2019

BRUNSWICK, VT: Municipal Plan

Adopted: December 12, 2019

Contents

Part I: VISION STATEMENT AND OBJECTIVES		
Statement of Objectives		
PART II: PLANNING CONSIDERATIONS	3	
1. Natural Area Protection		
2. Water Quality	4	
3. Undeveloped Shoreline	5	
4. Land Conservation Projects		
5. Housing		
6. Transportation Plan	7	
7. Education Plan		
8. Energy		
9. Utilities and Facilities		
10. Impact on Adjacent Communities	11	
11. Existing Land Use	11	
12. Land Use Plan	12	
13. Economic Development	13	
14. Flood Resilience	14	
PART III: IMPLEMENTATION PLAN	16	

Part I: VISION STATEMENT AND OBJECTIVES

The pace of life in Brunswick is quiet. There are forests, open spaces, and farms by the Connecticut River. People walk, snowmobile and hunt freely on the vast stretches of open and forestland. The water quality and wildlife habitat are maintained. The Town relies heavily on adjacent communities for services, thus maintaining the low level of property taxes. But most of all, Brunswick maintains the quality of rural living where neighbors help neighbors and a strong sense of belonging still exists.

Since the adoption of the present (now expired) Town Plan in 2002, changes have occurred in Brunswick's land ownership pattern. Paper company ownerships, some dating back to the early 1900s, such as St. Regis, IP, Champion International, are now owned by the Weyerhaeuser Corp., State of Vermont (West Mountain Wildlife Area) and the Federal Government's US Fish & Wildlife Service (Conte Refuge, Nulhegan Division) plus smaller private owners. More than 70% of Brunswick's total acres are now in these three categories of ownership, State, Federal, and private commercial timberland.

This Brunswick Plan update will address these new ownership conditions from our town's perspective at pertinent sections of the Plan as it follows in this document."

Table 1.1: Conserved Acreages in Brunswick

(Total Land: 15,721 Water: 240)

Taxation	Owner	Acres	Easement(s)?
Status			
A	Weyerhauser LLC	2,680	Yes - several
	Nature Conservancy	1,378	Yes
	Green Crow Timber Management	566	Yes
	Wobanaki, Inc. (Brunswick Springs)	100	Yes
В	State of Vermont – West Mountain Wildlife Management Area	5,208	Yes – several
	US. Government – Conte National Wildlife Refuge	1,614	No
	TOTAL	11,546	

Note: Properties with "A" taxation status pay property taxes. "B" denotes PILOT (payment in lieu of taxes; Easements range from a simple "no development" clause, to several clauses, e.g. public access, traditional uses only, etc.

Statement of Objectives

1. Brunswick seeks to preserve the scenic qualities of a quiet river-valley countryside which attracts sightseers with its charm and lovely views of pastures, woodlands and mountain scenery.

- 2. All landowners are urged to maintain their open fields, pastures and woodlands for their own personal enhancement and investment and further to seek the preservation of the natural plant life and the encouragement of wildlife.
- 3. Brunswick will endeavor to protect its streams and bodies of water as natural resources subject to pollution and infringement.
- 4. Flood lands are to be delineated and restricted from any residential or other development which would impose a financial or legal responsibility on Brunswick in the event of the next flood rampage. Structures on the flood plain shall be limited to recreational or agricultural purposes, other than housing for people or livestock.
- 5. All possible lawful aid will be encouraged to benefit and promote the active productive farms operating in the Town.
- 6. Brunswick will encourage development which is rural residential, farming, or recreational in character conforming to the limitations described in the Town land use plan.
- 7. Because of the proximity of commercial areas in Bloomfield, Vt., and North Stratford Colebrook, and Groveton N.H., it is not anticipated there will be a need for a commercial area within Brunswick. However, commercial uses should not be prohibited, but allowed as conditional uses requiring the approval of the Zoning Board of Adjustment. This does not preclude the active sale of natural products grown locally or the sale of craft products made by the residents in town.
- 8. Brunswick will strive to minimize property taxes within its control by avoiding developments which will require town services and/or town roads.
- Given the large concentration of publicly owned land in Brunswick, as well as concerns
 over rising property taxes, more large tracts of government owned lands are not
 encouraged.

