



**2016 Town Plan
Newark, Vermont
December 14, 2016**

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1 Introduction

1.1 *Newark Background and History*

Newark is the northernmost town in Caledonia County (Map 1). It is bordered on the south by the Caledonia County towns of Burke and Sutton. Newark is bordered on the east and north by the Essex County towns of East Haven, Ferdinand, and Brighton. It is bordered on the west by the Orleans County town of Westmore (Map 2).

Newark was chartered on August 15, 1781, to William Wall along with 69 other shareholders by the then-Republic of Vermont. In 1791, Vermont was admitted into the Union as the 14th state.

James Ball is said to have been Newark's first European settler. He cleared land near the town's southern boundary with Burke in 1795 and settled there with his family in 1797. Soon thereafter, Eleazer Packer settled "some two miles deeper still in the forest." Packer Mountain and Packer Cemetery are familiar landmarks to Newark residents.

The town, with a population approaching 100, organized in 1809. Newark reached its peak population of 679 in 1880, as can be seen in Figure 1.

An 1875 map of Newark (Map 3) shows 13 schools in the town and a more extensive road network than exists today. It also shows maple syrup operations, a few "hops yards," and a number of starch factories, which provided a market for Newark potato farmers. Farmers also grew wheat for the town's grist mill and raised pigs, sheep, and cattle. Newark forests supplied wood for no fewer than six water-powered sawmills and a shingle mill. The town supported a store and a hotel.

The roads that would become VT Routes 114 and 5A were built in 1842 and 1853. These roads enabled travelers to bypass the little hill town of Newark and may have inhibited the town's growth.

The village area at the crossing of Newark Street and Schoolhouse Road has, at times, been referred to as "Newark Street," leading to occasional confusion about whether the name "Newark Street" referred to the street, the village area, or the entire town.

In *The Nature of Vermont*, Charles Johnson describes the Vermont of this era as being deforested and ill-farmed. Wildlife had become scarce, and fish had pretty much disappeared. People began abandoning Vermont for more fertile lands.¹ The population of Newark began to drop, hitting a low of 144 in 1970.

¹ Charles W. Johnson, *The Nature of Vermont* (State of Vermont, 1980), p. 44.

The town's population then began to rebound through the 1970s. Some of this population growth was due to young people seeking a simpler way of life, close to the land, many of whom (no longer so young) are still here. Other evidence of this past can be seen in places like the abandoned commune in Bean Hollow.

1.2 *Government*

Newark is governed by a three-member selectboard, volunteers elected to staggered terms by the voters at Town Meeting. The selectboard is responsible for preparing the town's budget, setting policy, administering town finances, and performing a variety of related duties. The town has a part-time Town Clerk/Treasurer as well as an Assistant Clerk/Treasurer, hired by the Town Clerk. The Town Clerk maintains regular hours in the town office building. The town is also served by an elected Road Commissioner, who is assisted by one full-time and one part-time employee.

Like most small Vermont communities, Newark is heavily dependent on volunteers to carry out many governmental duties. The planning commission, made up of volunteers appointed by the selectboard, is perhaps the most active. The Newark Town Plan is its major work product. Many other residents are elected or appointed to serve on boards and committees and to represent Newark on state and regional boards and associations. This dedication and sense of duty helps define our community and keeps local institutions open and accessible. A complete list of elected and appointed positions can be found in the annual Newark Town Report. Copies are available at the Newark Town Clerk's Office.

Newark is part of the large, rural **Essex-Caledonia-Orleans** legislative district, which elects one member to the 150-member Vermont House of Representatives. In addition to Newark, this district includes Averill, Avery's Gore, Bloomfield, Brighton, Canaan, East Haven, Ferdinand, Lemington, Lewis, Norton, Warner's Grant, Warren's Gore, and Westmore. Newark is part of the **Caledonia-Orange** senate district, which elects two senators to the 30-member Vermont Senate.

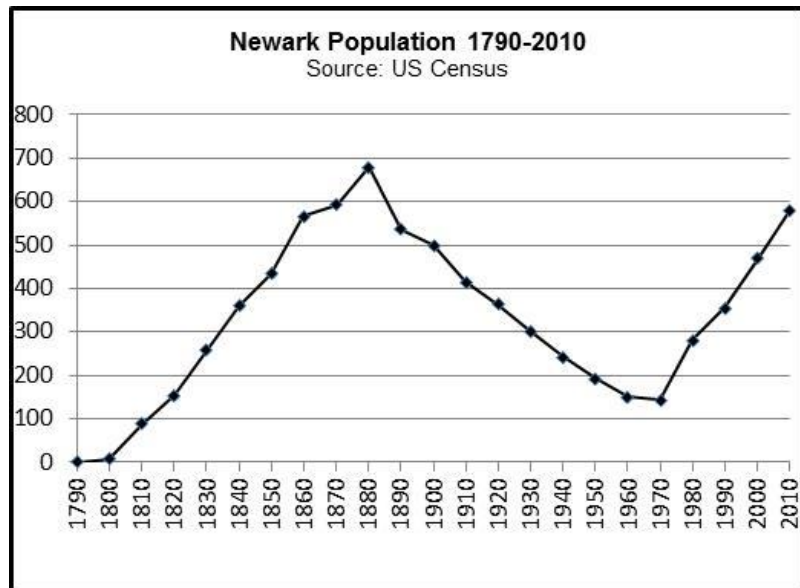


Figure 1 Newark's population over time

Newark is a member of the Northeastern Vermont Development Association (NVDA), which serves as both the planning commission and the development association for Vermont's Northeast Kingdom.² Newark has two seats on the NVDA's board of directors. The town also participates in the Vermont League of Cities and Towns (VLCT), a nonprofit, nonpartisan organization that serves Vermont's municipal officials. Newark has representation on VLCT committees, sends a representative to the league's annual meeting, attends VLCT seminars and training sessions, and frequently makes use of the VLCT's Municipal Assistance Center.

1.3 *The Newark Town Plan*

The Newark Town Plan is an advisory document, not a regulatory document. It does not pertain to zoning. The Newark Town Plan presents a clear, written community standard. A reader who has never visited Newark should, on reading the plan, understand what Newark is like, what its residents want, and what future they are working toward. The Newark Town Plan represents the public good at the most local of levels.

1.3.1 The Purpose of Town Plans

Towns are not required to adopt town plans, so the question is sometimes asked, "Why spend the time and effort to write a town plan?" Town plans can be useful in a number of ways, from serving as a simple source of information to providing a foundation for future planning activities. Ultimately, the residents themselves will determine the uses of the Newark Town Plan.

Potential uses include:

- *A source of information:* Town plans are a valuable source of information for local boards, commissions, citizens, and businesses. The information in a plan can serve to familiarize residents, potential residents, and development interests about a town and its resources.
- *A basis for community programs and decision making:* Town plans can be used as a guide for recommendations contained in capital budgets and programs, for proposed community development programs, and for the direction and content of local initiatives such as farmland protection, recreation planning, and housing.
- *A source for planning studies:* Few town plans can address every issue in complete detail. Thus, town plans record and discuss not only what is known about the resources and residents of the town, but also what is not known. Therefore, many plans will recommend further studies to develop courses of action on specific needs.
- *A standard for review at the state and regional levels:* Act 250, Section 246, Section 248, and other state regulatory processes identify town plans as a standard for review of

² Governor George Aiken is credited with giving the name Northeast Kingdom to Caledonia, Essex, and Orleans Counties on a 1949 visit to Lyndonville. "Northeast Kingdom" is commonly abbreviated "NEK."

development applications. Town plans are important to the development of regional plans as well as to regional and inter-municipal programs. In addition, state proposals (including the purchase of state land for parks and recreation) must comply with town plans.

- *A long-term guide:* A town plan is a long-term guide by which to measure and evaluate public and private proposals that affect the physical, social, and economic environment of the community.
- *Fulfillment of an eligibility requirement for state and federal grants:* While town plans in and of themselves are not required, the state began requiring towns to adopt town plans in 2000 in order to be eligible for most grants and low-interest loans. Planning grants, water and wastewater grants, community development grants, historic preservation grants, and other key sources of funding all now require town plans to have been adopted. While many private funding sources do not require town plans for eligibility, having a town plan that documents the need for funding will generally strengthen the application.
- *A basis for regulatory action:* A town plan can help serve as a foundation and guide for the creation of needed ordinances and policies that may be considered important by the town, including health, junk, speed limits, signing, road standards, and other issues.

It is important for the citizens of Newark to understand that the Newark Town Plan does not represent or include zoning bylaws or development regulations. Likewise, it is important to know that all energy-generation and transmission-development plans linked to the electrical grid are approved and regulated by the State of Vermont's Public Service Board under Title 30 V.S.A. Section 248. The preparation of a detailed town plan and town participation in the state's review process are the best ways to ensure that the Town of Newark's goals and objectives are considered and weighed by the Public Service Board during the decision process.

After the town plan is approved (locally by the selectboard and regionally by the NVDA), the Newark Town Plan will become an important tool in protecting the town's interests in development hearings (under Act 250) and utility hearings (under Sections 246 and 248) to which the town is a party.

1.3.2 Statutory Requirements

Vermont towns are authorized to create town plans under Title 24 V.S.A. Section 4381. The state statute requires that certain topics be discussed, although it does not mandate any specific goals and policies. All local plans in Vermont, regardless of whether they are for rural or urban towns, must include the following 12 components, as outlined in Title 24 V.S.A. Section 4382. These represent the minimum requirements of the Vermont Municipal and Regional Planning and Development Act:

- A statement of objectives, policies, and programs of the town, both to guide the future growth and development of land, public services, and facilities and to protect the environment (Section 2).
- A land-use plan (Section 3) and map (Map 4).
- A transportation plan (Section 4) and map (Map 15).
- A utility and public facility plan (Section 5) and map (Map 13).
- A statement of town policies for the preservation of rare and irreplaceable natural areas, scenic and historic features, and resources (Section 6).
- An educational facilities plan (Section 7) and map (Map 13).
- A statement of how the plan relates to adjacent town plans and the regional plan (Section 12).
- An energy plan, including policies and programs to implement those policies (Section 8).
- A housing element, including a recommended program for addressing low- and moderate-income persons' needs as identified in the regional plan (Section 9).
- An economic development element that describes present economic conditions and the location, type, and scale of desired economic development and that identifies policies and programs necessary to foster economic growth (Section 10).
- A flood-resilience plan (Section 11).
- A recommended program for the implementation of the objectives of the development plan (Section 13).

Title 24 V.S.A. Section 4302 describes additional goals that a municipal plan

1.3.3 Development of Newark's Town Plan

Newark has maintained its town plan for several decades. The process for developing each revision of the Newark Town Plan has involved:

- Solicitation of public input.
- Review of the plans of neighboring towns.
- Review of the Northeast Kingdom's regional plan.
- Consultations with relevant experts.
- Dozens of warned planning commission meetings.
- Public hearings.
- Review and approval by the Newark Selectboard.
- Review and approval by the NVDA.

Newark adopted a new town plan on December 7, 2011. On September 17, 2012, the Newark Selectboard approved the 2012 plan, addressing seven amendments to the 2011 plan. The purpose of the amendments was to clarify the town's position on industrialization. This 2016 Newark Town Plan retains much of the content of the 2012 plan and expands on that content.

This plan also addresses new statutory requirements and contains updated statistics.

1.3.3.1 Newark Town Plan—2011

Newark began the development of its 2011 plan in 2008 when it carried out a land-use investigation project. The project, funded by a municipal planning grant from the Vermont Department of Housing and Community Development, was conducted by the Newark Planning Commission with the assistance of the NVDA.

The land-use investigation project involved a number of public meetings and the production of a final report (available for download at NVDA.net). The meetings included presentations from NVDA planners, reviews of detailed resource maps of Newark, a primer on Act 250 from the District Environmental Commission Coordinator, a primer on state and federal land-use regulations, and discussions among Newark residents.

The project, which provided significant input for use in the town plan, made it clear that, above all, Newark residents value the rural character of the community, wish to preserve that character, do not support large-scale development in the town, and support the preservation of the town's natural resources, open space, and scenery.

The Newark Town Plan, which the Newark Planning Commission completed in the fall of 2011, is a reflection of these values. The 2011 version of the Newark Town Plan was discussed at two public hearings, was approved by the Newark Selectboard on December 7, 2011, and was reviewed and approved by the NVDA as described under [24 V.S.A. Section 4350](#).

1.3.3.2 Newark Town Plan Amendments—2012

In March of 2012, Newark received notification that a wind-energy developer planned to erect a wind-measurement tower in Newark to determine the area's wind-energy potential. The developer stated that such a project would be consistent with the goals and objectives expressed in the 2011 Newark Town Plan.

Both the Newark Selectboard and the Newark Planning Commission felt that the developer had misinterpreted the town plan. And thus, on May 30, 2012, at a joint meeting, the selectboard and the planning commission agreed that the planning commission should amend the Newark Town Plan.

By the end of June 2012, the planning commission had prepared seven amendments to the Newark Town Plan. Some of the amendments clarified the town's position on industrial and commercial development in the town. Other amendments reflected the planning commission's understanding of the interpretation of town plans by state regulators.

The planning commission held a public hearing on the amendments on August 9, 2012, and the selectboard held a public meeting on September 11. On September 17, 2012, Newark held a special Town Meeting at which voters recommended, by a vote of 169 to 59, that the selectboard approve the amended town plan. The selectboard voted unanimously to approve the plan. In October, the NVDA's Town Plan Approval Committee conducted a public hearing on the amended Newark Town Plan. The committee determined that the amended plan met statutory requirements and that it had been adopted according to Vermont law. The amended town plan was approved first by the committee and later by the NVDA's Board of Directors.

On October 16, 2012, Hawk Rock Holdings, an owner of property in Newark, filed suit against the Town of Newark, asking the Caledonia Superior Court to find the Newark Town Plan deficient and to declare it invalid. Nearly 3 years later, on August 5, 2015, Judge Robert Bent of the Caledonia Superior Court declared the amended Newark Town Plan to be invalid, citing deficiencies in the town plan report that state statute requires municipal planning commissions to prepare. In October 2015, the Newark Planning Commission corrected the deficiencies in the town plan report and on November 21, 2015, the Newark Selectboard readopted the amendments to the town plan that it originally had adopted on September 17, 2012.

1.3.3.3 Newark Town Plan—2016

The Newark Planning Commission has now revised the 2012 town plan in order to create this, the 2016 Newark Town Plan. The 2016 revisions are the result of several important developments:

- Revisions were made by the Vermont Legislature to Title 24 V.S.A. Chapter 117, which added new requirements for town plans (for example, plans must now address flood resilience).
- Newark was awarded a Department of Housing and Community Development grant in 2014 to create a natural resources inventory, update maps, and develop a new flood-resilience element for the Newark Town Plan.
- New maps became available through the Agency of Natural Resources, the Agency of Transportation, and other sources.
- Newark completed a natural resource inventory as part of the 2014 grant.³
- There was a need for more specificity and data to make the town plan more meaningful.
- There was a need to study and include additional detail in the economic development section, based on recent major development projects in the area.

In preparing the 2016 town plan, the Newark Planning Commission has considered the following factors:

- Existing land use.

³ Fritz Gerhardt, *Natural Resource Inventory of the Town of Newark, Vermont*, 2014.

- Community facilities, services, and resources.
- Natural resources.
- Population.
- Past Newark town plans.
- Input from Newark residents and taxpayers.
- Information developed under the 2008 and 2014 municipal planning grants awarded by the Department of Housing and Community Development.

