intended for community members and travelers’ use. Plans that create a stronger sense of place in the Cornwall village and that provide safe links (such as crosswalks, signage or other appropriate traffic calming measures) to the community resources located there will be encouraged. Many of the existing public structures are historic and maintaining their character is key to maintaining the character of the village as a whole. Additional buildings in the village center should complement this character. Adaptive reuse of historic buildings for public use should be supported over new construction or demolition of significant buildings. Provisions for pedestrians and cyclists should continue to be pursued, including efforts to slow thru-traffic and provide safe opportunities to walk or bike from, to and within this area of town.



Map 1. Land Use Areas (Source: ACRPC)

The West Cornwall Area will continue to be a primarily residential neighborhood.

- a. **Agricultural:** Agricultural use will continue to be low intensity with open lands in production for hay, corn and similar crops. Small scale, innovative agricultural enterprises are encouraged, providing operations do not negatively impact the health, welfare or safety of nearby residents.
- b. **Residential:** Existing residential uses will be supported and future residential development will be encouraged to extend the existing settlement pattern and architectural character of West Cornwall. While promoting compatible building types, a range of housing options such as multi-family housing and accessory apartments should be allowed. Development should be allowed on small lots and provision of the infrastructure needed to facilitate higher density use should be encouraged. Panhandle lots behind existing homes should be explored to provide infill opportunities.
- c. **Commercial:** This area is currently and should remain primarily residential. Home occupations and home-based business that will not negatively affect the quality of life for neighboring property owners should be encouraged. The Town should restrict hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners. Appropriate business uses would include home-based businesses, small shops, restaurants or inns that do not require increases in traffic – including trucks – beyond what is customary in residential areas, or outdoor storage of materials, equipment or goods. Small scale, innovative agricultural enterprises are encouraged, providing operations do not negatively impact the health, welfare or safety of nearby residents.
- d. **Public:** Public uses that duplicate or cannot be accommodated in Cornwall Village may be appropriate in this area. The scale and character of public buildings needs to be carefully considered. Adaptive reuse of historic buildings for public use should be supported over new construction or demolition of significant buildings.

The Route 30 North Area will continue to be a densely built settlement characterized by historic homes lining the highway, and acting as a visual gateway into Cornwall Village.

- a. **Agricultural:** Agricultural use will continue to be low intensity with land in production for hay, corn and similar crops. Small scale, innovative agricultural enterprises are encouraged, providing operations do not negatively impact the health, welfare or safety of nearby residents.

- b. **Residential:** Existing residential uses will be supported and future residential development will be encouraged to extend the existing settlement pattern, lot configuration and architectural character of existing historic homes. Development should be allowed on lots similar in size to existing parcels. The possibility of developing panhandle lots behind existing homes should be explored to provide infill opportunities. Provisions should continue to be made to create safe access for residents to walk or bike along Route 30 by maintaining the upkeep of three-foot shoulders on Route 30, reducing and enforcing the speed limit, and improving signage, creating a visual ‘gateway’ into Cornwall village. A range of housing options such as multi-family housing and accessory apartments should be encouraged.
- c. **Commercial:** This area is currently and should remain primarily residential. Home occupations and home-based businesses that will not negatively affect the quality of life for neighboring property owners should be encouraged. Restrictions should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners. Conversion of residential structures into office space or similar low-intensity commercial uses may be appropriate under similar constraints.
- d. **Public:** Development of public uses should be discouraged, in order to guide future public use structures into Cornwall Village. Provisions for pedestrians and cyclists should continue to be pursued, including efforts to slow thru-traffic and provide safe opportunities to walk or bike.

ROUTE 30 SOUTH AREA

This part of town, formed by the triangular area formed by Route 30, Delong Road and Douglas Road, has a home density similar to the West Cornwall village area and will also continue to be primarily a residential area. Existing commercial activity, which is home-based and agricultural, is in keeping with this traditional settlement pattern.

- a. **Agricultural:** Agricultural activities are encouraged to continue in this area, including small scale and hobby-type farms.
- b. **Residential:** Existing residential uses will be supported and future development will be encouraged in keeping with a rural pattern with clusters of buildings separated by open land. A range of housing options, such as multi-family housing and accessory apartments, should be allowed. Exterior lighting should be kept to a minimum. Private roads and drives built to access new development should be constructed to standards that allow efficient, adequate access and at the same time are compatible with the character of the area and conform to established safety and construction standards.
- c. **Commercial:** Commercial uses within this area will continue to be primarily home-based businesses. Town regulations should be reviewed and amended as appropriate to ensure that the definitions of home-based business and business based out of buildings other than

residences are clear and generally support current commercial uses. Consideration should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners. Agricultural-related businesses and adaptive reuse of agricultural buildings should be encouraged.

- d. **Public:** Survey results indicate that there is still interest in public use of the town-owned Douglas Pond, which is on the NW edge of this area. A town recreation committee can be tasked to investigate the options and costs associated with access and maintenance of this potential recreation site. Negative impact on the residential and agricultural character of the area should continue to be a concern.