PART II: PLANNING CONSIDERATIONS

1. Natural Area Protection

In 1988 there was a comprehensive natural areas inventory completed for Essex County. Through that study, the most significant natural areas were identified. They included things like endangered plant species, special wildlife habitat, and nesting areas for rare birds. Several areas were identified in Brunswick. Special care should be given to protecting these valuable resources.

Since the last plan update, the Agency of Natural Resources has compiled a significant amount of natural resources into an online database that is available to the general public. The ANR Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/) has more than 150 mapped data layers, allowing users to create custom maps to enhance planning efforts. This map, for example, show "significant natural communities," located

mostly to the south half of the town. These areas contain Red spruce northern hardwood forests (which appear highlighted on the exported map), as well as lowland spruce forests, and northern white cedar swamps. Also available is information on threatened and endangered species (see attached map). While the information remains fairly generalized, most of these species appear to be plants. Uncommon species found in Brunswick (see attached map) include plants and animals (both invertebrates and vertebrates.)

Nearly all of Brunswick's lands, except for small stretches along Routes 105 and 102, are considered high priority habitat blocks. Many wildlife species rely on large blocks of contiguous forest and secure connections to other large forest blocks for all or part of their habitat needs.

In 2014 the Agency of Natural Resources identified and mapped habitat blocks, weighting them for their priority, based on a number of factors, such as size of area, density, share of wetlands and ponds, and connectivity with other habitat blocks. Not surprisingly, Essex County contains a high concentration of the highest priority blocks in the state, as well as wildlife connectivity to areas beyond the county and state. Virtually all of Route 102 in Brunswick is considered a high priority wildlife crossing area because access to the river provides important inter-state connectivity.

Planning considerations for maintain high priority forest blocks includes minimizing the number of roads, which can fragment connectivity. Under statewide renewal energy siting standards, high priority forest blocks are also considered potential constraints for siting renewable energy structures, such as ground mounted solar panels and wind turbines.

Given the concentration of publicly-held lands and conservation easements in Brunswick, it is the opinion of the Town of Brunswick that the highest priority habitat blocks are well protected from fragmentation. The Town, however, should maintain ongoing dialog with the Department of Fish and Wildlife regarding land management plans and wildlife movement. Although Route 102 is a critical wildlife crossing, there is very little development pressure, and the Town is unlikely to see dense development anywhere in town. A review of the Town's zoning by-law would be helpful in order to identify strategies that maintain low densities and minimize fragmentation (such as avoiding development with long private driveways). Also, wetlands along Route 102 that are currently undeveloped – and will remain so – might provide protected travel corridors for wildlife.

Water Quality

Protecting water quality is a high priority in the Town of Brunswick. Activities such as logging on steep slopes or down to the water's edge, building houses close to the water, and cutting all the vegetation along the shore all affect the quality of water. Landowners are encouraged to follow the State of Vermont Erosion Control Standards and the Acceptable Management Practices for Protecting Water Quality of Logging Jobs in Vermont (AMPs).

The Town of Brunswick contains 1,939 acres of Class 2 wetlands, as well as a number of "confirmed" and "unconfirmed" vernal pools. (The latter has been identified through GIS analysis but not yet field identified.) Class 2 wetlands are protected to some degree through state regulations, which require a 50-foot buffer from development.

Brunswick is one of the few communities in Vermont to contain Class I Wetlands. In April 2017, the Dennis Pond wetlands were granted Class I status by the State of Vermont Department of Environmental Conservation. While all wetlands support a diversity of plants and wildlife, Class I wetlands receive additional levels of protection from potential development because they support exceptional or irreplaceable natural resources. The Dennis Pond supports ecosystems typical of northern Vermont climates, namely spruce fir forest, as well as large expanses of bog. Moose sightings are common.

While the Class I wetland is protected by a 100-foot buffer, it is available for recreation purposes, especially for boating and kayaking. (Boating and kayaking are preferred in the bog, as hikers are more likely to trample sensitive plants.) The public may access these lands from Route 102 and Dennis Pond Road, but visitors should avoid nesting and breeding areas, as well as privately-held posted lands.

A vernal pool is a small wetland in a shallow natural depression that typically fills with water during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet stream and no viable populations of fish. Vernal pools are typically sparsely vegetated with herbaceous plants and are shaded by trees from the surrounding upland forest. Although vernal pools were routinely omitted from natural resource mapping for many years, they support a rich diversity of wildlife, such as a breeding habitat for amphibians. Recent mapping efforts have identified these resources statewide, although additional field work will be necessary. Both wetlands and vernal pools are considered unsuitable areas for development, including the siting of renewable energy structures.