The development of the 2016 Newark Town Plan began in August 2013, has required roughly five dozen public meetings and thousands of hours of work by the planning commission and selectboard, and has been informed by:

- Review of the plans of neighboring towns.
- Review of the regional plan.
- Two large public informational and discussion meetings.
- The preparation of the Newark Natural Resource Inventory.
- Consultations with:
 - Northeastern Vermont Development Association (NVDA)
 - Caledonia County Natural Resources Conservation District
 - Beck Pond, LLC (author of the *Newark Natural Resource Inventory*)
 - Vermont Natural Resources Council
 - Vermont League of Cities and Towns
 - Vermont Agency of Commerce and Community Development
 - Vermont Fish and Wildlife Department
 - Watershed Management Division of the Vermont Department of Environmental Conservation.
- Three public hearings (one each conducted by the planning commission, the selectboard, and NVDA).

2 Statement of Objectives, Policies, and Programs

2.1 *Vision Statement*

In preparing for each of its four most recent town plans (including this one), the Newark Planning Commission conducted public meetings where the town's Vision Statement was reviewed and discussed, a statement that has remained virtually unchanged since it was first composed nearly two decades ago. The most recent public discussion, in 2014, confirmed that the statement remains relevant and important:

Newark is a quiet rural town with a beautiful setting. Woodlands, open fields, hills, scenic vistas, the sounds of nature, clean water and air, and clean streams and pristine ponds make Newark a unique and pleasant community to visit and live in. The environment is clean and healthy.

It is these characteristics that the Town of Newark intends to protect and preserve.

As a result of our public discussions, the Newark Planning Commission has added this paragraph to the town's Vision Statement:

Our townspeople, while of independent spirit, share a strong sense of community and view their stewardship of Newark's lands as a serious responsibility. It is important to the citizens of Newark that the character of the town, its history, its sense of community, and its natural setting be preserved for the benefit and enjoyment of future generations of residents and visitors.

The primary purpose of this town plan is to describe the character of the town and to suggest ways that Newark can preserve its character and the natural resources heritage on which its character rests.

2.2 *Growth and Development*

Newark residents are pleased with the town's rural character and see little need for dramatic change, growth, or development. Newark has maintained its rural character and close-knit community feeling in spite of 45 years of population growth. Preserving the character of the town may become more challenging as economic activity in the region increases.

2.3 *Zoning, Subdivisions, and Nonregulatory Policies*

The Newark Town Plan does not represent or include zoning bylaws or development regulations.

3 Land Use

Newark's historic land use has been influenced by climate, topography, and soils. Future land use should be guided by the importance of preserving its cultural and natural heritage. Central to these considerations is the preservation of Newark's large forest habitat blocks, which provide essential connecting habitat linking important wildlife habitats across northeastern Vermont, northern New England, and adjacent Canada.⁴

3.1 *Climate*

Newark is located in Vermont's northeast highlands, the coldest and snowiest region in the state. The USDA's latest Plant Hardiness Map shows that Newark lies on the boundary of Zone 3b and Zone 4a. These zones indicate low winter temperatures of -35 and -30 degrees Fahrenheit, respectively. (Previous maps have shown Newark to lie entirely within Zone 3.)

Newark's growing season is short: between 90 and 120 days, beginning in late May or early June and ending in late September or early October. Low-elevation pockets can experience shorter seasons.

3.2 *Topography*

Elevations in Newark range from slightly less than 1,100 feet (335 m) along the East Branch of the Passumpsic River to 2,362 feet (720 m) atop Abbott Hill in the northwestern side of town, just south of Job Mountain. The main topographical features in Newark are several north-south ridges, numerous rivers and streams, and several ponds (see Map 5). The most prominent north-south ridge rises between the East Branch of the Passumpsic River and Bean and Sleeper Brooks and includes Packer and Walker Mountains and Hawk Rock. Both Hawk Rock and Walker Mountain have large cliff formations that are visible from VT Route 114, and Packer Mountain has large cliff formations visible from Newark Street and other town roads. A second ridge extends from the Abbott Hill area southeast toward Newark Hollow, and a third ridge extends from the southeast corner of Newark Pond through the center of town toward Maple Ridge Road. Between these three ridges flow the town's rivers and streams: the East and West Branches of the Passumpsic River; Bean, Sleeper, and Roundy Brooks; and numerous smaller tributaries. Finally, Newark is home to several ponds, including Newark, Center, Beck, Walker, and Sawdust Ponds, as well as a small part of Brown Pond.⁵

3.3 *Geology, Bedrock, Soils, and Slopes*

Newark is underlain by five formations of bedrock (see Map 6). About half the town is underlain by Waits River Formation—primarily limestone, which may have formed along the

⁴ *Ibid.*, vi.

⁵ *Ibid.*, 4.

shore of an ocean that existed 500 million years ago. Much of the rest of the town rests on various granite formations.⁶ Limestone bedrock is easily soluble and contains minerals important to plant growth. Granite is less soluble and contains few minerals that promote plant growth. Much of the town's best agricultural soils are found atop the Waits River Formation bedrock.

The town's surface geology ranges from exposed granite bedrock on Packer Mountain and Hawk Rock to unsorted glacial till to peats and mucks in the town's wetlands.⁷ The Soil Conservation Service⁸ categorizes over half of Newark's land into one or more of the following four groups:

- Unfavorable depth to bedrock, less than 20 to 40 inches.
- Excess soil wetness.
- Unfavorable topography, mainly excessively steep slopes.
- Unfavorable rate of movement of water through soil.

These factors leave relatively little acreage suitable for development (see Map 18).

Soils are considered to be prime agricultural soils if they meet national standards as having "the best combination of physical and chemical characteristics for producing food, feed fiber, forage, and oilseed crops and are also available for these uses. The present land use may be cropland, pasture, forestland, or other land uses, but not urban and built-up or water. Location, tract size, and accessibility to markets and support industries are not considered when making a Prime Farmland determination." Prime agricultural soils meet conditions that relate to temperature and growing season, flooding, moisture, water table depth, drainage, rock content, acidity, slope, and depth.⁹ Though small in area, Newark has significant tracts of prime agricultural soils as well as agricultural soils of statewide importance (see Map 11).

3.4 *Forests and Wildlife Habitat*

Newark is heavily forested, with 15 large areas of contiguous forest habitat. As described in Gerhardt,¹⁰ deciduous, coniferous, and mixed forests cover approximately 20,927 acres, or about 88% of the town. The largest forest block is located between Center Pond Road and VT Route 114 and consists of 7,900 acres, encompassing Packer and Walker Mountains and Hawk Rock. Another large forest block in Newark, of 3,366 acres, includes much of the upper Bean Brook watershed between Center Pond Road and Newark Street. These blocks extend into the

⁶ *Ibid.*, 5.

⁷ *Ibid.*, 7.

⁸ It is now called the Natural Resources Conservation Service. It is part of the USDA and works with private landowners to help them conserve, maintain, and improve their natural resources.

⁹ Vermont Soil Fact Sheet, Detailed Definitions and Explanations, USDA Natural Resources Conservation Service.

¹⁰ Gerhardt, *Inventory*, p. 13.

towns of Brighton and Westmore, respectively. Other Newark forests are connected to even larger forest blocks in Essex County (the second largest forest block in the state) and Westmore.

Map 8 shows these and other habitat blocks in Newark, representing areas of contiguous forest and other natural habitats unfragmented by roads, development, or agriculture. While primarily forests, these essential blocks also include wetlands, rivers and streams, lakes and ponds, cliffs, and rock outcrops.¹¹

Newark's forests are part of a critical habitat corridor that links Vermont's northern Green Mountains with the forests of Essex County, northern New Hampshire, and beyond (see Map 9 and Map 10). This corridor has been identified by the Staying Connected Initiative (SCI) as one of six priority linkages in the northern Appalachian Mountain region. SCI is an international partnership of 21 governmental and nongovernmental organizations working to restore and enhance landscape connectivity across the Northern Appalachians.

3.5 *Water Resources*

Newark is rich in water resources. Newark's rivers, streams, and waterbodies are vital to the community and comprise unique, sensitive, and irreplaceable natural features.

3.5.1 Headwater Areas

Headwaters are the seeps, wetlands, small pools, and tiny streams at heights of land that eventually make their way to larger valley-bottom rivers. If protected from development and intensive uses (such as logging, resource extraction, and some forms of recreation), these headwaters can contain the purest water in an entire river system. At the same time, degradation of these waters can degrade the entire downstream system. In Vermont, headwaters are afforded special protection, and development near headwaters is regulated.

The federal Environmental Protection Agency recognizes three orders of headwaters. A zero-order headwater may be a wetland or a seep. A first-order headwater is the smallest stream that forms from one or more zero-order headwaters. A second-order headwater forms where two first-order headwaters converge.¹² Newark has headwaters of all three orders, which feed each of the larger brooks and rivers that flow through the town. The health of these headwaters is critical to the health of the region's rivers.

Newark's headwaters are generally characterized by steep slopes and shallow soils. Headwater streams and ephemeral surface waters are highly vulnerable to erosion and man-made

¹¹ Vermont Agency of Natural Resources, BioFinder Component Extract—Landscapes/Habitat Blocks, <http://biofinder.vermont.gov/>

¹² <http://www.epa.gov/eerd/methods/headwater/HISSmanual-ch1.pdf>, p. 1.

disturbance. Headwater seeps, located at higher elevations on the landscape, serve as the source for downslope streams and are protected in Vermont as Class II wetlands.

Protection of headwaters is an important priority for the Town of Newark. Development (and other activities) that could damage headwaters must be avoided.

3.5.2 Rivers, Streams, and Surface Waters

Newark's rivers and streams are important assets to our community, providing recreational and aesthetic functions as well as supporting plentiful and diverse fisheries and aquatic species. The surface waters host unique aquatic natural communities and support diverse species, ranging from fresh water mussels to brook trout to common loon to river otter. Newark's watersheds are shown in Map 7 and the acreage for each is shown in Table 1.

Table 1 Watersheds in Newark (source: Vermont ANR)

Newark's Watersheds		
Watershed	Acres	Pct of Newark Acreage
Bean Brook	10,905	46%
East Branch Passumpsic River	7,531	32%
West Branch Passumpsic River	4,860	20%
Clyde River	537	2%
Total	23,833	100%

In addition to many smaller streams and waterbodies, Newark counts among its water resources portions of the East and West Branch Passumpsic River and Bean and Sleepers Brooks as well as Newark Pond and Center Pond. The East Branch Passumpsic River has its headwaters in neighboring Brighton, but it flows approximately 5 miles through the eastern portion of Newark before continuing on through East Haven and Burke to join with the West Branch in Lyndon. The West Branch rises on the slopes of Mt. Pisgah in Westmore but is also fed from the outlet of Newark Pond. It flows approximately 0.8 mile through the very western corner of Newark before passing into Sutton and Burke and joining with the East Branch in Lyndon to form the main-stem Passumpsic River. The Passumpsic joins the Connecticut River in Barnet and flows southward to Long Island Sound.

Sleepers Brook and Bean Brook drain a large area of Newark. Bean Brook drains Bald Hill Pond in Westmore and flows over 6 miles eastward across Newark, joining the East Branch Passumpsic River just beyond the Newark/East Haven town boundary. Sleepers Brook drains the northern portion of town and passes through Center Pond before joining Bean Brook near Newark Hollow.

A small portion of Newark's northernmost area drains toward Job's Pond, Cold Brook, and the Clyde River, where it continues to Lake Memphremagog and the St. Lawrence Seaway. Newark also contains much of the headwaters of Roundy Brook, which flows through Burke Hollow and joins the West Branch Passumpsic.

Newark's ponds are highly valued for their scenic and recreational qualities, and parcels with frontage on Center Pond and Newark Pond have the highest per-acre values in town. Center Pond, so named because it sits near the geographic center of town, is roughly 80 acres in size and has a maximum depth of 72 feet. It is a cold-water fishery with lake trout and brook trout. The pond has recently become a nesting site for loons.

Newark Pond is located on the western edge of town and is roughly 163 acres. It has a maximum depth of 31 feet. Its diverse fishery includes bullhead, rainbow trout, smallmouth bass, and yellow perch. Newark Pond has nesting loons during most summers.

Other small ponds in Newark, both in the northern part of town, include Walker Pond and Sawdust Pond, which (according to *Vermont Place Names*, 1977) is said to have gotten its name because a sawmill located there nearly filled the pond with sawdust at one time.

The ponds and streams within Newark's borders are irreplaceable assets. Preservation of their purity and aesthetic beauty is important to Newark residents. Development along the waterways may result in pollution, sedimentation caused by a lack of riparian forest buffers, reduced public and wildlife access to lakeshores, and the introduction of invasive exotic flora or fauna. Protecting water quality is a high priority in the Town of Newark. Impacts from logging on steep slopes or near the water's edge, development close to the water, runoff from gravel roads, and cutting of vegetation along shorelines all negatively affect the quality of water.

The Vermont Shoreland Protection Act (2014) regulates activities within 250 feet of the mean water level of lakes larger than 10 acres. The intent of the act is to allow reasonable development of shorelands on lakes and ponds while protecting aquatic habitat and water quality and maintaining the natural stability of shorelines. Standards for the creation of impervious surfaces (such as buildings and driveways) and cleared areas within the shoreland area are intended to preserve functioning lake and pond ecosystems, protect water quality and bank stability, conserve aquatic and wildlife habitat, and further the economic benefits of lakes and their shorelands. New, stricter shoreland protection legislation was enacted in 2015. A handbook for shoreland development, including new legal requirements, is available at the Newark Town Clerk's Office.

3.5.3 Wetlands and Vernal Pools

Wetlands are important natural resource areas that provide erosion protection and shoreline stabilization, recharge underground aquifers, enable natural purification of water, and provide

necessary habitats for many species of fish, wildlife, migratory birds, and plants. Wetlands provide scenic areas for hunting, fishing, canoeing, kayaking, and other forms of recreation. They are also important locations for environmental education and research.

Beavers, once nearly extinct in Vermont, have created valuable wetlands along both the East Branch Passumpsic River and Bean Brook. Beaver dams have created a series of upland ponds and wetlands that cascade down the western face of Packer Mountain. These areas provide essential habitat to a wide variety of species and must be protected from the effects of development. Vermont's Agency of Natural Resources (ANR) recommends encouraging beaver activity and protecting beaver ponds with a buffer of at least 400 feet. Residents and road crews should seek alternatives to beaver-dam removal.¹³

Vernal pools are small wetland areas—generally located within upland forests—that are critical seasonal habitats for amphibians such as spotted salamander and wood frog. These unique and sensitive areas were added to the state's Class II wetland designation in 2010, and a statewide inventory of vernal pools using color infrared aerial photography and field surveys was completed about the same time. A small number of vernal pools have been mapped in Newark. However, the recent *Natural Resource Inventory* of Newark suggests that “the relative paucity of vernal pools in Newark may reflect limited search effort, and additional efforts should be undertaken to identify and map any vernal pools in the Town of Newark.”¹⁴

The Vermont Wetland Rules provide wetland classifications and outline protective measures for Class I and Class II wetlands. Class I wetlands are considered irreplaceable. Class II wetlands are important and require protection.¹⁵ (There are no Class I wetlands in Newark.)

3.6 Present and Prospective Land Use

The 1875 map of Newark referred to in Section 1 shows Newark's settlement and development patterns when the town's population was at its greatest. At that time, there were more roads, more industry, more agriculture, more settled areas, and more schools than exist in present-day Newark. Newark's current land use is shown in Map 4.

A small number of Newark residents still work in the woods, produce maple sugar, or grow hay. Other residents operate home-based businesses based on arts and crafts or leveraged by the internet. Today, Newark is primarily a bedroom community whose residents work in schools, commerce, or industry in larger neighboring towns and cities. Newark is also a vacation destination, having a large number of camps and second homes, some of which are available for vacation rental.