CIDER MILL – RIDGE ROAD AREA

The Cider Mill – Ridge Road Area has significant open space and scenic views to both the Adirondack and Green Mountains. It is primarily a residential area.

- a. **Agricultural and Open Space:** Agricultural activities are encouraged to continue in this area. Small scale, innovative agricultural enterprises, including small-scale or hobby-type farms are encouraged providing operations do not negatively impact the health, welfare or safety of nearby residents. The conservation of agricultural land and maintaining open space for its ecological, scenic and recreational value is highly encouraged and supported.
- b. **Residential:** Existing residential uses will be supported and future residential development will be encouraged. New residential development should be encouraged to site buildings to minimize impacts on ecological, historical and scenic features of the landscape. Use of conservation subdivision principles should be encouraged and rural amenities, such as public recreation trails, should be incorporated into any major subdivisions. A range of housing options such as multi-family housing and accessory apartments should be encouraged. Exterior lighting should be kept to a minimum. Private roads and drives built to access new development should be constructed to standards that allow efficient, adequate access and at the same time are compatible with the character of the area.
- c. **Commercial:** Low-intensity home occupations and home-based businesses that will not negatively affect the quality of life for neighboring property owners should be encouraged. Restrictions should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners.
- d. **Public:** Public uses, with the exception of recreation, should not be encouraged in this district, in order to guide such uses into Cornwall Village.

The Rural Area includes Cornwall's most productive agricultural lands and significant ecological, historic and scenic assets of the landscape. It is a low-density settlement area where future homes should be built on the margins of agricultural land in order to maximize these assets.

- a. **Agricultural and Open Space:** Agricultural activities of a range of scales and types are encouraged in this area. The conservation of agricultural land and maintaining open space for its ecological, scenic and recreational value is highly encouraged and supported. Additional on-farm agricultural enterprises and value-added initiatives should be supported by updated zoning regulations. Landowners wishing to sell the development rights on their property should be supported to do so.
- b. **Residential:** Existing residential uses will be supported and future residential development will be encouraged to locate away from agriculturally viable land and environmentally sensitive areas. New residential development should be encouraged to site buildings to minimize impacts on ecological, historical and scenic features of the landscape. All subdivisions should be encouraged to follow conservation subdivision guidelines found in this plan, and major subdivisions should incorporate affordable housing options and access to public recreational trails. A range of housing options such as multi-family housing and accessory apartments should be encouraged. Exterior lighting should be kept to a minimum. Private roads and drives built to access new development should be constructed to standards that allow efficient, adequate access and at the same time are compatible with the character of the area.
- c. **Commercial:** Commercial uses, other than agriculture related businesses, will continue to be primarily home occupations or home-based businesses. The town's regulations should be amended to support a variety of home-based businesses, including those that are based out of buildings on the property other than the residence. Consideration should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners. Agricultural-related businesses or adaptive reuse of agricultural buildings should be encouraged.
- d. **Public:** Public uses, with the exception of recreation, should not be encouraged in this district, in order to guide such uses into Cornwall Village.

The Ledges Area is characterized by a significant amount of forested, steep slopes and other unique natural features. It has a very low level of development.

- a. **Agriculture and Open Space:** This area is recognized for its contiguous forest cover, connecting approximately seven miles from Sperry Road north to Weybridge Cave Natural State Park. Some timber harvesting continues in this area. Care should be taken to retain this natural area, and minimize impacts from development. The Planning Commission may look into including this area in a ‘special features overlay district’, to guide development in this unique natural area.
- b. **Residential:** Existing residential uses will be supported and future residential development will be permitted only at a very low density. Consideration should be given to maintaining forest cover in this area and residential development should be encouraged to locate on existing non-wooded land if possible. Development should also be prohibited on lands with extreme slopes in order to prevent erosion and reduction in water quality in nearby streams, as well as ensure adequate access to residences.
- c. **Commercial:** Commercial uses within this area will continue to be low-intensity, home occupations. Restrictions should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners.
- d. **Public:** Public uses, with the exception of recreation, should not be encouraged in this district, in order to guide such uses into Cornwall Village.

LEMON FAIR - BEAVER BROOK AREA

The Lemon Fair-Beaver Brook area is characterized by its inclusion of the Lemon Fair River flood plain, parts of the Beaver Brook riparian corridor, and adjacent agricultural fields. It will continue to be largely undeveloped.

- a. **Agricultural and Open Space:** Much of the land is undeveloped in this area, and should continue to remain primarily undeveloped. Agricultural landowners are encouraged to leave a riparian buffer of uncultivated land around streams and prevent farm animals from entering the streams. Landowners are encouraged to participate in federal programs for such projects. The town should also continue to encourage landowners who wish to sell the development rights on their property in this area in order to minimize development in this ecologically important area. Development should be prohibited within the floodplain to prevent future property loss or damage. This land use area emphasizes the importance of Beaver Brook and the Lemon Fair River in the town’s natural systems and encourages property owners to keep development set back from the stream for water quality and wildlife habitat

protection. Zoning regulations should be updated to reflect this, including specific setback requirements from riparian corridors. The Planning Commission may look into including this area in a 'special features overlay district', to guide development in this unique natural area.