The Connecticut River is considered an "exemplary surface water" because of its ability to support important aquatic habitat and species. The Connecticut River has been declared a national Scenic Byway under the Federal Highway Administration.

The river is served by a joint commission (of New Hampshire and Vermont representatives), as well as the Headwaters Subcommittee, which addresses corridor and recreation management issues pertaining to the 80-mile headwaters area, which includes Brunswick. The Subcommittee consists of two volunteers from each of the communities along this section of the river. The two Brunswick seats on the Subcommittee are currently open.

3. Undeveloped Shoreline

Brunswick maintains a "Shoreland" zoning district that extends 100 feet along all lakeshores and streambanks of all surface waters. Uses in this district are limited to accessory uses, agriculture and forestry.

In 2014, the State of Vermont enacted Shoreland Regulations that apply to most new development, redevelopment, or clearing of an area within 250 feet of the mean water level of lakes and ponds that are greater than 10 acres. Permits are required for such activities, and the regulations establish standards for limiting impervious surface coverage and maintaining natural vegetation cover to allow for filtration and minimize runoff. Surface waters in Brunswick that are subject to these regulations are:

Brunswick Springs 18.99 acres
Dennis Pond 41.43 acres
Paul Stream Pond 20.81 acres

Tuttle Pond 16.63 acres
Big Wheeler Pond 73.35

The Town will need to reevaluate its shoreland zoning in relation to the state shoreland regulations and in consideration of areas subject to fluvial erosion. (See the land use and flood resilience chapters.)

4. Land Conservation Projects

The Planning Commission recognizes a growing interest in land conservation in Essex County. While in general placing large blocks of land under conservation easement would work toward to town's overall vision for the future, there are several areas of concern:

- a) Local Taxes. Land in Brunswick is currently assessed at a relatively low value per acre. Therefore, it is the opinion of the Planning Commission that in the near term, the amount of taxes generated from a piece of forest land would not change if the development rights were removed. If it were found that this were not the case, the opinion on large scale conservation would change.
- b) **Public Ownership.** Because of concerns over rising property taxes, future large amounts of government ownership are not encouraged.
- c) Traditional Uses. Any large-scale conservation easements or public ownership should include the continuation of traditional uses such as maintaining seasonal camps and access for snowmobiling, hunting, walking, cycling, and horseback riding.
- d) Landowners Rights Maintained. A landowner's rights should not be diminished. Eminent domain should not be used, and just compensation given to the landowner in all cases of transferring land from one party to another.

The West Mountain Wildlife Management Area (WMA) is a 22,971 acre parcel that includes 5,208 acres in Brunswick, as well as more in Maidstone and Ferdinand. The land, which was purchased in 1999 from Champion International, is owned by the state of Vermont and is managed by the Department of Fish and Wildlife. Elevations on the WMA range from 2,733 feet on West Mountain to 1,100 feet along the lower stretches of Paul Stream. The terrain varies from high-elevation spruce-fir to lowland bogs. The Department of Fish and Wildlife has identified 14 species of plants listed as rare or endangered and eight sites of ecological significance on the WMA. Because the property encompasses nine major ponds, 75 miles of streams, and many diverse wetland complexes the WMA hosts a rich diversity of mammals, birds, reptiles and amphibians.

Additional conservation easements are held by the Vermont Land Trust and the Nature Conservancy, properties with easements are not removed from the tax rolls.

5. Housing

According to the 2010 Census, the total population for Brunswick was 112, marking an increase of 5 persons from the previous decade, and an increase of 20 from the 1990 Census.

According to the 2010 Census, there are 90 housing units in Brunswick including seasonal camps, marking an increase of only 1 housing unit from the previous decade. Roughly half of these housing units are occupied year-round, and the vast majority of those units are owner-occupied. As of the 2010 Census, there were only two renters in town. Large conservation holdings, rough terrain, and lack of roads generally restrict the development of any new housing units to Routes 102 and 105.

Census estimates indicate that about 47% of Brunswick homeowners have a mortgage, and 53% do not. The median monthly housing cost for homeowners with a mortgage is \$1,075, those without a mortgage, \$456.