¹³ Vermont Agency of Natural Resources, *Conserving Vermont's Natural Heritage*, 2013, p. 65.

¹⁴ Gerhardt, *Inventory*, p. 20.

¹⁵ http://www.vtwaterquality.org/wetlands/docs/wl_st_reg.pdf

Planning for land use in Newark has consistently involved the public, as illustrated in the following summary:

- 1998 The Newark Planning Commission conducted a survey of residents regarding land-use preferences.
- 2008 The planning commission held a number of land-use planning sessions under a state planning grant. The Northeastern Vermont Development Association (NVDA) facilitated the sessions, with contributions from ANR.
- 2011 The planning commission and selectboard both conducted public hearings on a new town plan.
- 2012 A number of organizations in the town (including the planning commission and selectboard) conducted a variety of informational and discussion sessions focused on land use and energy generation.
- 2012 Both the planning commission and the selectboard conducted public hearings on amendments to the town plan.
- 2014 The Newark Planning Commission, under a state planning grant, conducted educational and information-gathering sessions that explored land use from the perspective of natural resources and flood resiliency. This grant also enabled the development of Dr. Gerhardt's comprehensive *Natural Resource Inventory*.
- 2015 The planning commission and the selectboard both conducted additional public hearings on the amendments to the town plan originally proposed in 2012.

The consistent message that residents have delivered in all these public efforts is that they like Newark just as it is. Thus, Newark's land-use plan, as described in the following sections, is based on a few fundamental goals:

- Protect the town's natural resources.
- Enhance the town's natural flood-resilience assets.
- Preserve the town's rural character.
- Maintain the viability of Newark's working lands by protecting them from fragmentation and by discouraging the introduction of incompatible uses.

3.6.1 Public Lands

3.6.1.1 *Town Parcels*

Newark owns three contiguous municipal properties located on Newark Street near the center of town. The Town Garage and Fire Station occupy a 7.13-acre parcel at the north end. The Newark Street School includes a 5.55-acre campus with parking, play areas, ball fields, and community gardens. The Town Hall and Town Clerk's Office occupy a third parcel (0.38 acre), located at the southern end of the complex. The town buildings are described in Section 5.1.

The town also owns 117 acres, with 950 feet of shoreline, on the north end of Center Pond. In conjunction with the Vermont Land Trust and the Vermont Housing and Conservation Board, these lands and development rights on the entire east side of Center Pond were acquired in 1995 as part of the Center Pond Project in order to provide open spaces, a beach, camping areas, and hunting areas for present and future generations of Newark residents. The protected area includes 700 acres, with 4,800 feet of shoreline. The town also holds an easement on the eastern shoreline that permits the construction of a foot trail. This area has been overseen in the past by the Center Pond Natural Resources Committee, composed of residents and camp owners. A member of the selectboard and a member of the planning commission serve as ex officio members of the committee, although the committee is currently inactive.

3.6.1.2 State of Vermont Parcels

The Bald Hill Wildlife Management Area (WMA) is a 700-acre tract of land surrounding the Bald Hill Fish Culture Station in Newark. It is owned by the State of Vermont and managed by the Vermont Fish and Wildlife Department. It includes all of 14-acre Sawdust Pond and much of the headwaters of Bean Brook. An additional 232 acres is located in the adjacent area of Westmore. The Bald Hill Fish Culture Station was previously used to raise trout and salmon for the state fish-stocking program. Today, it is still used for salmon but is also the state's only producer of walleye.

Willoughby State Forest surrounds much of Lake Willoughby (a National Natural Landmark) and is managed for many uses, particularly recreation. It is located predominantly in the neighboring towns of Sutton and Westmore and is approximately 7,682 acres in size. A 52-acre parcel of the forest is located in Newark, on Newark Street in the northern portion of town near Job's Pond. The "Newark Block" includes a 45-acre Norway Spruce Plantation. The parcel is governed by the Willoughby State Forest Long Range Management Plan (last updated in April 2004).

The State of Vermont also owns three public fishing-access areas in Newark, managed by the Vermont Fish and Wildlife Department. These are a 0.6-acre gravel access on the west side of Center Pond, a 0.3-acre gravel access on the north end of Newark Pond, and a 0.8-acre primitive cartop access at the south end of Beck Pond.

3.6.1.3 The Nature Conservancy Parcel

The Nature Conservancy owns a 44-acre Newark Pond Natural Area, located on the southwest corner of Newark Pond. The natural area, open to the public, protects loon nesting habitat on Newark Pond and includes a small island with nesting loons and 2,410 feet of protected shoreline. In addition to the island, the preserve includes a hiking trail.

3.6.1.4 *Cemeteries*

The town has three cemeteries. Packer Cemetery (0.40 acre) is located at the eastern end of Schoolhouse Road at the intersection with Maple Ridge Road. It is the oldest cemetery in Newark and has no land for future burials. The town recently purchased land for the future expansion of the Pleasant View Cemetery (2.5 acres total), located on Schoolhouse Road just east of Newark Street. There is also an old private family cemetery located on VT Route 114 (Island Pond Road) across from Moose Lane, dating from a diphtheria epidemic in 1879.

3.6.2 Forests and the SCI Linkage

According to SCI maps, Newark's forests are located at a chokepoint in the critical habitat corridor that links the northern Green Mountains with forests in Essex Country and beyond (see Map 9 and Map 10). If these forests were to be compromised, the viability of the corridor would be threatened. Preservation of this corridor is an outstanding conservation opportunity of international significance and is a top priority of the Town of Newark.

Forests offer an almost unlimited range of benefits to the Newark community, including clean water, recreation and educational activities, and scenery. Much of Newark's forestlands are in private ownership, where they are used to generate fuelwood, lumber, and forest products such as maple syrup and Christmas trees. Sound forest management results in a stable economic return for landowners, local resources to support local industry, and perhaps most importantly, an incentive for keeping large tracts of land free of development and available to wildlife and to the public for recreation and scenic enjoyment. Conversely, poor forest management can result in the degradation of biological diversity, reduced recreational potential, and damage to scenic landscapes.

In addition to commercial value for landowners, Newark's forest habitat is also vital to the local community's interests in its natural heritage, identity, and working landscape. These lands represent much of what makes life in this area unique and enjoyable. They provide a myriad of ecological functions for fish, wildlife, plants, and all the natural processes that sustain them. Further, they provide extremely valuable connections for people to enjoy and appreciate the land and its abundant resources.

Sound forest-management plans should be encouraged and should include objectives for sustainable timber production, protection of water quality, maintenance of a diversity of wildlife habitat, and aesthetic enhancement. Whatever the objectives of a forest property owner, developing and implementing a forest-management plan is the best means of managing a forest parcel for long-term sustainable forest production. Landowners enrolled in Vermont's Use Value Appraisal program (known as "Current Use") also receive substantial tax benefits

based on the property's value as a working forest or farm rather than on its development potential.

The primary threats to Newark's forests are development, fragmentation, parcelization, and poor logging and forest-management practices. It is Newark's goal to maintain its intact forests and to discourage parcelization and fragmentation, which compromise forest value.

A variety of federal, state, and local mechanisms offer financial help to forest owners who wish to keep their forests intact, such as:

- The Forest Legacy Program is a federal program (administered by Vermont's Department of Forest, Parks and Recreation) that helps landowners resist financial pressures that might otherwise force them to convert forestlands to nonforest uses.
- Vermont's Current Use program provides property-tax relief to forest owners who agree to adhere to a forest-management plan and to refrain from developing their forestland.
- Vermont law enables municipalities to enter into contracts with landowners to stabilize their property taxes in exchange for cooperation in meeting municipal goals (such as maintaining intact forests).
- Many federal programs are available to help forest owners with grants and other assistance. These include the Land and Water Conservation Fund, Environmental Quality Incentive Program, Conservation Technical Assistance program, Wildlife Habitat Incentive Program, and Partners for Fish and Wildlife Program.
- Available state programs include the Forest Stewardship Program and Forest Watershed Program.

3.6.3 Agriculture

In the past, Newark was known for its production of hops, grains, and potatoes. After a century and a half of vigorous activity, these agricultural endeavors began to decline. Newark's last commercial dairy operation ceased operation in 2003. Much of the town's pastureland and marginal cropland is reverting to woodland. Today, less than 6% of Newark's land remains cleared for agricultural use.

Despite the loss of traditional dairy farms, some of the higher quality cropland in Newark is still being used for agriculture. Large farms in the neighboring Town of Sutton are keeping many of Newark's lands open by growing some of their cattle feed here. Also, a number of small, diversified farms and gardens in Newark are growing hay, grain, flowers, fruits, and vegetables. Others are raising horses, livestock, and poultry or producing products such as maple syrup, wool, and Christmas trees.

A great deal of property in town remains in large parcels. With fewer residents continuing to be engaged in farming, land subdivision, primarily for residential purposes, is reshaping

portions of Newark's working landscape. Subdivision and development continue to threaten productive farm land. Farms sustain and enhance local capacity for food production, and support of existing and future farming operations should be encouraged. Support of organic farming is especially encouraged because of its positive effects on agricultural resources.

Though small in area, Newark has significant tracts of prime agricultural soils as well as agricultural soils of statewide importance (see Map 11). Land development should be carried out in a manner that minimizes fragmentation of these tracts.

Newark's agricultural resources are growing in importance as more Vermonters become interested in reestablishing a local food economy. Farmers' markets, Community Supported Agriculture, and a variety of efforts being carried out by the NVDA are improving the economic outlook for Newark farmers. In addition to their economic importance, Newark's agricultural lands are an important cultural and scenic feature of the town.

Prime agricultural soils are a finite resource. Maintaining a land base for farming not only helps preserve Newark's rural character, it contributes to the local economic base in a sustainable manner. In the face of global climate change and an increasing world population, maintaining a local food supply may prove in the long run to be critical to the community's survival.

3.6.4 Residential

Newark is a bedroom community whose residents work, for the most part, in neighboring towns. The sparseness of development in Newark has also made it an attractive location for vacation homes, seasonal homes, and camps.

According to Vermont's Enhanced 911 database, there are 597 structures in Newark. Of these, 354 are residences and 214 are camps or seasonal homes. The remaining structures include state and town buildings as well as buildings that the state has not categorized. (See Map 12.)

Residential development in town is occurring at a slow, but steady pace. The parcelization and fragmentation that can result from this type of development pose a threat to Newark's natural and agricultural resources. Newark has neither zoning nor subdivision regulations that might help avoid these dangers. The town thus relies on its landowners to be good stewards and to exercise care in the use of their land.

The town discourages development that requires the construction of new roads (especially dead-end roads). Besides creating a fragmentation problem, such development increases the town's infrastructure and maintenance burdens.

The state estimates that Newark's population may grow as much as 30% by 2030. Our existing housing stock can accommodate much of that growth through conversion of vacation homes, upgrades of seasonal homes, and the use of accessory residences.

Historic settlement areas along Newark Street may be the most suitable for new small-scale residential development. Many of the other settlement areas shown on the map of 1875 Newark (Map 3) have been reforested, have become part of a vital wildlife linkage (see Map 10), and are no longer suitable for development. Newark has no areas that are suitable for large-scale development.

Newark discourages “strip development” along roads and encourages developers to preserve open space and to be mindful of their impact on the forest and the town’s rural character. The Vermont Natural Resources Council has described “good” and “bad” building practices, depicted in Figures 2 and 3.¹⁶ The town encourages good building practices that meet the goals described in Section 9.4.

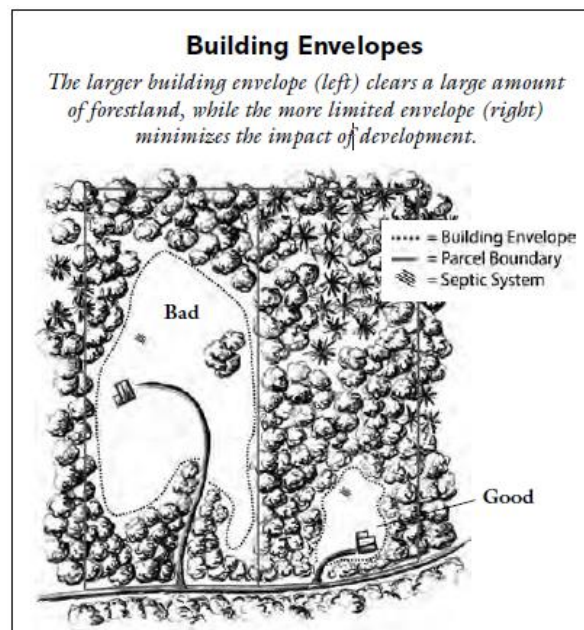


Figure 2 Minimizing the impact of residential development (Vermont Natural Resources Council)

¹⁶ Community Strategies for Vermont’s Forest and Wildlife, Vermont Natural Resources Council, September 2013.

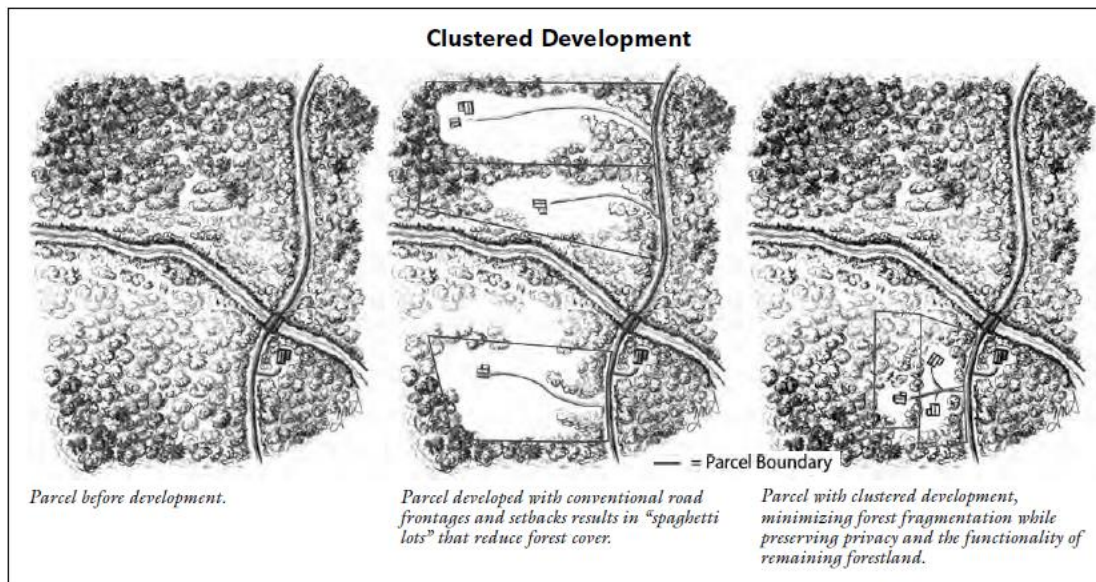


Figure 3 Clustered development (Vermont Natural Resources Council)

The Town of Newark has neither a central public municipal water supply nor a municipal sewage disposal or treatment system. The town maintains a single-source water system that provides drinking water to the Newark Town School, the Town Garage, and the Town Clerk's Office. Most residences make use of on-site water and septic systems dedicated to a single dwelling.

The use of on-site systems has worked well, and there are no plans to consider municipal systems in the near future. However, as Newark grows and changes, the town should be aware of potential problems in order to protect the health and well-being of its residents. The quality of ground and surface water is an issue of ever-increasing importance to the town's residents.