- b. Residential:** Existing residential uses will be supported and the location of future residential development should be carefully reviewed to ensure that it is not being located within floodplains, wetlands, riparian zones or other similar sensitive areas. No additional development should be allowed within the floodplain. Along the Beaver Brook, future residential development should be required to be set back a reasonable distance from the stream. Consideration should be given to maintaining riparian vegetation along the stream banks.
- c. Commercial:** Commercial uses within this area will continue to be low-intensity, home-based businesses and home occupations. Restrictions should be given to hours of operation, noise, lighting, traffic, outdoor storage, parking, signage and other impacts that could affect the quality of life for neighboring property owners.
- d. Public:** Public uses, with the exception of recreation, should not be encouraged in this district, in order to guide such uses into Cornwall Village.

CORNWALL SWAMP

Cornwall Swamp will continue to be a largely undeveloped, forested swamp with limited land in low-intensity agricultural use.

- a. Agricultural and Open Space:** Open space and limited forestry, will continue to be the primary land uses within this area. The town should also continue to support landowners who wish to sell the development rights on their property or sell the property to a conservation organization or the state.
- b. Residential:** Existing residential uses will be supported, but additional residential development should be prevented on environmentally sensitive land.
- c. Commercial:** Commercial uses should not be allowed within this area.
- d. Public:** Public uses, with the exception of recreation, should not be encouraged in this district, in order to guide such uses into Cornwall Village.

PLAN GOALS AND RECOMMENDATIONS

The following goals are written in association with the sections of this plan. Together with the Future Land Use Plan, these goals direct planning and land use decisions and guide Cornwall toward our future vision.

POPULATION

GOAL 1

Promote community activities and interaction among town residents through the following actions.

- a. Create and maintain public facilities and spaces that encourage social interaction among town residents.
- b. Strengthen residents' sense of community by promoting opportunities for residents to gather for recreation, education and other activities.
- c. Support small-scale commercial activities in Cornwall's village center that would create places for residents to gather and interact, while providing basic daily supplies. (e.g. general store and farmers market)

GOAL 2

Strengthen citizen participation in local government and build a stronger sense of community through the following actions.

- a. Develop a stronger sense of civic responsibility and duty in residents.
- b. Increase residents' understanding of how the town government works.
- c. Continue to provide town news and information to residents.

GOAL 3

Maintain and increase intergenerational diversity in the town through the following actions.

- a. Support elderly residents in their efforts to maintain independence. Continue to support organizations that assist elderly residents.
- b. Support the provision of housing that will allow elderly residents to continue to live in the community.
- c. Support the provision of housing that will allow young people to buy homes and raise their families in the community.
- d. Work to make Cornwall a more affordable community.

GOAL 1

Promote a pattern of development to accommodate residential growth that will retain a rural character, protect prime agricultural land, conserve natural resources and revitalize Cornwall's village center through the following actions.

- a. Adopt regulations to preserve prime agricultural and important habitat from the pressures of residential development and maintain the rural atmosphere of the town.
- b. Create an overlay district to show prime agricultural land, important wildlife habitat or other environmentally sensitive areas.
- c. Allow incentives for developments that use the town's PUD provisions or that cluster homes while preserving open space or agricultural land. Review existing regulations to ensure provisions around PUD align with this document.
- d. Investigate other development patterns and/or housing patterns that might further the stated goals above. The Planning Commission should try to recruit a housing committee to review this topic.

GOAL 2

Provide a range of housing opportunities that will meet the needs of Cornwall's current and future residents through the following actions.

- a. Work with housing trusts and developers to encourage development of small-scale affordable and workforce housing with access to emergency and road services, particularly for younger town residents and the elderly.
- b. Allow for "density bonuses" for the creation of affordable and workforce housing development in PUDs over the permitted zoning in such developments, provided sufficient water and septic capability exists.
- c. Promote affordable housing and increase the availability of long-term rental housing by allowing for apartments associated with existing homes or the conversion of large single-family homes into multi-family homes.
- d. Maintain a mix of housing types and values by encouraging housing developments that contain homes of a variety of styles, sizes or sale prices.
- e. Encourage any new residential development to be energy-efficient.
- f. Better understand the impact of short term rentals on the availability and affordability of permanent housing in our community.

GOAL 1

Promote and protect the long-term viability of agriculture and agricultural land through the following actions.