A household's total housing costs should be 30% or less of the household income in order to be considered affordable. While the 30% rule applies to housing costs for all income brackets, Vermont statute defines **affordable housing** as owner-occupied housing for which the total annual cost of ownership does not exceed 30 percent of the gross annual income of a household at 120% of the highest of state or county median income. For renters the affordability threshold is 80% of the county or state median income. (By statutory definition, housing costs for home owners include principal, interest, taxes, insurance, and association fees. For renters, costs include rent, utilities, and association fees.)

While the term "affordable housing" usually evokes imagery of large multi-unit structures with subsidized rentals managed by a housing provider, it can take many forms, including mobile homes and accessory dwelling units. In fact, mobile homes and accessory dwelling units are the most likely opportunities for affordable housing in Brunswick. Vermont statute requires towns to treat mobile homes in a manner similar to other forms of housing. In other words, the town's zoning by-law cannot prohibit them. In 2004, Vermont statute amended its policy for accessory dwelling units, which are typically "mother-in-law" efficiencies contained in single family homes. As of 2004, accessory dwelling units must be treated as a permitted use of a single-family dwelling, even if they are intended to be rented out to non-family members. The Town of Brunswick's zoning by-law must be amended to provide for accessory dwelling units in accordance with statute.

6. Transportation Plan

State highway 105 in Brunswick is projected as a regional arterial highway designed to link larger communities and move increasing traffic to and through Brunswick. Direct access to Route 105 from private properties should be minimized because of dangerous traffic hazards arising from turning movements on a major artery.

State Highway 102 is classified as a regional collector designed to provide access within the region and to adjacent towns of Bloomfield and Maidstone. While Brunswick is aware that Rt. 102 is a State Highway, subject to state speed limits and passing zones, it also, in the absence of any town roads, serves our residents as our only local north- south neighborhood road. Route 102, which carries the burden of local traffic arising from activities of residents, also is part of the Connecticut River Scenic Byway. The designation strives to promote tourism throughout the Vermont and New Hampshire communities along the river.

Interactive maps and itineraries are available from the Connecticut River Joint Commission's web site: http://ctriverbyways.org.

The town of Brunswick has no local roads and therefore has no need of any type of road building or maintenance equipment. No development should be permitted to alter this status because any change would impose an undue burden upon the taxpayers of the town.

Traffic on VT Route 102 is a serious concern. In recent years we are finding an ever-increasing amount of through traffic, north and southbound through town, often at, we feel, are excessive speeds. Cars, trucks, and motorcycles are abundant through-travelers. Long strings of motorcycles, sometimes twenty or even more, are seen here. In addition to speeding, noise pollution is increasing. Large trucks with clearance heights of under 12'6" (Bloomfield Rt 102 railroad bridge) use the highway. Bicycle use is also rising, including guided bike tours, again sometimes in large numbers.

Some of this new traffic appears to be by long-distance travelers seeking to avoid the parallel US Route 3 across the Ct. River in New Hampshire.

Our safety concerns are numerous, including our own farms having to move their equipment from field to field while worrying about traffic hazards by passers-through, some of whom seem unfamiliar with such machinery on roadways.

We request in our Plan that VT Agency of Transportation continually monitor traffic loads on 102 and remain open to our local concerns as they are presented by Brunswick citizens and town officials. We also support traffic law enforcement here by DOT and Sheriff-State Police elements.

Like all of Essex County, Brunswick residents are highly dependent on automobiles. Census data show that Essex County residents have some of the longest commuting times in the state, and the highly dispersed rural development patterns means that residents are more likely to add more mileage from incidental trips such as shopping and appointments. With few alternative transportation options available, the town encourages measures that reduce vehicle miles travelled, such as ride sharing.

7. Education Plan

It is hoped that the educational needs of the students from Brunswick can continue to be met by an accredited school system outside of the Town of Brunswick. Tuition expenses are provided by the Town. Currently there are nine students from Brunswick.

In response to Act 46, Brunswick eliminated its local school board and became part of the NEK Choice School District. (The district is comprised of Bloomfield, Brunswick, East Haven, Granby, Guildhall, Kirby, Lemington, Norton, Maidstone, and Victory; as well as the Unified Towns & Gores of Averill, Avery's Gore, Ferdinand, Lewis, Warner's Grant, and Warren's Gore. Canaan, which has its own K-12 school, is in the Essex-North Supervisory Union.) Tuition for students preK through 12 is paid directly to any school approved by the State Board of Education, provided students can prove residency in one of the NEK Choice towns. Students and their families must make their own transportation arrangements.