The Department of Environmental Conservation currently regulates all waste and potable water systems in the state. A Wastewater System and Potable Water Supply Permit must be applied for and granted by the Department of Environmental Conservation for any new development. Information covering sewage systems and requirements is available through the ANR and the Newark Town Clerk's Office.

Vermont's stormwater regulations require that the majority of stormwater be treated on site for any development that involves more than 1 acre of disturbed land. Smaller developments, such as single-family homes, are exempt from state and federal stormwater regulations. Smaller developments, however, can have a cumulative impact on water quality.

Low-impact development (LID) techniques provide an alternative to conventional stormwater management. LID mimics natural hydrologic processes and can be employed at individual homes to minimize runoff and maximize infiltration. Techniques can be relatively simple – like creating rain gardens in low-lying areas to absorb runoff or by disconnecting impervious

surfaces, such as having downspouts drain into a yard, not a driveway. The net result is fewer contaminants entering our lakes, rivers, and streams. There has been some educational outreach on LID in the Northeast Kingdom. Although Newark has no zoning, landowners might benefit from outreach and education before they develop (or redevelop) their lots.

The town's goal is to maintain or improve the quality of surface and ground water to ensure a safe, drinkable water supply and to maintain a high level of appreciation for the protection of the ponds and streams of Newark.

3.6.5 Recreation

Newark abounds with outdoor recreational opportunities, among them being hiking, biking, boating, canoeing, camping, cross-country and back-country skiing, snowmobiling, horseback riding, golfing, hunting, and fishing. Newark has miles of recreational trails that provide opportunities to visit and explore the community's natural areas.

Several areas in town provide public access for outdoor activities:

- The area adjacent to the Town Hall is used as a town park. It has a paved area for a basketball court and an open-air ice rink in the winter. It also has a covered picnic area. The park is used annually for the fire department's chicken BBQ and flea market on Old Home Day.
- The Bald Hill WMA, managed by the state Fish and Wildlife Department, is open to hiking, skiing, hunting, fishing, and trapping (subject to state regulations).
- Willoughby State Forest provides hiking, skiing, and other dispersed recreational opportunities. A section of a woods road is used in the winter as a snowmobile trail.
- Both Newark Pond and Center Pond provide opportunities for fishing and boating. Each pond has a state-maintained fishing and boating access area for launching boats, canoes, and kayaks. Personal watercraft are not permitted on either pond. Both ponds support populations of stocked and wild fish, including native brook trout.
- Beck Pond is a shallow 20-acre pond located due north of Center Pond. It has a small access trail for cartop/carry-in boats and has a population of brook trout.
- In 2005, NorthWoods Stewardship Center constructed a 0.5-mile trail from a trailhead on Center Pond Road to a small beach on the north end of the pond. Students from the Newark Street School have installed a number of bog bridges and help maintain the walking trails.
- The Newark Pond Natural Area preserve includes 2,410 feet of shoreline and a 0.5-mile nature trail, accessed by a small parking area on Newark Pond Road that loops through the forest around to the shoreline.

Publicly accessible recreational trails include the Center Pond Trail, the Newark Pond Natural Area loop trail (owned by The Nature Conservancy), and the woods roads located at Bald Hill WMA and Willoughby State Forest.

The NVDA and the Northeast Kingdom Travel and Tourism Association provide guides for bicycling in the Northeast Kingdom (nvda.net/Transp/documents). *Cycling in the Kingdom* includes a route from East Burke to Island Pond, traveling along VT Route 114 through Newark. *Cycling the Kingdom's Back Roads* includes a route that enters Newark from the north on Abbott Hill Road and continues south down Newark Street, Schoolhouse Road, and Maple Ridge Road.

Kingdom Trails Association, located in East Burke, manages a world-renowned mountain-biking network featuring more than 100 miles of varied terrain in the area. Many Newark residents use the Kingdom Trails network for mountain biking, hiking, snowshoeing, and Nordic skiing.

The Vermont Association of Snow Travelers (VAST) is an association of local snowmobile clubs that includes the Newark E-Z Riders, who maintain Newark's snowmobile trails. Since most snowmobile trails are located on private land, VAST relies on the generosity of landowners for the privilege of riding on their land. Several woods roads, public Class 4 roads, and legal trails are included in the VAST trail network in Newark. Snowmobile trails may intersect town roads at designated crossings, but town ordinance prohibits operating a snowmobile on a town road.

Use of all-terrain vehicles (ATVs) is increasing in popularity. The Vermont All-Terrain Vehicle Sportsman's Association is an association of local ATV clubs. There are currently no specific ATV trails in Newark, and ATVs are not permitted on roads or public lands in the town. ATV operators must obtain landowner permission before using ATVs on private land.

Many landowners permit nonmotorized traffic on their lands. Some landowners permit hunting and trapping. Abuse of landowner generosity can result in an increase in posted land. The Town of Newark encourages people to seek permission to access posted land and to respect the rights of landowners.

In addition, Newark embraces the Vermont tradition of permitting low-impact recreational access, such as cross-country skiing, hunting, and hiking, on private roads and trails. Newark landowners are encouraged to support recreation by NOT posting their land, and visitors should respect private property and obey all signs. Landowners should be made aware that under Vermont's Landowner Liability Law, they are not liable for injuries to recreationalists who use their land.

Recreation is an important aspect of life in Newark. It is also an important driver of the economy of the town and region. Newark wishes to preserve its natural assets, which provide so many recreational opportunities, and to continue its landowners' tradition of providing

recreational access to private lands. The town also wishes to maintain its recreational assets such as hiking trails and beaches and to work with local groups to expand the range of recreational opportunities.

3.6.6 Commerce and Industry

Newark has little in the way of commercial or industrial development. The village centers and downtown areas of neighboring towns offer more promise for commercial ventures than Newark, with its small population and lightly traveled roads.

Similarly, Newark has few amenities to offer industrial developers. It lacks sewage and water systems, three-phase power, paved roads, and easy access to interstate highways. The Town of Newark supports the NVDA's efforts to develop and promote industrial parks that provide the infrastructure and services required for industrial development in the region.

Concentrating commercial and industrial development in existing commercial areas and industrial parks is a fundamental principle in the "smart growth" strategy that the State of Vermont is promoting. Many Newark residents commute to commercial and industrial areas in nearby towns to work and shop.

Newark's commercial activities at the present time are forestry, arts, artisanal work, individual home construction, and home-based occupations. These small businesses are important to the town and should be encouraged. A home occupation or business is defined as one conducted by the resident(s) of a residential building, which is carried out within the principal building or an accessory structure incidental to the dwelling, employs no more than four nonresidents, and does not substantially alter the character of the area.

Newark's goal is to maintain its unique rural atmosphere, natural scenic beauty, and wildlife habitat, while encouraging the orderly and environmentally sound development of economic opportunities.

Residents of the Northeast Kingdom view the rural character of the region, its natural resources, and its large tracts of undeveloped land as its most valuable resource and vital to an economic future that is most compatible with their lifestyles, sensibilities, and preferences. The Town of Newark encourages only those developments that preserve and make use of these economic drivers, respect the natural environment, and improve the well-being of residents. The town regards development that would compromise the rural character of the town, its natural resources, and its large tracts of undeveloped land as inappropriate and inconsistent with the town's vision and goals.

The Town of Newark regards large-scale industrial development as inappropriate within the town, preferring instead to support the NVDA's efforts to develop industrial centers within the

Northeast Kingdom. Newark values its ridgelines and other high-elevation areas and recognizes the great importance of these areas to both residents and migratory wildlife. Therefore, large-scale commercial and industrial development at elevations greater than 1,700 feet should be strictly avoided.

Approximately 10,000 acres (out of the town's total of nearly 24,000 acres) lie at elevations above 1,700 feet. These lands, which are depicted in Map 4, are largely made up of conservation lands and parcels that are enrolled in the Current Use program; they are, thus, unavailable for development. A majority of these lands lie in the critical wildlife linkage identified by the Staying Connected Initiative. Thus, they are inappropriate for development. Significant portions of the lands have steep slopes and poor soils and are not served by electricity distribution lines; thus, they may be unsuitable for development.

In addition, Newark regards commercial or industrial structures that exceed 125 feet in height as inappropriate and inconsistent with the town's vision and goals.

Any industrial or commercial development in Newark should be small-scale, should not fragment forests, should not encroach on neighboring properties, and should have an appearance that blends in with Newark's rural character. "Strip development" along roads in Newark must be avoided. Developments that cannot blend should be entirely screened from view from neighboring properties, state highways, and town roads. Screening can be achieved by proper siting, consideration of topographical features, and use of native vegetation.

3.6.7 Historic and Cultural Features

The Town of Newark has some known historic sites and structures as well as other historic features that have yet to be identified or catalogued. Newark's historic homes and buildings are part of the town's cultural landscape and rural character, which include traditional settlement patterns and features and the historic built environment. A 2014 public forum confirmed that there is local support for preserving Newark's rural character, including its small-town feeling, agrarian setting, and historic, scenic, and recreational resources.

Many privately owned historic homes and barns help define the town's agrarian heritage. Also of historical significance, though not well-documented, are other cultural landscape features, including native American sites, stone walls, shade trees, fences, corner posts, and "witness trees," which once marked field and property boundaries; foundations and cellar holes, as well as other visible remnants of past land use and occupation. Several historic mill sites in Newark are evidenced by stone work and remnant foundations and point to the early industry of the town's past.

3.6.8 Open Spaces

Newark recognizes the importance of open spaces for wildlife habitat, recreation, flood resilience, and preservation of our cultural heritage. These issues are important themes that recur throughout this town plan. They are discussed elsewhere in this section as well as Sections 6 and 11. See the *Newark Natural Resource Inventory* for more detailed discussions.

3.6.9 Posted Land, Parcelization, Fragmentation, and Current Use

There is a tradition of “open lands” in the Northeast Kingdom. Landowners generously allow access to their lands for various recreational purposes. Guests who make use of this access are generally courteous, appreciative, and respectful.

Newark’s lands remain largely open for recreation. To post land against trespassing, a landowner must file with the town clerk each year, pay a fee, and meet strict state signage requirements. As of this writing (August 2016), only six parcels, totaling 409.9 acres, are legally posted.

Parcelization and fragmentation are distinct but related threats to Newark’s wildlife habitat. The Vermont Natural Resources Council describes these threats as follows: When land is divided into smaller parcels (parcelized), the result is usually an increase in the number of owners of that piece of land. This often leads to new housing and infrastructure development, fragmenting the landscape. Depending on the location and scale, such fragmentation may negatively affect plant and animal species, wildlife habitat, and water quality. Fragmentation may also affect “the contiguous ownership and management of forest parcels, and thus the viability of large tracts of forestland to contribute to Vermont’s rural economy.”¹⁷

Newark’s grand lists for the years 2004, 2009, and 2013 show that Newark’s land is being broken up into smaller parcels. The process may appear to be slow, but it is a difficult process to reverse, and the cumulative effect over time can be significant.

Table 2 shows that from 2004 to 2013, the number of parcels in Newark grew from 675 to 702. The median parcel size has shrunk from 11 acres to 10.6 acres, meaning that half the parcels are now smaller than 10.6 acres and half are larger. If this trend were to continue at its current pace, by 2036 there would be 771 parcels and the median size would be 9.6 acres.

¹⁷ VNRC, *Community Strategies for Vermont’s Forests and Wildlife: A Guide for Local Action*, September 2013, p. 4.

Table 2 Newark parcelization

Newark Land Parcels				
Year	2004	2009	2013	2036
Total Parcels	675	694	702	771
Median Parcel Size (acres)	11.0	10.8	10.6	9.6
Average Parcel Size (acres)	34.6	33.6	33.2	29.6

The State of Vermont established its Current Use program in 1978, taxing farm and forest land based on its value for agricultural or forest use instead of its value in the market place. One of the purposes of Current Use is to slow development of these lands by taxing them at a lower rate, thus helping relieve owners of large tracts of land of an unmanageable tax burden.

Newark has seen an increase in the amount of land enrolled in Current Use (see Map 14). It may be that enrollment in the program has enabled Newark landowners to resist financial pressures to divide their land and sell portions for development.

According to reports from the Vermont Department of Taxation, Newark's participation in the Current Use program has increased from 18 parcels (totaling 4,504 acres) in 2004 to 61 parcels (totaling 9,792.15 acres) in 2013. That is an increase from less than 20% of the town's land to more than 40%.

3.7 *Land-Use Goals*

Preserve Newark's rural character and the purity and aesthetic beauty of the town's environment and its waters, including wetlands, ponds, vernal pools, and streams, for both human use and animal habitat.

- Establish a Newark Conservation Commission to develop conservation goals for the town and to expand Newark's eligibility for federal and state forest and agricultural conservation programs.
- Encourage and assist Newark landowners to conserve their forest and agricultural lands, implement forest-management plans, enroll these lands in the state's Current Use program, participate in the Forest Legacy Program, and make use of other state and federal assistance programs.
- Work with landowners to keep lands open to recreation while discouraging recreational activities that degrade the environment, violate the rights of property owners, or interfere with other positive uses of Newark lands.
- Participate in proceedings under Act 250, Section 246, and Section 248 in order to ensure that Newark's conservation objectives are well understood and given strong consideration.

- Make landowners aware that, under Vermont’s Landowner Liability Law, they are not liable for injuries to recreationalists who use their land.

Encourage the orderly and environmentally sound development of economic opportunities.

- Discourage development and incompatible activities, such as the construction of new roads or road expansions that damage headwaters or compromise the integrity of forests and prime agricultural lands.
- Develop mechanisms that promote Newark’s forest and agricultural products and that support farming operations, especially organic farming.
- Participate in the development of management plans for state recreational facilities in Newark.
- Explore land-acquisition opportunities to facilitate the establishment of other recreational assets, from hiking trails to beaches.

Help preserve the critical habitat corridors, forests, and agricultural lands from fragmentation and incompatible uses.

- Explore tax-stabilization options to enable owners of forest and agricultural lands to avoid breaking up intact tracts because of financial hardship.
- Encourage home-based occupations and small businesses such as forestry, arts, agriculture, artisanal work, and individual home construction.
- Establish and maintain effective working relationships with local ANR and Agency of Agriculture personnel to stay abreast of state and federal programs that provide aid to farmers and owners of agricultural lands.
- Support the NVDA’s efforts to develop and promote industrial parks in the county that provide the infrastructure and services to support industrial development in the region.

Identify and preserve historically significant sites and buildings.

- Seek grant money to carry out field work to identify and preserve sites, buildings, and features that have environmental or historical significance.
- Work with the Newark Conservation Commission to identify historic sites and features in Newark.

Enhance the town’s natural flood-resilience assets.

- See Section 12, Flood-Resilience Plan.

4 Transportation

Transportation planning is vital for a community. It has a fundamental impact on land use and development; provides for the movement of people and goods within the community; and provides connections among homes, community facilities, and destinations beyond the community. The main goal of the transportation policy in Newark is to provide a safe, efficient, and convenient network of roads for all Newark residents and visitors.

According to the latest Vermont Agency of Transportation (VTrans) General Highway Map for Newark (see Map 15), there are 43.427 miles of public, traveled road in Newark, consisting of Class 1 (State) and Class 2 and 3 (Town) highways. The mileage breakdown is shown in Table 3. There are also 5.10 miles of Class 4 highways and 1.06 miles of legal trails, which are generally not maintained by the town but are open to public use. In addition to public roads, the 2008 Land Use Investigation Project identified 20.265 miles of private roads in Newark. These roads are not included on the VTrans General Highway Map.