- a. Minimize development on primary agricultural soils.
- b. Support a farmer's right to farm using Vermont's Required Agricultural Practices.
- c. Encourage landowners to protect agricultural land through conservation easements or the current use program.
- d. Support ventures that promote a sustainable local economy with particular consideration given to local food production and innovative on-farm businesses.
- e. The Planning Commission should work to generate a community conversation about land use ethics and shared community values around how to plan for and regulate development and its impact on local agriculture.
- f. The town would also benefit from a clear-eyed approach to the use of residences as a source of income when used as short-term rentals. While there may be some instances of homeowners who are able to live here and offer this service, it would be helpful to understand the impact on the housing market in town.
- g. Currently, the town depends on institutional knowledge and a list of businesses with state permits to know which businesses are in town. The Planning Commission should try to conduct a study to determine what local businesses are in town to better understand our economic environment.

GOAL 2

Support the maintenance of existing and development of new home-based businesses in Cornwall that would fit into the rural character of the town through the following actions.

- a. Encourage the creation and viability of home-based businesses and home occupations that meet the standards of the town's regulations and preserve neighbors' quality of life.
- b. Prohibit large-scale, big box, and/or strip commercial development throughout Cornwall, including along Routes 125, 30 and 74.

EDUCATION

GOAL 1

Ensure that high quality educational opportunities are provided for all residents through the following actions.

- a. Support the provision of early education programs and after-school programs.
- b. Encourage the provision of high-quality childcare services that meet the needs of the town's working parents.

- c. Support excellent and diverse educational opportunities in order to facilitate a tradition of lifelong learning by town residents and work to engage residents of all ages in the district. This is part of the town's annual budgetary process already in supporting non-profits that apply for funding.

HISTORIC AND CULTURAL RESOURCES

GOAL 1

Maintain and protect Cornwall's historic and cultural resources through the following actions.

- a. Identify and protect significant historic structures, sites or districts.
- b. Encourage efforts to preserve known and potential archaeological sites, historic sites and buildings; and enhance the appearance of historic districts.
- c. Support adaptive reuse of historic structures, including former agricultural buildings.

COMMUNITY FACILITIES AND SERVICES

GOAL 1

Work to ensure that Cornwall's public buildings can continue to accommodate the services needed by residents currently and in the future through the following actions.

- a. Maintain Cornwall village as a community center that provides administrative and public facilities including town offices, library, school and town green.
- b. Support future projects to construct, rehabilitate and maintain Cornwall's public buildings and facilities that are energy efficient, are cost-effective to taxpayers, preserve their historic character, promote the viability of the village center and conform to the goals of this plan.
- c. Encourage development of a 5- to 10-year capital budget and program that would allow the town to require phasing of developments and the assessment of impact fees on large developments needing expansions of local services or facilities.
- d. Promote and recognize the value of volunteerism in the provision of community services and the longstanding tradition of Cornwall residents working together to meet community needs.
- g. Continue to explore opportunities for coordinating services with neighboring towns and sharing resources such as equipment and personnel in a manner similar to the fire department's mutual aid system.
- h. Continue to actively plan for the town's solid waste disposal needs by participating in the Addison County Solid Waste Management District.
- i. Continue to support high quality fire and rescue services in town and ensure that there is adequate access for emergency vehicles to all residential and commercial development.
- j. Continue to support the organizational and planning efforts of the Emergency Management Committee to ensure adequate preparation for potential large-scale emergencies.

GOAL 2

Work to ensure that current and future development has adequate, functioning wastewater disposal systems through the following actions.

- a. Issue town permits for development contingent upon applicants receiving all required state and federal permits, including a state water and wastewater permit.
- b. Support efforts to ensure that new, cost-effective wastewater disposal technologies are approved for use in Vermont that will allow for reasonable development throughout the Town of Cornwall.

UTILITIES AND ENERGY

GOAL 1

Provide access to state-of-the-art communication technology to Cornwall residents and businesses, the infrastructure of which does not compromise Cornwall's scenic landscape through the following actions.

- a. Support provision of high-speed internet access throughout Cornwall.
- b. Support provision of cellular phone service throughout Cornwall
- c. Ensure that new infrastructure blends into its surroundings by developing regulations that encourage utilization of existing structures before the construction of new towers.

GOAL 2

Foster resource conservation by promoting energy efficiency, small-scale generation and local distribution of energy through the following actions.

- a. Work with Cornwall's Energy Coordinator to form a Cornwall Energy Committee, and to provide up-to-date energy efficiency programs and resource information at the Town Hall, on the Town Website and in the Cornwall Newsletter.
- b. Encourage use of energy-efficient building practices for new construction and renovation projects based on the Vermont Residential Energy Code.
- c. Encourage dispersed, small-scale development of renewable energy generators, including solar panels and wind turbines, and net-metering as a way to make these systems more affordable.

GOAL 3

Ensure that energy infrastructure and services do not cause undue adverse impact to the health and safety of our residents or on the environmental quality of our town.

GOAL 4

Continue to maintain the common rural practice of utilizing local resources, such as wood, in a sustainable manner for energy sources through the following actions.