Workforce training is provided through the Canaan Career Center, as well as the White Mountain Regional Career and Technical Education Center in Whitefield, NH. Programming between the two schools covers a range of vocations, including agriculture, business administration, computer systems, culinary arts, conservation management, construction, hospitality management, engineering, and welding.

8. Energy

There is a growing awareness of the long-term costs - economic, environmental and social of our energy choices. The use of energy is an important consideration in local decisions about land use, building standards, and-our local economy. Brunswick citizens buy their electric power from Vermont Electric Cooperative (VEC). Due to the slow growth rate, no new supplies of energy are anticipated.

Based on estimates from Northeastern Vermont Development Association, Brunswick's largest share of energy use probably comes from transportation (roughly 55%), followed by thermal (35%). Electricity use accounts for the remainder at only about 10%. This pattern is very typical for the Northeast Kingdom, where residents travel great distances for employment, as well as goods and services.

Electricity:

Vermont receives its electricity primarily from imported sources (since the closing of the Vermont Yankee nuclear power plant). Much of this imported electricity derives from renewable hydroelectricity generated in Canada, with the rest coming from a mix of generating facilities and from a growing supply of small- and medium-sized renewable (hydro, wind, solar, and biomass) in-state sources.

Total billings over the most recent three-year period show that electricity demand and consumption is fairly stable. In 2016, Brunswick electric users accounted a slight decrease in kilowatt hours from the previous year. According to reports from Efficiency Vermont, energy efficiency measures allowed Brunswick customers to save about \$603 that year. The Town of Brunswick supports ongoing efficiency upgrades, as well as improvements made to space and water heating.

Transportation:

Brunswick is highly auto dependent, and NVDA estimates that is annual average of a light duty vehicle (car, SUV, truck) in town is about 14,000 vehicle miles. Collectively, use of light-duty vehicles probably account for about 49,000 gallons of fuel, accounting for 5,781 MM BTUs a year in gasoline and ethanol.

Land Use Patterns

While compact, dense development is typically considered to be energy efficient, Brunswick's sparsely settled development patterns are not likely to change, and we cannot expect to gain efficiencies in such a manner. The town can be mindful when siting new residential structures so that they can take advantage of passive solar and southern exposure.

Renewables

Brunswick supports the development of siting of renewable energy resources on a scale that is appropriate with our community. The wind and solar energy resource maps produced by

NVDA show that there are considerable constraints to be taken into consideration when siting ground-mounted solar panels and/or residential-scale turbines. These constraints include wetlands, river corridors, sensitive habitat areas, priority habitat blocks, vernal pools and wetlands.

9. Utilities and Facilities

In keeping with the rural nature of the town, Brunswick does not contain a library, hospital, sewer treatment facilities, power generating stations, public water supplies or the like. Brunswick is a very rural town and is expected to remain so into the future.

Since there are no town roads, facilities or other buildings, Brunswick does not own any equipment. The Town of Brunswick owns a 75-acre woodlot. It was cut over within the last decade and has no significant timber at this point.

Fire service is provided by Stratford (NH) Fire Department and by Brighton Fire Department. As a very heavily forested town, Brunswick supports a town warden, who has superior command responsibility for wildfires on state and federally owned lands, as well as private holdings. By arrangement with the Vermont Department of Forests, Parks and Recreation, the Brunswick Town Warden is given gate keys and lock combinations to access wildfires on the West Mountain WMA. On the Brunswick portion of the federal Conte Wildlife Refuge Area (lands north of Route 105), the Town has an arrangement with the Brighton Fire Department to respond to wildfires on the federal lands in town, while the Town Warden retains overall command responsibility there.

Ambulance service is provided by Northumberland, operating out of Groveton NH. The Town, along with other "river towns" in Essex County, often depends upon the Essex County Sheriff's Department for first-response to emergencies, such as crimes and vehicle accidents. While we value the services of the Vermont State Police (VSP), their distance from Brunswick can make for long response times. As long as this situation continues, the Town supports a strong, active Essex County Sheriff's Department.

Historic Buildings/Properties

The Town of Brunswick has one historic building, the 1848 Brunswick Schoolhouse, which also served as the original Town Hall. The building received a \$15,000 grant from the Preservation Trust in 2011. The Town Hall should be maintained and its historic character preserved.