Table 3 Miles of highway in Newark

Class 1 - State Highways	6.097
Class 2 - Newark Street	6.880
Class 3 - Town Highways	30.450
Total	43.427

4.1 *Class 1—State Highways*

Per statute, Class 1 roads are those town highways that form an extension of a state highway route and have a state highway route number. VT Route 5A runs approximately 0.85 mile on the western edge of town, from the Westmore/Newark town line to the Newark/Sutton town line in a north-south direction. It is an important travel corridor linking West Burke, Lyndonville, and points south with Westmore, Lake Willoughby, and points north. VT Route 114 runs north-south approximately 5.25 miles on the eastern edge of town from the Brighton/Newark line to the Newark/East Haven town line. It is one of two north-south highways in nearby Essex County and is the primary route connecting East Burke, Lyndonville, and points south with the village of Island Pond, northern Essex County, and the rural eastern portion of Orleans County.

4.2 *Class 2—Newark Street*

Class 2 town highways are the most important routes in each town. In Newark, the only Class 2 town highway is Newark Street. It travels directly north-south for much of its length and runs 6.88 miles from the Westmore/Newark/Brighton town line at the northern end of town to the Burke/Newark town line to the south. Newark Street is the only paved highway in town. Before

the construction of VT Route 114, Newark Street served as a main stage route between West Burke and Island Pond. The State of Vermont paved Newark Street from Route 5A in West Burke to the state-owned Bald Hill Fish Culture Station (approximately 3.36-miles of this paved street lies in Newark). The northerly portion of Newark Street near Abbott Hill was resurfaced with sta-mat gravel in 2013.

4.3 *Class 3—Town Highways*

Class 3 roads include all traveled town highways other than Class 1 or 2 highways and, by law, must be kept in good and sufficient repair during all seasons of the year. Newark has 30.45 miles of gravel Class 3 town highways. Appropriated funds and grant money from the Federal Emergency Management Agency have been used to upgrade and improve Newark's gravel roads. The improvements include extensive ditching, new culverts, and new surface gravel, as well as new street signs (particularly near the municipal garage and school) and better road alignments at intersections. It is felt that the existing road network and maintenance programs serve the town's citizens adequately at the present time.

The town follows the state's recommendations for gravel-road construction and maintenance and continues to apply for grant monies to aid with the cost of road work. A 2015 road-erosion inventory identified potential erosion hazards in Newark; this inventory will enable the town to prioritize projects that mitigate stormwater runoff, reduce erosion and property damage, and address water-quality impairments. Future road-maintenance efforts should consider practices such as ditch treatments and culvert upgrades to increase the resiliency of the infrastructure and reduce long-term costs.

New roads (for a subdivision, for example) will be considered for acceptance by the town only if they meet minimum Class 3 standards as defined by Vermont statute. The town will be reluctant to accept new dead-end roads and cul-de-sacs—they are especially time-consuming for road crews to maintain and they provide little public benefit. Also, building and maintaining additional roads require the use of gravel, an expensive, finite resource. The town purchases most of its gravel from a gravel operation within the town (see Section 6.4).

4.4 *Class 4—Town Highways*

Class 4 roads include all other town highways, which are typically maintained to the extent required by the necessity of the town. By law, towns are not required to maintain Class 4 roads regularly, but they may be required to maintain bridges and culverts. There are 5.10 miles of public Class 4 roads in Newark, many of which access private dwellings or are currently impassible to most vehicles.

Because Vermont's Class 4 roads are public rights of way that provide important opportunities for recreation (such as snowmobiling, skiing, bike riding, and hunting), the Vermont Trails and

Greenways Council and the Vermont Department of Forests, Parks and Recreation advise communities to preserve these corridors for current and future generations. In the event that Newark decides to discontinue or “throw up” a Class 4 road, the town should seek to reclassify the road as a legal trail, thus preserving the public right of way while eliminating the burden of maintenance.

4.5 *Legal Trails*

By statute, a legal trail is a public right of way that is “not a highway.” The town is not liable for the construction, maintenance, repair, or safety of legal trails. Newark has two legal trails, totaling 1.06 miles.

4.6 *Unidentified Corridors or “Ancient Roads”*

Unidentified corridors are highways that were laid out with proper authority but do not appear on town highway maps, are not clearly observable by evidence of use, and are not legal trails. These roads are often unnoticed in property-deed research—which typically include the last 30 years—and have complicated title and insurance claims. Newark conducted research on ancient roads within the town. Recent state legislation, which gave towns a limited amount of time to identify and reclaim these roads, expired in 2015.

4.7 *Scenic Roads*

VT Routes 114 and 5A, both of which pass through Newark, have been designated “Northeast Kingdom Byways” by the Northeast Kingdom Travel and Tourism Association. The byway designation is an element of the association’s campaign to promote the Northeast Kingdom as a geotourism destination. VT Route 5A provides views of Willoughby Gap. VT Route 114 follows the East Branch of the Passumpsic and provides views of the Seneca range to the east and Hogback Mountain (the ridge made up of Walker Mountain, Hawk Rock, Packer Mountain, and Sugar Hill) to the west.

Newark’s town highways are scenic as well. Many town roads, including Newark Street, East Hill Road, Duford Road, Abbott Hill Road, Center Pond Road, Schoolhouse Road, Maple Ridge Road, and Rivers Farm Road feature canopied stretches that open up onto views of Hogback Mountain, the Senecas, East Haven Ridge, Willoughby Gap, Haystack Mountain, Job’s Mountain, the Pinnacle, and Bald Hill. Abbott Hill Road is especially dramatic in winter when the frequent snows cover the trees that overhang the road.

These views are an essential characteristic of Newark, and it is the goal of the town to preserve them. The town discourages the disruption of tree canopies, stone walls, and other scenic features along roadways. The town encourages shared access for driveways—this reduces the number of curb cuts and will encourage the type of smart growth that the town promotes (see

Figure 3 on page 28). The town discourages developments and activities that would detract from the open views along highways.

4.8 *New Roads, Driveways, and Curb Cuts*

So as to ensure that no damage is done to town highways, a developer or property owner must receive the town's permission before connecting a new road or driveway to an existing town road. Access permits for curb cuts are available at the Town Clerk's Office for a small fee.

Approval from VTrans is required to access state highways.

4.9 *Bicycle and Pedestrian Traffic*

Newark encourages bicycle riding on the shoulders of town roads, but the town advises riders to use caution, especially on narrow bridges. Being a hill town, every approach to Newark involves a steep climb, so bicycles may never be popular for general transportation.

The town has no sidewalks, so care and caution should be at the utmost when walking along our roads. As development in Newark continues, there may be a need to consider improvements to the town's pedestrian infrastructure—particularly in the village area near the Newark Street School. Here, it may be practical to enhance pedestrian and bicycle travel through appropriate speed limits and safety signage. The planning commission will work with the selectboard and School Committee to assess the benefit of the addition of a sidewalk or recreation path on or near town property.

4.10 *Public Transportation and Ride Sharing*

Currently, there are few alternatives that would allow residents to become less dependent on motor vehicles. Rural Community Transit (RCT) is a nonprofit transportation group that serves a wide range of passengers through a variety of programs. RCT coordinates medical trips for Medicaid-eligible persons and also provides services for area social-service agencies. RCT relies on a volunteer driver network and, as demand increases, so does the need for volunteers.

VTrans has developed a free resource called **Go Vermont** (government.org) to help people reduce their transportation costs through carpooling, vanpooling, and ride sharing. While none exists in Newark, a number of Park and Ride sites are located in neighboring towns, offering Newark residents the opportunity to carpool to work or retail businesses. Many of these are located along state highways—VT Routes 114, 5, and 5A—or at private businesses and municipal properties. Carpooling is an important, cost-effective means of reducing vehicle mileage, maintenance costs, fuel consumption, and carbon emissions. Where possible, Newark should work with neighboring communities and VTrans to promote the use of Park and Ride facilities by Newark residents.

4.11 *Transportation Goals*

Provide a sustainably built and funded transportation infrastructure that is resilient, minimizes runoff and sedimentation impacts to wetlands and surface waters, and has minimal impacts to Newark's wildlife, scenic beauty, and historic settlement patterns.

- Carry out improvements to town roads in a manner that protects, conserves, and enhances natural resources, scenic features, and wildlife.
- Cooperate with VTrans and neighboring towns to provide an effective transportation system that enables residents to access services and facilities within town and in neighboring communities.
- Adopt construction and maintenance practices that help minimize the cost of maintaining local roads.
- Seek grants for road-improvement expenses such as equipment, ditch stabilization, road surfacing, erosion control, and bridge and culvert replacement.
- Prioritize spending such that maintenance and rehabilitation of existing traveled roads take precedence over road upgrades to Class 4 or private roads.
- Create a long-term road-improvement program—including a prioritized bridge and culvert inventory—and review periodically.
- Design new culverts to accommodate high-flow stormwater events and provide passage for aquatic organisms.
- Work with VTrans to identify locations of conflict between wildlife and transportation and identify solutions to minimize these conflicts.
- Ensure that new town roads and new lot layouts minimize the degradation and fragmentation of wildlife habitat, forests, and farmland.
- Ensure that adequate standards are followed in upgrading Class 4 and private roads to Class 3 town-maintained roads, noting that landowners are required to pay for such upgrades and that the planning commission and selectboard must ensure consistency with the town plan.

Provide Newark residents with transportation facilities that are safe, efficient, and adequate to meet the needs of all users, including pedestrians and cyclists.

- Cooperate with the Northeastern Vermont Development Association, neighboring communities, and service providers to encourage the development and use of public transportation, ride sharing, and Park and Ride facilities.
- Conduct a town-wide survey of bicycle-pedestrian trails, routes, and resources to assess opportunities for development and improvement.
- Encourage development of community pathways and trails for bicycle and pedestrian (bike-ped) use—particularly in the Newark Street village area.
- Increase safety for bike-ped and other uses on Newark Street through the development of facilities, such as a bike lane, and management of motorized traffic behavior.

- Encourage access to broadband services so as to support telecommuting, home occupations, and small-scale home businesses, thus reducing the need for commuting.

5 Utility and Facility Plan

Newark's buildings and facilities are shown in Map 13.

5.1 *Town Buildings*

The Town of Newark owns four buildings: Town Clerk's Office, Newark Street School, Town Garage, and Town Hall. These buildings are situated on a 13-acre parcel located just north of the crossroads of Newark Street and Schoolhouse Road.

The Town Clerk's Office was built in 1973-1974, has 560 square feet of floor area, is handicap accessible, and has electric heat. The building has been maintained well and is in fair condition. It consists of three rooms: the clerk's office, the document vault, and the conference room. The conference room is used for meetings of the selectboard, listers, planning commission, and other town groups. The conference room is also used for Election Day polling.

The Newark Street School was constructed in 1980. The town owns the building; the Caledonia North Supervisory Union owns the contents. Educational resources in town are described in Section 7.

The Town Garage, constructed in 1986, is a heated 40' x 100', five-bay metal structure located just north of the Newark Street School. The garage houses both the town's road equipment and the Newark Volunteer Fire Department's equipment. The condition of the town garage is poor, and the jointly used space is inadequate. A Town Building Committee was formed in spring 2016 to investigate replacement or repair options for the Town Garage, fire station, and Town Clerk's Office.

The former Town Hall, which is in poor condition, is the oldest building owned by the town. The upper level, unused now and mostly empty, was once used for Town Meetings and includes an open floor plan with a small stage and a primitive bathroom facility (no longer functioning). The rear portion of the lower level is used for storage, while the front section has been converted into a recycling center (see Section 5.3.5). Improvements to the recycling center were made possible by private donations and by bottle-return monies provided by the recycling center. In 2014, the building was rewired and the antiquated "fuse box" was replaced with a circuit-breaker panel.

5.2 *Historic Features*

The Town of Newark has some known historic sites and structures. These buildings are part of the town's cultural landscape and rural character.

The Newark Union Church, located in the heart of Newark's village, was built in 1862 and is owned by the pew holders. The building is in good condition, thanks to grants and donations. A new roof was installed in 1997 with the help of a grant from the Vermont Preservation Trust. In the last few years, the building was rewired and painted and had new windows installed. The Bicentennial Committee landscaped the grounds in 1991. The church is used for Newark's annual Old Home Day celebration in July and for a nondenominational Easter service. The acoustics are excellent, making it a favorite venue for the Newark Balkan Chorus.¹⁸ The Newark Street School has used the church for programs and graduation. The church is also available for weddings and funerals.

5.3 *Town and Regional Services*

5.3.1 Road Maintenance

Newark's highways are maintained by a three-person crew (two full-timers and one part-timer). The Road Commissioner is elected annually at Town Meeting. This person supervises road maintenance and works closely with the selectboard and the Vermont Agency of Transportation.

It is town policy to leave a road unplowed if all the homes on that road are unoccupied in the winter. Newark has an ordinance forbidding the moving of snow from a driveway onto a town road (a practice that can create hazardous conditions for drivers).

5.3.2 Hospitals and Medical Services

The closest hospital to Newark is the Northeastern Vermont Regional Hospital (NVRH) in St. Johnsbury. It is affiliated with Dartmouth-Hitchcock Medical Center in Lebanon, NH, has a staff of 340, is licensed for 75 beds, and has a walk-in emergency room. NVRH has a helipad, enabling the Dartmouth-Hitchcock Advance Response Team to transport patients to Lebanon or to any other facility in New England.

Other nearby hospitals are the North Country Hospital in Newport, Copley Hospital in Morrisville, Littleton Hospital in Littleton, NH, and Fletcher Allen Health Care in Burlington.

The Norris Cotton Cancer Center North, a Dartmouth-Hitchcock facility located in St. Johnsbury, provides cancer care in coordination with local health-care facilities as well as with the Norris Cotton Cancer Center in Lebanon.

¹⁸ The Newark Balkan Chorus, created by beloved teacher Evanne Weirich, has shared its rich harmonies and rhythms in such venues as Garrison Keillor's *Prairie Home Companion* and the movie *In the Bedroom*.

Numerous medical and dental facilities are located in towns close to Newark, including Lyndon, St. Johnsbury, Barton, and Island Pond. Some Newark residents use Corner Medical in Lyndonville, Island Pond Health Care, or medical offices in St. Johnsbury for their health care. Eye care is available in St. Johnsbury. Pharmacies are located in Island Pond, Lyndonville, and St. Johnsbury.

5.3.3 Emergency Services

5.3.3.1 *Rescue*

The Town of Newark is served by Lyndon Rescue, Inc., an ambulance service located at Lyndon State College. Lyndon Rescue's board consists of one person from each of the towns it serves. Besides providing emergency ambulance service, Lyndon Rescue will also transport patients from one medical facility to another (e.g., from NVRH to the Dartmouth-Hitchcock Medical Center in Lebanon).

The town has implemented the Enhanced 911 program. All roads have been named, and signs indicating their names have been erected. All homes have been numbered. This facilitates quicker response by emergency vehicles. New house numbers are assigned by the Newark Volunteer Fire Department, which will provide reflective house number signs for a small fee. On the other hand, some of the maps used by rescue and fire personnel have inaccuracies and inconsistencies among them, making some homes and camps difficult to find.

Newark, along with 23 other area communities, belongs to Local Emergency Planning Committee 9 (www.lepc9.org). This committee develops response and mitigation plans for a number of natural and man-made disasters, including floods, hazardous material spills, wildfires, snowstorms, and terrorism. Currently, Newark does not participate in the National Flood Insurance Plan and has no flood-hazard regulations. Flood resiliency is discussed more fully in Section 11.

A propane-powered electric generator has been installed at the school, improving the school's resource as an emergency site for the town.