- a. Consider access to land-locked woodlots when reviewing development proposals.
- b. Promote sustainable land management of woodlots and other resource areas and encourage landowners to develop management plans for such lands.

TRANSPORTATION

GOAL 1

Reduce safety hazards throughout Cornwall's road network through the following actions.

- a. Lobby Vermont Agency of Transportation to improve the safety of the intersection of Route 125 and Cider Mill Road.
- b. Enter into substantive talks with the Vermont Agency of Transportation when planning the next round of repaving the approaches for Route 125 and 74 for the purpose of establishing paved shoulders wide enough to accommodate bicycles, joggers and pedestrians.
- c. Support implementation and enforcement of slower speed limits and increased signage in the Historic Route 30 North, Cornwall Village and West Cornwall areas to reflect the population densities in these areas, and allow safer access by cyclists and pedestrians, and explore the feasibility of village crosswalks.
- d. Support the creation of a plan to identify existing and potential bike and pedestrian networks throughout Cornwall.

GOAL 2

Maintain Cornwall's road network in a manner that enhances the town's rural character and protects the environment through the following actions.

- a. Conduct a review of the town's policies and guidelines related to whether it is appropriate and necessary for the town to pave an existing gravel road.
- b. Gain the agreement of the majority of residents along any gravel road which is being considered for paving.
- c. The Town of Cornwall will continue to participate as a member community in the Lake Champlain Byway and will encourage efforts to promote its use as a tool to attract visitors to the community.
- d. Promote awareness of key animal crossing locations on town roads.

GOAL 3

Ensure that private roads and drives are constructed and maintained to minimum standards through the following action.

- a. Maintain the town's current standards for private roads to ensure they are in keeping with state standards for safe access by emergency vehicles.

RECREATION

GOAL 1

Promote provision of public recreation facilities, preservation of public access and responsible use of the town's resources through the following actions.

- a. Continue to push the Vermont Agency of Transportation to create rights-of-way for bicycles, joggers and pedestrians on all state highways in conjunction with the reconstruction of those roads so people can walk and bicycle safely.
- b. Support the recreation committee's efforts to improve and promote public access to public and private lands, and to connect District teachers with private landowners wishing to provide outdoor education opportunities.
- c. Identify existing and potential bike and pedestrian networks and recreation opportunities throughout Cornwall.
- d. Continue to maintain and encourage public access to traditional recreation areas by encouraging private landowners to continue the common rural practice of allowing use of their land for hunting, fishing and other recreational activities.
- e. Encourage developers of major subdivisions to earmark or donate land or facilities for parks, public access, or trails if the need for such facilities has been identified and would benefit residents of the subdivision and the town.
- f. New development should be designed and situated in such a way as to minimize any adverse effects on recreation resources.
- g. Encourage the use of Cornwall's public buildings for recreational opportunities.

NATURE AND THE ENVIRONMENT

GOAL 1

Conserve and ensure the continued viability of the town's native plants, animals and natural communities through the following actions.

- a. Enhance the Inventory of the town's important natural communities, wildlife habitat and habitat connectors and add other significant information missing from the Inventory.
- b. Create 'Special Features Overlay Map' to guide development decisions on projects that could otherwise fragment forest blocks and significant habitat connectors. Promote and support efforts by

landowners, land trusts, state and federal agencies, and other organizations to conserve corridors, important habitats and the locations of rare and uncommon species.

- c. Encourage landowner participation in state, federal and other conservation programs.

GOAL 2

Maintain and, where necessary, improve the quality of Cornwall's groundwater, surface waters and wetlands through the following actions.

- a. Cooperate with agencies or organizations in monitoring the river's water quality and support the extension of this program to all of Cornwall's rivers and streams.
- b. Require adequate management of storm-water runoff from developed lands, parking areas, roads and driveways so that surface waters are not negatively impacted by storm-water discharge.
- c. Review and update zoning regulations to include specific setback requirements from riparian corridors.
- d. Limit development in the floodplain to protect the ecological services that this area provides mitigating flood hazards.
- e. Limit development in areas with steep slopes and other areas with high erosion potential.
- f. Discourage negative impacts to wetlands, such as disruption of natural hydrology and soils, alteration of natural nutrient, chemical and sediment regimes, and degradation of natural community quality.
- g. Work with landowners, land trusts, state and federal agencies, and other organizations to protect water quality, conserve groundwater resources and preserve functioning wetland systems.
- h. Encourage the gathering and analysis of information on the yield and quality of wells in Cornwall to help determine the adequacy of the town's groundwater supplies, and support testing of water sources for pollutants. The town does not favor the construction of underground utility transmission infrastructure near wells and groundwater supplies.

GOAL 3

Protect and enhance the rural, scenic character of Cornwall's landscape through the following action.

- a. Require management plans for any lands to be held in common as a condition of approval for future PUDs.

GOAL 4

Maintain and improve the integrity of Cornwall's existing Forest Blocks through the following actions.