Brunswick Springs, a 100-acre property with six mineral springs that made the town a resort destination in the 19th century, is now privately owned, and its uses are governed with a Vermont Land Trust easement, and by the Abenakis.

Cemeteries

There are two public cemeteries in the Town of Brunswick. One is full while the other one was recently expanded and has capacity for the foreseeable future.

Solid Waste

Brunswick is a member town in the Northeast Kingdom Waste Management District (www.nekwmd.org), which serves 49 towns (the largest service area in the state). Brunswick appoints a representative to serve on the NEKWMD board.

10. Impact on Adjacent Communities

Brunswick is very closely linked to the adjacent communities in both Vermont and New Hampshire. Brunswick supports the adjacent communities by providing labor for their jobs, by supporting community endeavors such as medical services and schools. In turn, the adjacent communities provide shopping facilities, medical services, fire protection, schools, and so on. We rely on each other and maintaining a positive relationship is important. Keeping communication open between communities is critical to maintaining the quiet rural lifestyle that is important to all the residents of the area.

The Town of Bloomfield does not have a town plan in effect, nor a zoning bylaw. Bloomfield has adopted local flood hazard area regulations. The Town of Maidstone's Plan was adopted in 2016. Maidstone does have a zoning bylaw and subdivision regulations in effect. The land uses and zoning districts do not conflict with those of Brunswick. The Towns of Lewis and Ferdinand, both part of the Unified Towns & Gores, has a Local Development Plan and Zoning Regulations in effect. The town's latest plan and flood hazard regulations were updated in 2014. A draft 2019 update is in the adoption process. There are no conflicting land uses between the UTG plan and bylaw and Brunswick's. The goals of the Brunswick plan are compatible with the land use goals of the NVDA Regional Plan.

11. Existing Land Use

The Town of Brunswick has always been primarily forested, with no settlement outside of the lowland areas of the Connecticut and Nulhegan River valleys. In early years, this settlement was primarily subsistence farming, but the historical regional decline of agriculture has also happened here. There are four active dairy farms, all in the Connecticut River valley. Accessible areas along existing highways have gradually developed as low-density rural residential properties, with most residents commuting to employment elsewhere.

The majority of forest land in the town under state or federal ownership. The remainder of forest land is actively managed by the landowners for the production of timber products which are marketed elsewhere. Privately owned forest roads, which are under permanent easement, must provide a variety of seasonal access potentials to these lands, and there have been many individually owned seasonal-recreational camps located in many areas, particularly on the shores of the various bodies of water in the town. These camps were all originally for hunting and fishing purposes, and with easier seasonal access provided intermittently by forest management activities, some have in recent years been used as a seasonal-vacation type of camp.

12. Land Use Plan

The land use plan appears relatively simple on first examination, but is the result of many inputs. Existing land use is the starting point. Then topography, soils and their capabilities, building and environmental conditions, transportation, the need of community facilities and the economy of the town are factors too. The most significant influence in Brunswick is the high concentration of conserved and/or publicly owned lands: The balance of lands in Brunswick that are subject to local control are limited to Route 102 and 105.

Access is a consideration in that areas remote from existing centers of development usually should not be developed at all or should be developed non-intensively. Soils are important in determining the advisable density of potential settlement as related to the land's toleration of building and subsurface sewage disposal. Economic and population considerations enter into the land use plan in that there must be thought given as to how much of each land use category is needed to support a specified population in the future. It would seem likely that the population will increase in future years. Economic goals and the tax base must also be considered.

The land use plan represents a policy document because of the many considerations that have gone into the plan and the number of policies that must flow from it when it is implemented. A major tool in implementing the land use plan is the zoning ordinance which will set forth controls and standards for using the land, including subdivision regulations. In accordance with Act 250 the Town Planning Commission can advise the Regional District Environmental commission as to whether or not proposed land development in the town is or is not in conformance with a duly adopted town development plan. Before the District commission grants a permit, it must be found that the land development is in conformance with a duly adopted town development plan. The adopted land use plan can be an important part of Act 250 hearings.

The proposed land use plan has several different districts which are listed below. The following pages describe each with its general location and purpose.