5.3.3.2 *Fire Protection*

Fire protection for the town is provided by the dedicated volunteers of the Newark Volunteer Fire Department. The department answers calls that include structure fires, medical calls, motor-vehicle accidents, chimney fires, and alarm investigations. The department also provides emergency medical services and is the only Certified ALS First Responder squad in the region. The department can provide the first response to 911 calls, with any necessary follow-up provided by Lyndon Rescue. The fire department has a portable defibrillator and a basket to transport patients when vehicle access is not available.

The department currently has three volunteer EMTs on its roster. They are qualified to work alongside Lyndon Rescue's workers. The volunteers use paging devices that are dispatched from St. Johnsbury, enabling them to be on-call 24 hours a day. The fire station and fire trucks are equipped with two-way radios.

The department has a fire engine, and a tanker truck that are kept in the east end of the Town Garage, which is heated, keeping the equipment available for year-round use. The fire trucks and the garage are equipped with two-way radios. The department also has a Chevrolet Tahoe and an equipment trailer. The department is constructing a new building (Fall 2016) to provide additional storage capacity.

The fire department has received grants to install dry hydrants at various water sources within the town to supply water for the town's pumper truck during fire emergencies and for refilling afterward. Currently, there are four dry hydrants, located on Center Pond Road at Sleepers Brook, at Newark Pond, on Hollow Road, and on Howard Brook Road (VT Route 114). At the 2015 Town Meeting, \$30,000 was appropriated to obtain and install a 30,000-gallon underground poly-retention system for fire suppression to cover the center of town. The fire chief is currently working with the selectboard investigating options.

Dispatching is managed 24/7 by the St. Johnsbury dispatch system. The Newark Volunteer Fire Department has mutual-aid agreements with two organizations: the Northeast Mutual Aid, which includes the six towns on Newark's southerly borders, and the Northeast International Mutual Aid System, which includes towns on the northerly borders. Newark is part of mutual-aid systems involving 25 other fire departments.

In other public service, the fire department periodically hosts a CPR/Basic First Aid course at the Newark Street School. This hands-on workshop is free to the public (donations are gratefully accepted). During Fire Prevention Week, volunteer members meet with and educate the children at school on fire safety.

The town appropriates funds annually for department operations. Additional funds are raised through an annual chicken BBQ, an annual chicken pie supper, and generous donations from residents and property owners.

The fire department is faced with several challenges:

- The continued development of year-round and seasonal homes and camps has increased the number of structures covered by the department.
- Some of the development is occurring in remote areas and along Class 4 or private roads, making access more difficult.
- Gated or barred private roads encumber access to potential emergencies.

- It has become increasingly difficult to enroll and retain community members in the fire department.
- The availability of private or public water supplies to support emergency fire services is limited.
- The conditions at the town garage and fire department are crowded.

5.3.3.3 Police Protection

Newark is served by two part-time constables, who are elected each year at Town Meeting. The constables are paid only for services performed for the town, which typically involve local complaints about violations of town ordinances or state statutes. (Copies of town ordinances are available at the Town Clerk's Office.)

Newark is served by the Caledonia County Sheriff's Department. The department provides routine patrolling and emergency services. If desired, the town can enter into a contract with the Sheriff's Department to provide dedicated coverage on a per-hour basis. Newark is also in the territory served by the St. Johnsbury barracks of the Vermont State Police.

5.3.4 Libraries

Newark has no public library, but the town donates funds annually to the Cobleigh Public Library in Lyndonville. Among other services, the library provides a bookmobile that stops at the Newark Street School on a regular basis. Residents can use the Cobleigh Public Library as well as the Island Pond Public Library in Brighton, both of which offer internet service. Additional library services are offered at the former East Haven School and the Burke Mountain Club in East Burke.

5.3.5 Refuse Disposal

The solid-waste transfer facility is housed in a semienclosed structure adjacent to the Town Hall building, where part of the first floor has been converted to a recycling center. The recycling center is operated by the Town of Newark in partnership with the Northeast Kingdom Waste Management District (NEKWMD). Since July 2013, the transfer station has been manned by a contracted waste hauler. It offers free recycling and pay-per-throw trash collection. The facility's regular hours are Saturday, 8 am to noon, and Sunday, 11 am to 4 pm. From January 1 through April 30, Saturday hours are suspended and Sunday hours are extended, running from 9 am to 4 pm.

Items that can be recycled include glass, steel cans, plastics, corrugated cardboard, boxboard, newspapers, junk mail, aluminum cans, and other materials. Compost containers for food scraps are located outside the building. Bulky items, such as appliances and furniture, may be disposed of, for a fee, whenever the facility is open. Residents can also make arrangements

with the contractor to pick up bulky items at their home. The solid waste is removed weekly by the contractor and disposed of at the Waste USA landfill in Coventry, VT.

With the widespread community support of this program, the town recycles about 67% of its solid waste, one of the highest rates in the district.

Newark residents can dispose of metal, batteries, oil, and other materials at NEKWMD's facility in Lyndonville.

5.3.6 Post Office

Many years ago, Newark had two post offices, but today it has none. Mail delivery is largely handled by the West Burke Post Office, with the East Haven Post Office covering a small portion of town.

5.4 *Utilities*

5.4.1 Water and Sewage

The town has no municipal water or sewer systems. Systems are the sole responsibility of property owners and are required to meet state and federal regulatory standards (see Section 3.6.4).

5.4.2 Electric Power

Electric power in Newark is served by Lyndonville Electric Department in the southern part of town and by Vermont Electric Cooperative in the north. No large-scale electricity generation is located within the town. Newark has no three-phase power lines. Some areas of town have no grid-based electricity access. Some residents may opt to supply their own electricity through the use of gasoline, diesel, or propane generators or renewable-energy systems such as solar panels (see Section 8, Energy).

5.4.3 Communication Services

Telephone service throughout the town is provided via landlines by FairPoint Communications. Old lines and equipment, however, often cause static interference in landline telephone service.

Cellular phone service is available through several carriers (e.g., AT&T or T-Mobile), although the town has many "dead areas" in cellular service.

High-speed internet services are provided in various parts of town by FairPoint Communications via landlines, by major satellite companies (such as DISH and Direct TV), and by other internet

services that use line-of-site technology. Some areas in town are unable to access any of these alternatives.

Television programming is available by cable in some parts of the town and by major satellite companies, but again, cable service is not available everywhere.

5.5 *Utility and Facility Goals*

Preserve the rural character of the community and ensure the adequacy of town resources for present and future generations through the preservation and maintenance of town buildings, lands, and historic resources.

- Assist the Town Building Committee in assessing the present condition and future needs of the Town Clerk's Office, the Town Garage/Fire Department buildings, and the Town Hall and look into funding options, including grants, for renovations or replacements.
- Work with the selectboard, town clerk, fire department, and road commissioner to address ongoing priorities for town properties.
- Establish a conservation commission, similar to the former Center Pond Committee, to guide management of the Newark Town Forest, to support land and resource-conservation projects, and to provide stewardship resources for landowners.
- Actively support the pew holders who care for the historic Newark Union Church.
- Encourage the formation of a Newark Historical Society or Committee to preserve the town's history and highlight the community's historic sites, buildings, and artifacts.
- Work with the selectboard and cemetery sexton to ensure that the town cemeteries are maintained in good order.

Ensure the safety of Newark residents and properties by supporting the services of Newark's road, fire, and rescue personnel.

- Actively participate in and support the efforts of the Town Building Committee to ensure adequate fire, road, office, and school facilities in Newark.
- Improve public safety by ensuring that all roads have their names posted clearly and by encouraging property owners to display E911 numbers on their houses and camps.
- Encourage community support for and membership in the Newark Volunteer Fire Department.

Maintain Newark's position as a leader in the reduction of household solid waste in the Northeast Kingdom by continuing to operate an efficient and user-friendly recycling and waste transfer facility.

- Encourage efforts to reduce solid waste by maintaining cost-effective access to collection services for household recyclables, e-waste, compost, scrap metal, hazardous waste, bulk items, and trash.

- Educate residents about mandated universal recycling and the appropriate disposal of hazardous materials, yard waste, bulk items, etc., by making information available at the town office and recycling center.
- Work with the selectboard and the town's representative to the NEKWMD to support and assist the state in enforcing waste-disposal laws, including junk cars, illegal dump-sites, open burning of trash, and improper disposal of hazardous materials.
- Encourage owners of junk vehicles to dispose of them or to store them in environmentally safe, fenced enclosures.
- Encourage residents to decrease the volume of solid waste by reducing their use of disposable items and by recycling all possible items after their last use.

Support universal access to communication services—internet, cellular, and cable—throughout town.

- Work with Northeastern Vermont Development Association, the state, and other consumers to urge providers to continue line and equipment upgrades throughout the town for better telephone and high-speed internet service.

6 Preservation Plan

Newark is rich in natural resources, scenic beauty, and recreational opportunities. The preservation of these riches has been the result of frugality, a commitment to stewardship, the willingness to forego many of the luxuries that are readily available in other parts of Vermont, and plain good luck.

For many years, the primary threats to the preservation of Newark's natural and cultural heritage arose from unsustainable timber-harvesting practices and the scattered development of homes and camps. Now, Vermont's energy policies have introduced the threat of unchecked energy sprawl.

Newark's irreplaceable assets include its rural character, its wildlife habitat, its scenery, and its recreational opportunities. It is the goal of the Town of Newark to preserve these assets and protect them against threats.

The town is concerned about plans for major development within Newark and in neighboring towns. Since most area towns regulate development more strictly than Newark does, Newark may find itself vulnerable to types of development that surrounding towns find undesirable. These developments could threaten the environment and quality of life that Newark residents value.

The town's goal is to ensure that future generations may enjoy a high quality of life, economic and recreational opportunities, abundant clean water, clean air, healthy habitat for fish and wildlife, picturesque landscapes, and peace and quiet.

While it is the intention of the citizens of Newark to preserve the scenic beauty and quality of sparsely developed wildlife habitat throughout the town, lands that the town places special value on for scenic, wildlife, and recreational importance include:

- The ridgeline historically known as Hogback Mountain, which consists of Walker Mountain, Hawk Rock, Packer Mountain, and Sugar Hill.
- The Job Mountain Ridge, which enters Newark from the northwest and runs toward Newark Hollow.
- The Pinnacle Ridge, which extends southeastward from Newark Pond toward Maple Ridge Road.
- The high-elevation areas along Newark Street, Abbott Hill Road, Pinnacle Road, Spruce Ridge Road, Maple Ridge Road, and Kinney Hill Road.
- The town's ponds, including Newark Pond, Center Pond, Beck Pond, Walker Pond, Sawdust Pond, and Brown Pond.

- The town’s rivers and streams, including the East and West Branches of the Passumpsic, Bean Brook, and Sleeper Brook, as well as smaller tributaries, wetlands, and vernal pools.
- The scenic roads described in Section 4.7.

These natural resources provide important ecological services as well as economic, recreational, and aesthetic benefits to residents and visitors. Development that would compromise these benefits is inappropriate and inconsistent with the town’s vision and goals.

Newark is a community heavily influenced by past land uses and traditions. Our working landscape—forests, farmlands, and historic features—continues to define our community. Development in Newark has followed historical patterns and, for the most part, is harmonious with the scenic qualities of a New England hill town. Newark’s scenic and aesthetic qualities enhance our citizens’ quality of life and are highly valued. Newark residents list such qualities as “small town feeling,” “pastoral and rural quality,” and “stewards of the land” as valued characteristics.

6.1 *Aesthetics*

6.1.1 Scenery

Newark’s aesthetics and scenic beauty reflect the unspoiled character of the Northeast Kingdom. Mountain ridgelines and high-elevation areas contribute substantially to the scenic beauty. The town strongly discourages development on Newark’s mountain ridgelines and other high-elevation areas, as these are included within Newark’s natural areas that are to be preserved in their natural condition.

Northeast Kingdom ridgelines and high-elevation areas are particularly vulnerable to development for wind-generation energy projects. No commercial or industrial facility for the generation, transmission, or distribution of electrical energy, including meteorological towers that collect wind data, should be constructed on ridgelines and mountain areas within the Town of Newark. Modern commercial wind turbines are massive industrial machines that are totally out of character with Newark’s unspoiled natural environment. Such development would result in an undue adverse impact on the aesthetics and scenic beauty of the town. It would be so out of character with our surroundings as to offend the sensibilities of the average person.

Newark’s economic future is tied inextricably to our ability to preserve our natural environment. Industrial-scale facilities for the generation, transmission, or distribution of energy located on Newark’s ridgelines or mountain areas would unduly interfere with the orderly development of Newark and the surrounding region. The societal benefits that accrue by preserving the aesthetics and scenic beauty of our area, protecting our natural resources, and maintaining our rural character outweigh any potential economic gain or amount of energy

that might be produced by commercial or industrial development of Newark's high-elevation areas.

Newark's opposition to the construction of commercial or industrial electric-generation facilities on the town's ridgelines or mountain areas is a clearly written community standard intended to preserve the aesthetics and scenic beauty of Newark and is a land-conservation measure intended to ensure the orderly development of Newark and the region. This declaration shall be construed by local and state regulatory bodies to achieve its full intended purpose.

6.1.2 Noise

Newark is a quiet place, and residents consider "peace and quiet" to be an essential element of the town's rural character. Newark residents enjoy being able to hear the sounds of the rich natural environment and benefit from Newark's quiet nights.

Some daytime noise is acceptable (such as from traffic, chainsaws, farm equipment, and the like) because it is occasional and is tied to our way of life. Such noise is usually being made by neighbors or family members, who are generally courteous and sensible about the times of day, duration, and volume of noise.

Most residents would find the noise of a pile driver or a race track objectionable even if the noise is occasional. Most residents would agree that the constant noise of industrial equipment, loud music, or barking dogs is unacceptable.

Medical professionals acknowledge that many types of noise, as well as the volume of noise, can cause adverse health effects that range from damage to hearing, to annoyance and stress reactions, to sleep disturbance.

Noise is measured in decibels ("dBA"). The World Health Organization recommends that indoor levels of noise remain below 30 dBA at night and suggests that nighttime levels of continuous, low-frequency noise should be even lower than 30 dBA.¹⁹

Newark's ambient (background) noise is typically below 20 dBA. In order to preserve Newark's essential rural character, the Town of Newark urges residents, property owners, and visitors to be courteous and attentive to the amount of noise to which they subject their neighbors. Furthermore, the Town of Newark considers industrial or commercial sources of noise inappropriate for the town if they produce noise readings greater than 30 dBA as measured at property boundaries. To protect against the effects of infrasound, no industrial or commercial

¹⁹ WHO *Guidelines for Community Noise*. World Health Organization, Geneva, 1999.

activity should produce indoor noise readings that would exceed 50 dBC in any existing or prospective residence anywhere on a neighboring property.

These guidelines include prospective residences to ensure that no Newark property owners lose the ability to develop any portion of their property owing to noise generated by a commercial or industrial neighbor.

6.1.3 Night Sky

People are often overwhelmed by the clear view of the night skies that Newark residents enjoy. Poorly designed outdoor lighting can obscure the night sky. The town encourages residents to meet their outdoor lighting requirements in ways that do not interfere with viewing the night sky. An internet search can provide information on how to improve the effectiveness of outdoor lighting systems while reducing their costs.

Developments that obscure the view of the night sky are inappropriate in Newark, as are developments that create light pollution that diminishes the view of the night sky.

6.2 ***Historic Features***

The primary historic landmarks in Newark are the Newark Union Church and the old Town Hall. The church has been well maintained through grants and generous contributions of pew-holders, residents, and visitors. Although the old Town Hall has not been as well maintained, the town has made periodic investments and should continue to do so. The town should look for additional grant money to fund maintenance tasks for both historic landmarks.