- a. Promote and support efforts by landowners, land trusts, state and federal agencies and other organizations to conserve forest blocks and habitat connectors in identified priority areas.
- b. Enhance the 2015 Ecological Inventory of Cornwall (referenced in 1A above) to field-verify and prioritize the town's principal wildlife habitat and habitat connectors.

- c. Revise the zoning approval and development review processes to require applicants to identify Vermont Agency of Natural Resources defined Highest Priority and Priority Forest Blocks and Wildlife Corridors that would be impacted by a proposed development and encourage development that does not fragment or create adverse impact to those forest blocks and habitat connectors.
- d. Through the Cornwall Conservation Commission, better inform the community about the concept of forest integrity.
- e. Collaborate with neighboring towns in identifying and maintaining forest and connectivity blocks that cross town boundaries.
- f. Work with the Town Highway Department to identify and, where practical, adopt road management practices that minimize hazards in identified wildlife road crossing areas.

FLOOD RESILIENCE

GOAL 1

Further develop and enhance the town of Cornwall as a Flood Resilient Community through the following actions.

- a. Maintain and protect water resources including their functions to limit and mitigate flood-related damage.
- b. Continue to maintain and upgrade as needed town road infrastructure to withstand potential flood events.
- c. Encourage participation by townspeople in Flood Resiliency planning meetings and process.
- d. Review and update Zoning and Subdivision Regulations in order to improve regulation of development in the Special Flood Hazard Area and River Corridor areas. Investigate simplifying interface between Zoning Districts and water resource feature-based overlays in order to improve and clarify regulation.
- e. Consider and investigate conducting necessary steps to qualify for maximum State funding (17.5%, 92.5% total) from the Emergency Relief and Assistance Fund.
- f. Continue annual updates of the Local Emergency Management Plan.
- g. Continue maintaining and, as needed, updating of Local Hazard Mitigation Plan.
- h. Using existing GIS resources, investigate developing and maintaining a digital mapping database (GIS) that would include parcel boundaries, zoning districts, wetlands, river corridors, Special Flood Hazard Area, special features, etc.

CONCLUSION



PLAN IMPLEMENTATION

This section of the Cornwall Plan lists specific actions that the town should take over the course of the next eight years to implement the priority goals and objectives of this plan, and to move towards the creation of the

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community described in the vision statement above. They are as follows, listed in the same approximate order as the Plan Goals and Recommendations.

A. Better understand affordability challenges and opportunities

Action 1: Promote and support affordable and workforce housing

Completion Date: Ongoing

Who: Planning Commission and Select Board

How: Investigate sustainable, affordable housing models that may be appropriate for Cornwall. Assess the possibilities of requiring an “affordable housing” fee from all major subdivision applications and other options designed to make housing in Cornwall more affordable. Study the prevalence of short term housing in Cornwall and its impact on the availability and affordability of permanent housing in our community.

Why: High home prices, energy costs and tax rates continue to be viewed as obstacles for young families, older residents on fixed incomes and many in the greater Middlebury area’s workforce. In addition, according to the State definition of affordable housing, an Addison County household earning 80% of the Median Family Income could afford to spend \$1376 on housing, yet the \$1856 median monthly ownership cost in Cornwall greatly exceeds that level. The elementary school enrollment needs to have a student population that affords financial sustainability.

B. Further support home-based businesses

Action 1: Review and propose appropriate zoning regulations to ensure that clear and practical definitions for “home-based business” and “home occupation” are included.

Completion Date: Ongoing

Who: Planning Commission and Select Board

How: Use existing regulations from other towns, if appropriate. If none are appropriate, craft language that is clear and definitive. Encourage all of those in town who currently have home-based businesses or home occupations to participate in development of workable definitions.

Why: It has become apparent that the existing definitions are too vague to ensure consistent interpretation and application by the DRB and Zoning Administrator.

C. Reinforce our historic settlement land-use pattern

Action 1: Review zoning regulations and assess opportunities to increase housing densities in village and medium density residential areas consistent with historical settlement patterns.

Action 2: Work with Select Board and state agencies to encourage further traffic calming measures in the Cornwall Village and West Cornwall areas.

Action 3: Investigate Village Center Designation application for Cornwall Village and West Cornwall.

Action 4: Investigate and report on potential for master planning process in Cornwall. Report to describe costs and benefits of the master planning process.

Completion Date: 2025

Who: Planning Commission and Select Board

How: Review case studies from other towns with similar development patterns to evaluate alternatives available to reinforce historic settlement patterns. Assess the current town road signage and consider additional signage. Discuss the possibilities of crosswalks, visual cues such as striping or narrowing of roadway, short runs of sidewalk, posting town roads with lower speed limits, and consistent speed enforcement surveillance to slow traffic.

Define traffic calming needs and locations and present a case to the Select Board.