Low Density Rural Residential District (R) Shoreland Districts (S)

Forest Conservation (F)

Flood Plain District (FP)

Low Density Rural Residential District (R)

In the foreseeable future the Town of Brunswick will remain strictly rural and will support agriculture and commercial forestry. With the predominant low tax rates within the town it is important to have low density rural residential development. Because of obvious limiting factors of topography and the necessity of having access to Routes 102 or 105, this district (R) is closely associated with these two highways and is limited in depth by steep slopes, ledge outcroppings, marshlands and bogs. The area extends the full length of both state highways within the town boundaries and with varying widths of suitable land from the public road. In this district (R) the minimum lot size is two (2) acres per dwelling and each

lot should have direct access to a state highway, with a minimum 350-foot frontage on the highway. No off-lot sewer or water will be provided by the town at any location. The primary uses of this area will be agriculture, forestry and single-family dwellings, all of which should be widely spaced and non-intensive uses which will protect the open character intrinsic to the area. It is intended to prevent development where it would cause an undue burden upon the town, such as the creation of a road or trail which would imply any town responsibility for maintenance and accessibility.

Earth extraction is allowed as a conditional use in this district (as well as in the Forest Conservation District). Extracting earth for traditional forestry practices is a common practice in Brunswick. While earth extraction generally falls under Act 250, the Town would like the Natural Resources Board to consider traffic impacts to routes 102 and 105 and site reclamation when considering commercial operations.

Shoreland Districts (S)

The purpose of this district is to protect the qualities of the waters of the State and their shores and banks within our town. It includes all lands within 100 feet of any of these bodies of water. The natural character of these areas are important not only to the scenic and natural beauty of the area, but also to the preservation of the water quality. No development should be allowed within this area other than agricultural or forest management activities and these should be managed by the landowner such that erosion is prevented by preservation of vegetative cover. An exception would be necessary stream-crossings and associated structures, so long as they do not cause siltation, divert the stream, alter the steam banks or impede the natural flow of water in any season. **Note: Please see the additional information in the Natural Resource section.**

Forest Conservation District (F)

This district includes all of the balance of the Town which is not included in the (R) or (S) districts. The permitted uses in this district should be agricultural and forestry uses, outdoor recreation, seasonal recreational camps and accessory uses. In this district the minimum lot size shall be such as to preserve the open character of the area, preventing the pollution of ground water by avoiding unsuitable soils, and avoiding the costly provision of public services.

Flood Plain Overlay (FP)

This area includes lowlands adjacent to the Connecticut and Nulhegan Rivers and lies below the "100 year flood" levels as delineated on the maps of the National Flood Insurance Program. This district is in effect an overlay which further restricts development in those portions of the other three districts which fall within its limits.

13. Economic Development

Nearly all of Brunswick's labor force commutes to work outside of the community. Brunswick is essentially a bedroom community for neighboring towns in Vermont and New Hampshire. Also, there is a large amount of state, federal, and conserved lands in Brunswick – much of which is set aside for wildlife habitat and outdoor recreation. Forestry is still a vital part of the local economy, as is agriculture – particularly along the CT River basin.

The Planning Commission supports the continued use of agriculture and forested lands for farming and logging as they provide employment opportunities, and they contribute to a working landscape which is important for local tourism. The Commission also supports the establishment of home occupations as defined in the zoning by-law. The zoning bylaw also allows Commercial Uses on a conditional basis in the Rural District.

Changes to Vermont statute provides some zoning exemptions to integrated agricultural operations, such as processing, as well as protection of certain home-based daycares that serve six children or fewer. The Planning Commission should review the zoning by-law to ensure it remains consistent with state regulations.

14. Flood Resilience

Note: As of July 1, 2014, all duly adopted municipal plans must contain a flood resilience plan that identifies flood and fluvial erosion hazard areas and designates those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests to reduce the risk of flood damage to infrastructure and property; and recommends policies and strategies to protect the areas.

Brunswick participates in the National Flood Insurance Program and administers its flood hazard regulations with a paper FEMA map dated June, 1991. A flood zone "AE" encompasses the Connecticut River and contains information about base flood elevations (i.e. how high the water would be expected to rise in a significant flood event). The remaining flood-prone areas are approximate "A" zones (i.e. no base flood elevation data) and include Dennis Pond Branch, the Paul Stream, and several ponds. According to the Agency of Natural Resource, Flood Ready reports (www.floodready.org) there are four structures that are likely located in the Special Flood Hazard Area, and two of them have flood insurance policies. There are some properties, including dairy farms, that are prone to erosion risks.

Brunswick has no public infrastructure (i.e. roads, bridges, culverts, and other structures) that would be subjected to flood risk, and the town has never received FEMA assistance for damage to public infrastructure.