6.3 ***Rare and Irreplaceable Natural Areas***

Newark occupies a critical location at a chokepoint in a wildlife habitat linkage. This linkage has been noted by the Staying Connected Initiative (SCI) for its importance as a rare and irreplaceable natural area (Map 9 and Map 10). Roughly 75% of land in the town lies in this linkage, including:

- Virtually all of the town's higher elevation land.
- All of Hogback Mountain.
- Nearly all of the town's lands that drain into Bean Brook and the East Branch of the Passumpsic.

The Hogback Mountain area is particularly important, as it is the largest block of wildlife habitat in town. It adjoins Vermont's second-largest block of habitat (which, in turn, adjoins the largest block), magnifying its importance.

The Newark lands that lie within the SCI linkage represent the town's best conservation opportunity. Approximately 50% of Newark's linkage is, in fact, conservation land or land

enrolled in Current Use, so development is not possible. The town discourages development that would fragment or compromise any of the remaining portion of the linkage. Such lands should be preserved by obtaining easements, by considering acquisition by the town, and by encouraging acquisition by conservation groups.

6.4 *Gravel and Other Nonrenewable Resources*

Gravel is vital for road construction, road maintenance, and many types of development. It is an essential ingredient of manufactured building materials. Gravel is a finite, nonrenewable resource—once depleted, it cannot be replaced, so it is important to plan for its prudent use.

Gravel deposits can serve an important role in filtering ground water and recharging aquifers. They often occur near rivers and lakes. For these reasons, some deposits are too ecologically valuable to disturb. State regulations may prohibit gravel extraction from a site in order to protect water supplies, critical wildlife habitat, or conserved lands.

Development that occurs over or near gravel deposits can make extraction difficult or impossible. Land owners and developers should take the presence of gravel into account when planning construction.

Extraction and processing of gravel and other earth resources can become a nuisance for neighboring residents and landowners. Problems resulting from extraction include noise, dust, and air pollution; surface and groundwater pollution; siltation; storage and disposal of waste materials (both solid and liquid); increased stormwater runoff, erosion, and sedimentation; spoiling of the landscape and limiting utility for subsequent uses of the site; and decreased highway safety and increased municipal costs due to increased traffic and accelerated deterioration of highways and bridges attributed to the transportation activities generated by the earth-resource operations. These impacts may substantially depreciate land values in the immediate vicinity. For these reasons, extraction operations should be isolated from neighboring properties and screened from view from roads and neighboring properties.

Before earth-resource-extraction operations begin at a site, the landowner and operator should work with the town, state, and Caledonia County Natural Resource Conservation District to develop operational plans that will:

- Minimize impacts to the environment and to neighbors
- Create a stable site
- Enable easy reclamation of the site
- Identify uses for the site when operations are completed

There is currently one active commercial gravel extraction site in Newark. It is located off Route 5A. The Town of Newark has a 10-year contract with the operator of that site to purchase gravel. Newark's road-maintenance activities require 5,000 yards of gravel in an average year.

6.5 *Preservation Plan Goals*

Preserve Newark's irreplaceable assets for future generations. These include its rural character, wildlife habitat, scenery, recreational opportunities, and peace and quiet.

- Establish a conservation commission to:
 - Develop detailed plans to preserve Newark's rare and irreplaceable areas
 - Develop detailed plans to preserve features that contribute to Newark's working landscape
 - Identify historic sites and buildings, inform landowners of the value of these features, and suggest ways to preserve them
 - Raise funds to finance protection of important forest and agricultural lands through easements or acquisition
- Support efforts to protect important natural and recreational areas through sustainable management, easements, and acquisition.
- Encourage sustainable forest-management practices.
- Support our community standard opposing large-scale industrial and commercial facilities on the town's ridgelines and high-elevation areas. Such development would result in an undue adverse impact on the aesthetics and scenic beauty of the town. It would be so out of character with our surroundings as to offend the sensibilities of the average person.
- Urge all residents, property owners, and visitors to be respectful, courteous, and attentive to the amount and timing of noise their activities produce. This is especially important near the town's ponds, where sound travels more easily.
- Encourage residents and property owners to meet exterior lighting requirements in ways that do not interfere with the view of the night sky; make best practices information available through the town office.
- Encourage the choice of roofing and exterior colors for buildings that are congruent with natural surroundings, especially near Newark's ponds and scenic areas.
- Discourage development and land uses that would fragment or compromise the SCI habitat linkage area through intervention in state proceedings as well as through education, easements, and land acquisition.
- Preserve historic resources by identifying and protecting sites, buildings, and features that contribute to Newark's rural, working landscape.
- Make the Newark Town Plan available online and at the Town Clerk's Office; encourage individuals seeking development permits to reference and adhere to the Town's preservation goals during construction or renovation.

7 Education

Newark's educational needs are met by a variety of childcare alternatives, its elementary school (the Newark Street School), and excellent secondary-education choices. The Vermont State Colleges and the Community College of Vermont provide local postsecondary and adult-education opportunities.

Vermont is at a crossroads with regard to educating its children. Politics are threatening the operation of small school districts. Legislation passed during the 2014-15 biennium calls for the consolidation of schools into districts with a minimum of 900 students. This, in response to decreasing statewide student enrollment and the ever-increasing cost of school budgets and associated property-tax burdens, presents a significant challenge for many of Vermont's schools, 30% of which have fewer than 100 pupils.

The Newark Street School falls within Vermont's small-school category and, despite overwhelming community support, faces extraordinary challenges. Are students getting the best education? Will the Newark Street School remain open? What will be the fate of neighboring schools within the supervisory union, which collectively falls below the 900-student threshold? How will legislated incentives and penalties impact local districts? What, if any, impact will the law have on rising property taxes? These and many other questions are being asked by members of communities across the state.

Newark residents showed unanimous support for the Newark Street School at the 2015 Town Meeting, passing the following resolution:

We, the voters of Newark, would like the legislature to know we are in strong support of our extraordinary school with its beautiful building and grounds, shared resources, exemplary staff, technology, afterschool program, and community support and believe that bigger is not always better.

In addition, Newark is served by two of the best secondary schools in Vermont, Lyndon Institute and St. Johnsbury Academy. The legislative impact on these private schools also remains unknown.

It is clear that the Newark community supports its children, teachers, and education professionals. Residents must be ever vigilant and actively work to meet the highest education standards for Newark's children so that they receive the first-rate education they deserve.

7.1 *Child Care*

Child care for preschool-aged children is a critical need for many families. Local child-care facilities are privately operated. According to the state's "Bright Futures" child-care database

(<http://www.brightfutures.dcf.state.vt.us>), in 2015, there were five registered child-care homes and two licensed child-care facilities in Newark and its adjoining towns.

Newark supports the addition of affordable, registered, residence-based family child-care facilities within the town. Newark encourages prospective operators of child care to make use of the business planning assistance available from the Vermont Small Business Development Center in St. Johnsbury (<http://www.vtsbdc.org/>).

7.2 *Preschool*

The Newark Street School provides tuition for 3- and 4-year-old children to attend local certified prekindergarten programs. The Bright Futures website describes the availability and eligibility requirements for child-care benefits offered by the state.

Each spring, the Newark Street School offers a 6-week, ½-day-per-week “Transition to Kindergarten” program to incoming kindergarten students.

7.3 *Newark Street School*

The Newark Street School is a vital community resource that offers excellent K-8 education. In addition to serving the community’s educational needs, the school serves as the center for civic programs and activities. It is a source of pride for residents and is essential to Newark’s identity.

In 1875, Newark had 13 one-room schoolhouses. The Newark Street School was built in 1980 to replace the town’s last remaining one-room schoolhouse. The two-story wood-frame school included three classrooms on the ground floor and a multipurpose room with a kitchen upstairs. Construction of an addition was completed in 1997, and the current Newark Street School contains six classrooms, a library, office space, small-group workspaces, a kitchen, and a large multipurpose community-use space, featuring a basketball court. The school can accommodate more than 100 students.

The school building has been meticulously maintained and is in excellent condition. It was painted in 2009. Energy-efficient lighting was installed in 2010. Extensive maintenance to the heating system and duct work was performed in 2012. A new standing-seam roof was put on the building in 2013.

The Newark Street School is located on town-owned property at 1448 Newark Street. This 13-acre parcel also includes town offices, town road-maintenance department, volunteer fire department, and the transfer station/recycling center. The acreage, with its open and southwesterly exposure, allows for future campus expansion and the addition of alternative energy options.

In addition to, and in support of the excellent academic opportunities offered by the school, the Newark Street School holds itself as a true community school and asset. Parents, grandparents,

and community members are warmly welcomed into the school for community meals, for volunteer opportunities, and for other uses of the facility. Students' educational experience is enhanced by attending a school that is an integral part of an engaged community. In addition, students benefit from multi-aged classrooms, regular school-wide assemblies, and various mixed-group activities.

7.3.1 Newark Street School Curriculum, Programs, and Services

The Newark Street School is a member of the Caledonia North Supervisory Union district, which includes four other local schools (Burke Town School, Lyndon Town School, Miller's Run, and Sutton School).

Unlike many other area schools, whose enrollments have declined, the Newark Street School's enrollment has remained fairly steady. The school is well-regarded, and some parents in neighboring towns have chosen to send their children to Newark. If the population of Newark were to increase by a projected 30%, this would in fact have either a negligible or a fairly positive impact on Newark Street School. The average enrollment between 2010 and 2016 has been 58 pupils, and a 30% increase is within the range of variation in student enrollment from year to year.

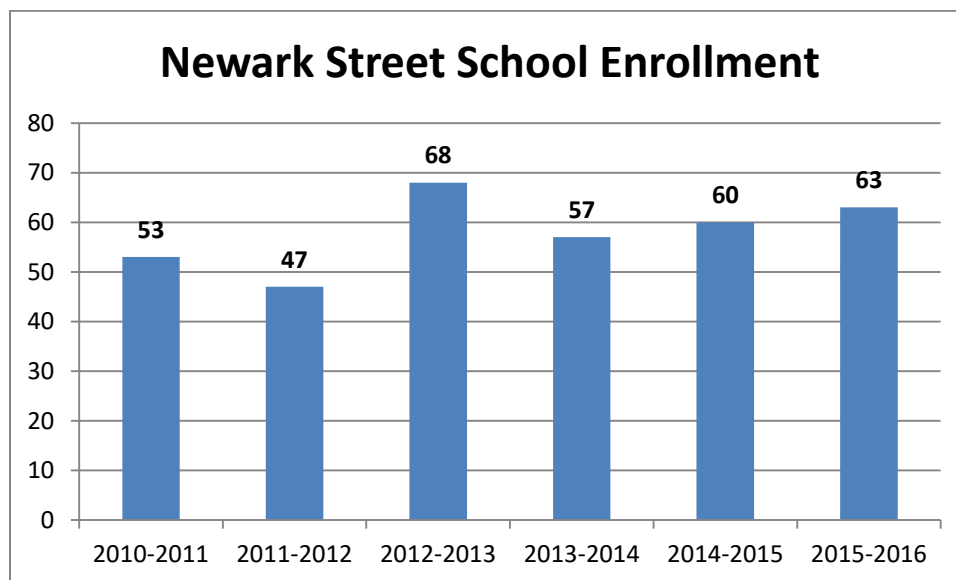


Figure 4 Newark Street School enrollments

The Newark Street School, along with other Vermont schools, follows a standards-based approach to teaching curriculum, with those standards directly related to the Vermont

Framework of Standards and Grade Level Expectations. The New England Common Assessment Program (NECAP), meant to assess progress toward those standards, has been regularly administered to students in grades three through eight in all Vermont schools. NECAP results showed that Newark students score well within the supervisory union. The Newark Street School has shifted instruction toward The Common Core standards, now set to replace the Vermont Framework of Standards.

The school provides a wide range of programs for students. In addition to core subject areas, the school offers classroom music, instrumental music, physical education, art, guidance counseling, and a library. The school enhances its offerings by sharing resources with schools in neighboring towns.

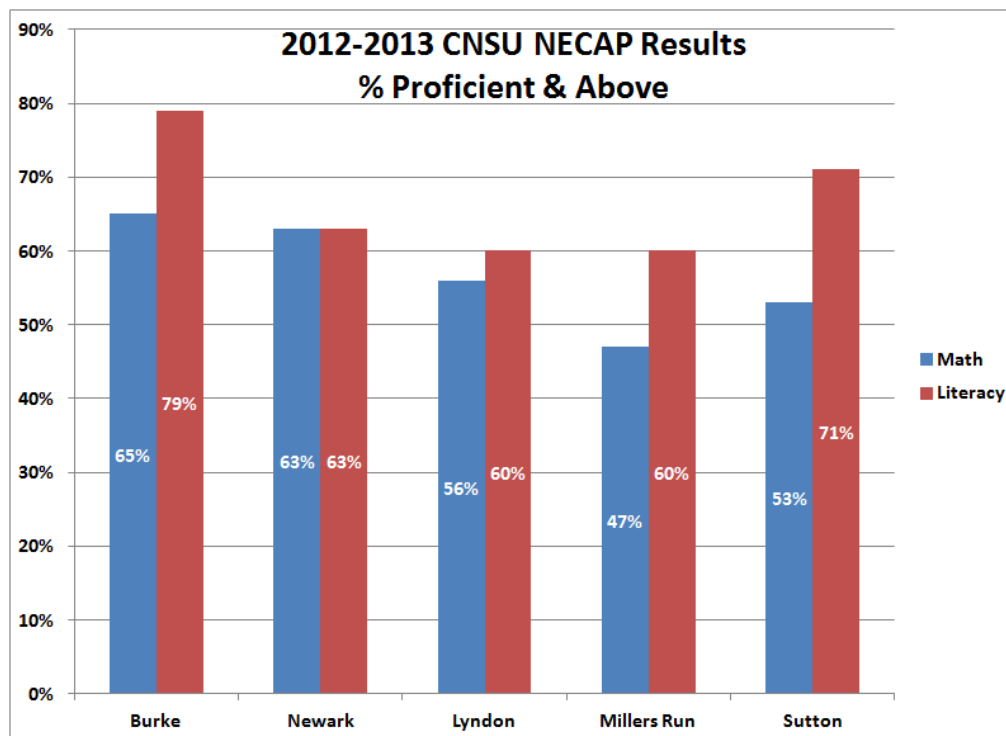


Figure 5 Comparison of student test results

Schools are now obligated to prepare students for higher education and technical careers by customizing their educational programs as early as elementary school. Personalized Learning Plans include such activities as field-based learning, job shadowing, and community experiences outside the classroom.

Nursing services are provided by certified specialists on a part-time basis. Access to the internet is available through a local area network. The school has a part-time principal, special educator, and secretary, as well as services for students in need of aid. Students are transported to and

from school by bus. The school continues to provide an essential nutritional breakfast and lunch program.

The after-school program is a critical element of Newark Street School culture. It is a successful and well-attended component of Newark's educational program, providing an engaging blend of tutoring, academic enrichment, participation in the arts, and regular exposure to healthy lifestyles. The after-school program includes a community garden and is the home of the Newark Balkan Chorus, a world-renowned chorus singing traditional Balkan songs.

Graduates of the Newark Street School report that the school had prepared them well for secondary education and postsecondary opportunities.

7.3.2 Newark Street School Community Amenities

Newark Street School is a member of the Vermont Rural Partnership (VRP), a nonprofit organization dedicated to sustaining rural schools and rural communities. Funded by private grant funds, VRP supports community involvement in schools and school involvement in the community. A VRP grant helped the Newark Volunteer Fire Department construct a community ice rink on the campus (if weather permits, the rink will begin its inaugural season in December 2016). Previous grants from VRP provided assistance with the installation of a Frisbee golf course, planting boxes, and a bread oven.