Why: In prior planning surveys, almost 80% of respondents wanted a safer pedestrian environment connecting existing civic buildings. The Select Board frequently receives correspondence from town residents requesting analysis and action to reduce speeds on Town roads and the highways that pass through Cornwall. Historic settlement areas encourage a landscape of villages and hamlets surrounded by areas of agricultural and natural areas, and also provides opportunities in the future for more residents to access services and amenities by bicycle or foot.

D. Preserve the working landscape

Action 1: Promote related town-wide events and education which foster the support networks and foundations needed to generate agriculturally focused social and economic capital.

Action 2: Review and amend Cornwall's zoning and subdivision regulations to better ensure the preservation of working landscape and encourage a healthy, local agricultural economy.

Completion Date: 2024

Who: Planning Commission and Select Board

How: The Planning Commission, working with other town groups, will facilitate opportunities that support awareness of and provide a forum for highlighting the benefits of a working landscape, such as the October 2020 Conservation Commission online panel titled "Setting Land Aside for Conservation," featuring representatives of the Vermont Land Trust and the Middlebury Area Land Trust, as well as a professional land appraiser. The recording of the panel is available on the Conservation Commission's website, and can be used as a model for additional forums and events.

The Planning Commission will review the zoning and subdivisions regulations and amend, as needed, to ensure the preservation of the working landscape and present any amendments to the Select Board for approval

Why: Prior surveys indicated that residents feel strongly about the need to maintain the rural character of Cornwall and to support local agricultural enterprises. Attendees at the 2016 Community Values workshop identified farms and working lands as one of eight high-priority values. Participants marked about 40% of Cornwall’s lands as valuable for farms and working lands. There is a continuing need to protect agricultural land.

E. Development of local childcare opportunities

Action 1: Investigate options for the development of sustainable local childcare facilities and support projects that would benefit the residents of Cornwall.

Completion Date: 2024

Who: Planning Commission and Select Board

How: Determine the current and future childcare needs of Cornwall residents. Determine current and planned future capacity of neighboring childcare centers. Support expansion of nearby childcare facilities that would benefit Cornwall residents in need of childcare.

Why: Currently there are no childcare centers in Cornwall. The lack of childcare providers in Cornwall and neighboring communities not only has revenue and employment impacts in the town, but also has the ripple effect of making it harder for local working parents to find childcare so that they can work.

F. Promote renewable and local energy generation

Action 1. Implement the use of a renewable energy source that will meet Cornwall’s municipal energy needs for the Town Hall and Town Garage.

Action 2. Encourage dispersed, small-scale development of renewable energy systems, including solar and wind turbines, for residences and businesses.

Action 3: Appoint an Energy Coordinator and create an Energy Committee.

Completion Date: Ongoing

Who: Select Board and Energy Committee

How: The Select Board will investigate and assess various options for installing a solar array capable of generating more than 20 Kw of energy for use by the Town Hall and Town Garage. The goal is that the solar array will be installed on or near the Town Hall by 2023. Leverage the Energy Coordinator position to form an Energy Committee, whose mission will be to provide assistance and guidance related to energy conservation and savings through education and outreach utilizing state and regional resources. The Energy Committee will also disseminate information and hold public events to inform residents about renewable energy options, including low-cost options.

Why: Installing a solar array to generate electricity for the Town Hall and Town Garage will cushion the Town from fluctuating and unpredictable energy costs. As of 2021, Cornwall has 96 renewable energy generators and a total of 470 households, suggesting that about 80% of households do not generate their own renewable energy. For the electric sector, Vermont’s 2022 Comprehensive Energy Plan sets the goal that 100% of energy needs be from carbon-free sources by 2032, and 75% from renewable energy.

G. Increase local recreation opportunities

Action 1: Identify potential new local recreational opportunities. Support the current activities of the Recreation Committee.

Completion Date: Ongoing

Who: Recreation Committee and Select Board

How: Seek interested persons through the use of the town's newsletter and website to mutually develop a work plan and goals and to work with landowners, when appropriate, to achieve goals. The Recreation Committee, along with other town groups, can also re-assess the practicality for recreational use of Douglas Pond and the re-establishment of town youth sports teams.

Why: Prior surveys indicated that residents seek increased opportunities to recreate in Cornwall but are challenged by not knowing what is available and what lands are accessible. Of particular interest were: bike shoulders on Routes 74 and 125, possible use of the VAST trail network for summer hiking and horseback riding, trail connectivity into Middlebury, and an inventory of property allowing unhindered access for hunting and fishing. In 2017 there was sufficient interest in town trails to form a Trails Committee, consisting of members from the Conservation Commission, the Recreation Committee and several other interested residents. More recently, the Select Board has identified the creation of multi-use trails as one idea in several to receive American Rescue Plan Act funding.

H. Strengthen our conservation efforts

Action 1: Promote and support efforts by landowners, land trusts, state and federal agencies and other organizations to conserve forest blocks, habitat connectors and working lands.

Action 2: Better inform town residents about the concepts of forest integrity.

Action 3: Enhance the 2015 Ecological Inventory of Cornwall by assessing the town's wildlife habitat blocks and adding new data about the town's significant natural areas to the Inventory.