The primary benefit of participating in the National Flood Insurance Program is that Brunswick residents may obtain flood insurance at more affordable rates. Federally-backed lending institutions require flood insurance on any mortgage in the Special Flood Hazard Area, regardless of whether the Town participates in the National Flood Insurance Program. Participation is therefore essential to property owners who are attempting to refinance or sell properties in the flood hazard area. Property owners outside of the Special Flood Hazard Area would be able to purchase flood insurance, and at preferred risk rates.

Brunswick's flood hazard regulations are best characterized as minimally compliant with FEMA requirements. Since FEMA standards have evolved somewhat over the past quarter century, it is recommended the Town review its flood hazard development standards with Vermont's National Flood Insurance Program Coordinator.

River Corridors

About two-thirds of Vermont's flood-related losses occur outside of mapped floodplains, and this reveals the fundamental limitations of the FEMA maps: A mapped floodplain makes the dangerous assumption that the river channel is static, that the river bends will

never shift up or down valley, that the river channel will never move laterally, or that river beds will never scour down or build up.

In reality, river channels are constantly undergoing some physical adjustment process. This might be gradual, resulting in gradual stream bank erosion or sediment deposit – or it might be sudden and dramatic, resulting a stream bank collapse. Land near stream banks are particularly vulnerable to erosion damage by flash flooding, bank collapse, and stream channel dynamics. The Vermont Department of Environmental Conservation, Agency of Natural Resources, has identified river corridors, which consist of the minimum area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition. In other words, the river corridor provides "wiggle room" for a stream as its channel changes over time. Keeping development out of the river corridors therefore reduces vulnerability to erosion. Statewide river corridors maps were released in 2015. These maps were developed using remote sensing data, such as valley widths, slope, land use and encompass all streams with a drainage area of two square miles or greater. Streams with a smaller drainage area were not mapped using the same process, but it is recommended that they be protected by a 50-foot vegetation buffer.

Uplands and Wetlands

Proper management of upland areas also plays an important role in flood hazard management. Limiting clearing of upland slopes will help to attenuate flood flows and reduce stormwater runoff. Conservation easements and enrollment in the Current Use Program may be an effective way to protect Brunswick's existing forested cover.

Wetlands also have the capacity to retain significant amounts of water. The State of Vermont regulates activities in and adjacent to wetlands. These rules apply to the wetlands and associated buffer zones within 100 feet of Class 1 wetlands, and 50 feet of Class II wetlands. Any activity in a Class I or II wetland requires a state permit.

Given the significant level of conservation land in Brunswick, it is possible many of the town's river corridors and wetlands are sufficiently protected from encroaching development. Nevertheless, the Planning Commission should consider evaluating its current flood hazard and zoning regulations to determine if additional considerations should be given to protecting them.

Local Hazard Mitigation Plan

A local hazard mitigation plan prioritizes hazard issues and details next steps for addressing them. It is required by FEMA in order to receive grant funding to reduce or eliminate hazards such as moving or elevating structures or acquiring repetitive loss structures. A local hazard mitigation plan was developed for Brunswick as an annex to regional plan for the Northeast Kingdom. It was adopted and approved by FEMA in 2005 and expired in 2010. Since that time, the FEMA approval process has become more rigorous. NVDA may be able to develop a new plan for Brunswick with existing resources.

PART III: IMPLEMENTATION PLAN

Planning issues and initiatives happen slowly in Brunswick. The Planning Commission meets when required. The current strategy has worked well over the last few years and has been deemed an appropriate way to implement this plan.

Brunswick currently has a zoning by-law in effect. This by-law also works to implement the vision set forth in this town plan.

- Periodically review local zoning decisions to see if the bylaw is being interpreted correctly and that the Zoning Board of Adjustment decisions are consistent with the goals and objectives of the town plan;
- Update the Town's Zoning Bylaws to reflect statutory changes, including, but not limited to, accessory dwelling units, shoreland development regulations.
- Review standards for siting home occupations.
- Invite someone from the Department of Environmental Conservation Floodplains Management Division to speak on the National Flood Insurance Program and review flood hazard regulations.
- Consider protection options for river corridors and wetlands.
- Develop a new Local Hazard Mitigation Plan.
- Appoint a local representative to serve on the Headwaters Subcommittee of Connecticut River Joint Commissions.

.