Action 4: Revise the zoning and subdivision regulations to further enhance Cornwall's existing forest blocks and habitat connectors.

Action 5: Create a Special Features Overlay Map to guide development decisions on projects that could otherwise fragment forest blocks and wildlife corridors.

Completion Date: Ongoing

Who: Planning Commission, Conservation Commission, and Select Board

How: The Conservation Commission will identify potential funding sources for enhancing the Ecological Inventory, and avenues for creating a Special Features Overlay Map. The Planning Commission will investigate regulatory opportunities and, where appropriate, propose revisions to zoning and subdivision regulations that promote and strengthen conservation efforts in Cornwall. The Conservation Commission will disseminate information and hold public events about land conservation. The Conservation Commission will explore what factors prompted Cornwall residents to conserve their land in the past, to better understand how these factors might motivate others to conserve in the future.

Why: With the completion of the Ecological Inventory in 2015 and the establishment of the Conservation Reserve Fund in 2021, Cornwall has the foundation to strengthen its conservation efforts even more. Prior surveys showed a strong desire for the preservation of Cornwall's natural features and rural character. Also the

overwhelming approval vote (86% in 2021) to fund the Conservation Reserve Fund indicates strong consent for Town financial support of conservation efforts. In addition, Act 171 encourages Vermont municipalities to address protection of forest blocks and habitat connectors. Vermont statutes also require a flood resilience plan, and to identify and avoid development in flood hazard, fluvial erosion and river corridor protection areas.

APPENDIX A: COMPATIBILITY

Cornwall's plan is of course primarily focused on guiding future development within its own borders. However, the effects of development do not necessarily respect municipal boundaries. Development and land use policies in neighboring communities and the region as a whole will impact the town. Conversely, trends and policies in Cornwall may affect its neighbors or potentially the region.

WITH THE REGION

Cornwall is located in the Addison Region. By state statute, town plans must be compatible with the Regional Plan. The Cornwall Town Plan contains goals and objectives similar to the Addison County Regional Plan. The Regional Plan adopts the land use plans of its member municipalities as its own, so there can be no conflict between local and regional land use plans.

WITH SURROUNDING TOWNS

This section briefly examines the land use plans for towns surrounding Cornwall. No conflict was found to exist between Cornwall and its neighbors. Each of the towns is listed below with a summary of the land use along that town's boundaries.

Bridport

The town of Bridport forms the northwest boundary of Cornwall. Much of the border between the towns is part of the Lemon Fair floodplain and wetland area. Indeed, most of the farm parcels with frontage along West Street cross the town line into Bridport. Both towns recognize this area as environmentally sensitive and ill-suited for development. West of Snake Mountain Road, Cornwall's land use plan classifies the area as suited for rural agricultural and residential uses. As the road continues into Bridport, the terrain becomes steeper and more wooded. Bridport classifies this area as part of its Upland Region, suited for low-intensity residential use.

Middlebury

The town of Middlebury borders Cornwall to the northeast. Cornwall's development pattern over the past several decades has been significantly linked to economic development and job growth in Middlebury and expansion of Middlebury College. As a regional center, Middlebury provides many services and facilities used by Cornwall residents.

The land use plans for the two communities along their shared border are generally compatible. Both recognize the area around Otter Creek and Cornwall Swamp as wet, flood-prone and ill-suited for development. Both envision a continuation of agricultural and rural residential uses elsewhere along their border. The area Middlebury has designated for institutional use does not extend to the town line, although the college has been acquiring land in the northeastern corner of Cornwall.

Salisbury

The town of Salisbury borders Cornwall on the east and the two towns are linked by a temporary bridge over the Otter Creek. The historic covered bridge was destroyed by fire in 2016. On both sides of the creek, the land is swampy and not well suited to development. In Cornwall, the land is largely forested, with small areas of

open agricultural land. In Salisbury, most of the border is in agricultural use as open fields. Both towns are planning low-intensity or no development in this sensitive, wet area.

Shoreham

The town of Shoreham also borders Cornwall to the west. Both towns recognize the agricultural character and use of the land along the town line. Some of the land on the border is conserved as part of a farm with land in the towns of Cornwall, Shoreham and Whiting.

Weybridge

The town of Weybridge borders Cornwall to the north of Cornwall. Along the town line, Weybridge has two planning regions – Lemon Fair Valley and Sheep Farm. The Lemon Fair region recognizes the flood-prone character of the land around the creek and the fertility of the farmland that surrounds it. The Sheep Farm region east of James Road recognizes a higher level of residential development. This is very similar to the planning areas described in this plan along the Cornwall side of the border.

Whiting

The town of Whiting borders Cornwall to the south. The land in Whiting along the town line is largely classified for conservation and agricultural uses. Both towns recognize the limitations and sensitivity of the land around Otter Creek and Cornwall Swamp. The remaining land is classified for agricultural and rural residential uses in both towns.