The Newark Street School has an outdoor basketball court, and in 2011, a grant from the Land & Water Conservation Fund (through the Vermont Agency of Natural Resources) enabled construction of a community playground and baseball/softball diamond for school and community use.

A North Country Credit Union grant provided school picnic tables for outdoor meals and community events.

The school is the site of Newark's annual town meeting and other community meetings, dinners, discussions, lectures, training sessions, and activities. The school also serves as the town's emergency shelter and is equipped with a propane-fired generator.

7.4 ***Secondary Education***

Lyndon Institute and St. Johnsbury Academy are customarily the secondary schools that graduates of Newark Street School attend. Recent legislation has expanded the opportunity for all students in grades 9 through 12 to enroll in any secondary school of their choice.

Transportation for secondary education is the responsibility of the students and their families.

Both Lyndon Institute and St. Johnsbury Academy offer career and technical education to all incoming juniors and seniors, as well as to adult learners, in the surrounding school district

area. Programs are available that prepare students for careers in automotive technology, welding, construction trades, computer and internet technology, culinary arts, electrician trades, manufacturing, and health and human services, among others. Cooperative education allows qualified students an opportunity to participate in real-world work experiences.

7.5 *Postsecondary and Continuing Education*

Lyndon State College and Johnson State College are 4-year colleges that are part of the state college system. They are located within 15 and 50 miles, respectively, of Newark. The nearest private college is Sterling College, in Craftsbury (about 35 miles from Newark).

Adult educational services and facilities with college-level classes are located nearby. The Community College of Vermont (CCV) has satellite offices and classrooms in St. Johnsbury and Newport. CCV offers programs in business, liberal arts, and nursing.

St. Johnsbury Academy and the Lyndon Institute Career and Technical Center offer adult education for anyone who is no longer enrolled in a traditional high school. Another resource for adult education is Northeast Kingdom Adult Basic Education, a nonprofit organization that provides free instruction to individuals no longer enrolled in public school.

7.6 *Educational Attainment in Newark*

According to recent American Community Survey five-year estimates (2009-2013), 89.4% of Newark's residents over the age of 25 have a high school diploma or equivalent (up from 78% in 2000). This is slightly below the statewide average of 91.3% and may indicate a need for continuing educational services in this area.

A look at college-attainment figures reveals that 30.4% of residents have completed a bachelor's degree or higher. While below the statewide average of 34.2%, this figure has increased significantly since 2000, when only 13.5% had a 4-year degree.

7.7 *Education Goals*

Preserve and encourage the high-quality education provided by Newark Street School.

- Find creative ways to pay for unfunded state and federal mandates.
- Support the school board's efforts to design and implement cost-effective educational plans.
- Encourage the continued participation in school activities and events by the town's residents.
- Encourage continued collaboration with neighboring towns to ensure a rich offering of school programs and opportunities.

8 Energy Plan

Energy is consumed in Vermont for transportation (34%), residential use (31%), and commercial and industrial use (36%).²⁰ Since Newark has no major commerce or industry, energy is consumed only for transportation and residential purposes—approximately half for each.

The primary components of residential energy use are electricity and heating. Statewide, almost 80% of residential energy use is dedicated to space heating and domestic hot water.²¹

Residential consumption of “grid electricity” in Newark is far below the statewide average. According to Efficiency Vermont, of all towns in Vermont, Newark uses the third-least amount of electricity per household.²²

Given Newark’s severe climate and its low use of electricity, Newark’s residential energy consumption differs from state averages. The Newark Planning Commission estimates Newark’s current energy utilization to be 50% for transportation, 45% for home heating, and 5% for electricity (as opposed to statewide residential consumption of 50%, 40%, and 10% for transportation, heating, and electricity, respectively).

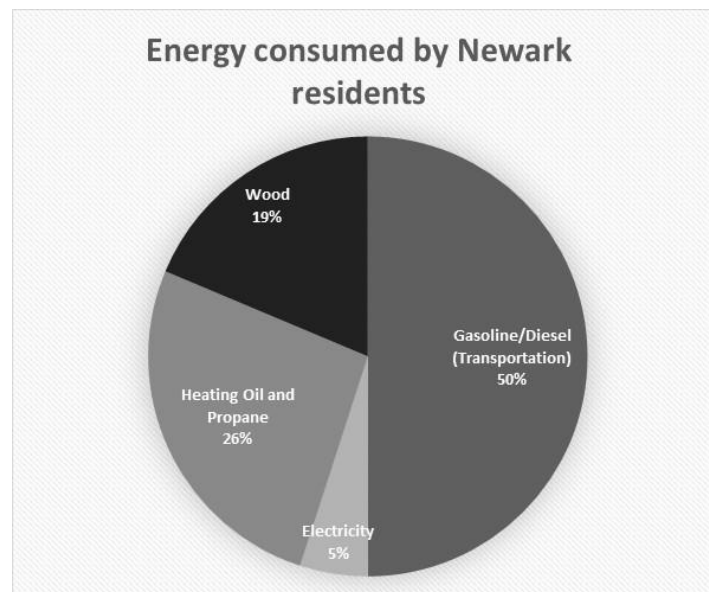


Figure 6 Energy consumption in Newark (Source: Newark Planning Commission)

²⁰ Comprehensive Energy Plan, Vermont Department of Public Service, December, 2011, p. 21.

²¹ <http://www.trorc.org/programs/energy/energy-use/>, accessed 8.20.15.

²² <https://www.encyvermont.com/About-Us/Energy-Efficiency-Initiatives/energy-data/Town-Energy-Data>, accessed 8.20.15.

8.1 *Home Heating*

According to the U.S. Census Bureau’s 2013 American Community Survey, more than 77% of homes in Vermont were heated by fossil fuels (oil, natural gas, and propane). By contrast, only 58% of Newark homes use fossil fuels as the primary heating source. More than 40% of Newark households use wood as a primary heating source.²³ The majority of Newark homes that use oil or propane as a primary heat source also use wood as a supplementary fuel.

Newark and its neighboring towns have a robust cordwood economy. This provides extra income for those who cut, split, and deliver wood, gives landowners a market for their low-grade wood, and makes inexpensive, local fuel available to Newark homeowners.

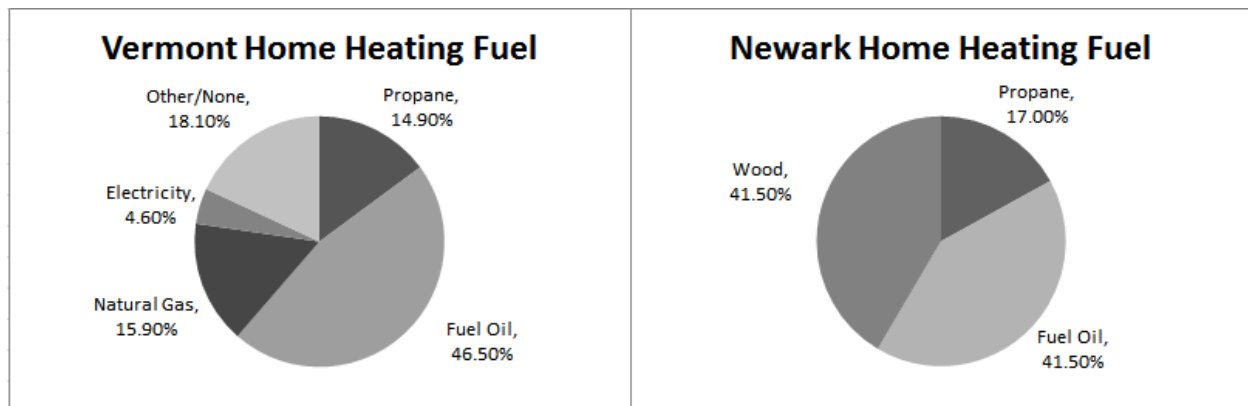


Figure 7 Home heating fuels in Vermont and Newark (Source: U.S. Census Bureau)

The State of Vermont is promoting the development of a “pellet economy,” which would enable Vermont residents to heat with locally harvested and produced fuel. Pellet heating is becoming an attractive home-heating option. Substantial incentives for purchasing and installing pellet boilers are currently available through the state’s Clean Energy Development Fund, Efficiency Vermont, and the Northern Forest Center.

8.2 *Efficiency and Conservation*

Newark encourages residents to use energy wisely and builders to adopt best energy practices in constructing new buildings. These practices include designing for passive solar heating, adequate insulation, and inclusion of Energy Star appliances. The Environmental Protection Agency maintains a website on “green building” at epa.gov/greenbuilding.

The town also recommends that homeowners upgrade the energy efficiency of their homes by weather-stripping, insulating walls and attics, replacing leaky doors and windows, and replacing old appliances with Energy Star appliances. The state and federal governments offer a variety of incentives to homeowners in the form of rebates, tax deductions, and tax credits. Some manufacturers, dealers, and utilities also offer incentives. The websites energystar.gov,

²³ <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>, accessed 8.20.15.

energy.gov/taxbreaks.htm, and efficiencyvermont.com describe some of the incentive programs.

8.3 *Electricity*

Most of the town receives its electricity from the Lyndonville Electric Department (LED), which, in addition to purchasing power from major generators, operates two small hydro facilities (Vail and Great Falls) on the Passumpsic River. The northern quarter of Newark receives its electricity from the Vermont Electric Cooperative (VEC).

Newark has no three-phase electricity service. Many types of industrial equipment require three-phase power to run properly.

Many areas of town are unserved even by single-phase distribution lines. These areas include lengthy stretches of East Hill, Maple Ridge, Duford, Kinney Hill, and Abbott Hill Roads. There are no electric substations in Newark.

8.4 *Newark's Energy Future: The Comprehensive Energy Plan and Renewables*

There is a great deal of concern in Vermont about climate change. This has led to the development of the state's Comprehensive Energy Plan and the establishment of aspirational goals to reduce emissions of greenhouse gases and produce 90% of our energy by renewable means. The state has also adopted statutory requirements (under Act 56) that Vermont electricity utilities increase the proportion of "renewable electricity" that they sell.

Newark may be closer to achieving the state's aspirational goals than other Vermont towns by virtue of its low usage of grid electricity, its large number of solar-powered "off-the-grid" homes, the considerable number of net-metered solar installations, and the large number of homes that use wood heat. However, Newark will not be able to meet the 90% renewable energy goal until significant advances are made in transportation technology. The current generation of electric vehicles is unsuitable for widespread use in Newark; electric vehicles are expensive, have limited range, take too long to charge, and perform poorly in cold weather. Additionally, many Newark residents require pickup trucks, which, currently, are available only as gasoline- or diesel-fueled vehicles.

Many Newark residents have already reduced their consumption of transportation fuels by eliminating unnecessary trips and by sharing rides with neighbors. Public transportation and formal ride-share options in Newark are limited because they are expensive to establish in sparsely populated rural areas. Park and Ride facilities are generally sited at intersections of major road corridors. Since Newark has no such locations, the town should work with neighboring towns to create Park and Ride facilities that could be used by all area residents.

Newark encourages homeowners to consider solar hot water and to participate in Vermont's net-metering program. Net metering enables individuals or groups to generate their own electricity (from solar panels or other renewable technology) and get credit from utilities, thereby offsetting their utility electricity costs. Newark encourages the development of residential and community-scale electricity generation subject to the following standards:

- No electricity generation facility should occupy more than 2 acres of land.
- Electricity generation facilities should not fragment wildlife habitat, block wildlife corridors, or compromise wetlands.
- Electricity generation facilities should not be sited on agricultural soils of national or state importance.
- Electricity generation facilities should connect to existing distribution lines without requiring upgrades.
- Facilities should produce no noise louder than 30 dBA or 50 dBC as measured at boundaries with neighboring properties.
- Facilities should not extend above the background horizon line.
- Facilities should not encroach on neighbors.
- The renewable energy credits generated by facilities in Newark should be retired.

In order to preserve Newark's rural character, any energy facility that occupies more than a quarter-acre of land should be screened from view from all state roads, town roads, and neighboring properties. Screening can be achieved by proper siting, consideration of topographical features, and use of native vegetation.

The Northeastern Vermont Development Association's 2020 Energy Plan identifies no sites in Newark that are suitable for solar orchards.²⁴ This may be due to the fact that Newark is the terminus for power lines coming from LED from the south and VEC from the north. The capacity of the electricity distribution lines in Newark is limited. Since three-phase power is not available in Newark, the town is a poor site for large-scale solar power. Therefore, solar developments should be kept small. This will reduce the likelihood that distribution lines will become saturated and ensure that any Newark homeowner can participate in Vermont's net-metering program without fear of destabilizing the local electricity distribution system.

Considering these limitations, the Newark Street School campus might provide a good site for a small, net-metered community solar facility. Newark also has a number of residences with south-facing roofs or yards with southern exposure that would be suitable for small solar developments.

²⁴ NVDA 2020 Energy Plan, p. 29, <http://www.nvda.net/files/2015%20Chapter%20%20Energy.pdf>

The NVDA has identified a handful of Newark locations for small-scale commercial wind.²⁵ However, the potential is extremely low and the sites lie in ecologically sensitive areas (inside the SCI wildlife linkage depicted in Map 10). Development would be inconsistent with Newark's rural character, noise guidelines, and conservation plan.

The NVDA has identified two locations in Newark that might be suitable for small-scale hydroelectric installations.²⁶ The difficulty of the permit process for new hydroelectric plants makes it unlikely that either of these sites would be developed. The town would approach such developments with extreme caution and would seek assurances that they could be undertaken without compromising the town's conservation goals.

Industrial-scale energy installations are incompatible with Newark's vision and goals:

- Industrial-scale installations would negatively affect the town's fundamental goal of habitat preservation.
- Industrial-scale energy installations would be out of place in the Newark landscape.
- Newark lacks the infrastructure to support large installations. Building the required infrastructure would be costly, would detract from the beauty of the town, and would contribute to the degradation of our natural environment.
- Industrial-scale energy installations, by virtue of their impacts on the landscape and wildlife habitat, would negatively affect Newark's economy (which benefits from second homes, tourism, and vacation rentals) and would interfere with the orderly development of our region, which is investing in an economic future based on ecotourism.²⁷
- Industrial-scale energy installations can also impact property values. (Vermont towns are beginning to reduce the assessed values of properties that are impacted by noise or adverse visual impacts created by energy installations.)

Therefore, industrial-scale power generation and transmission facilities are inappropriate in the town. This includes, but is not limited to, industrial-scale wind turbines and their associated transmission facilities.

While Newark is a poor location for utility-scale projects, the town is committed to collaborate with the utilities that serve it to:

- Determine what volume of electricity generation would be suitable for the town.
- Identify locations for developments that could improve reliability and not destabilize the grid.
- Identify locations suitable to both the utilities and the town.
- Cooperate with development in mutually agreeable locations.

²⁵ Ibid., 30.

²⁶ Ibid., 31.

²⁷ travelthekingdom.com.

- Define projects that can help utilities meet the state’s energy transformation goals that were established in 2015.

Newark asks the utilities that serve it to:

- Oppose projects proposed for Newark (and other towns) that are not the result of a collaborative process involving the town.
- Refuse to purchase power, whenever possible, from projects that have not been the result of a collaborative process involving any host town.

8.5 *Land Use and Energy Conservation*

In more densely populated towns and cities, smart-growth principles provide better opportunities for energy conservation than they do in Newark. While the application of smart-growth principles may not result in appreciable energy conservation, it can support the preservation of wildlife habitat in Newark and beyond.

The Town of Newark discourages development sprawl, whether it be residential sprawl or energy sprawl. Newark discourages development that requires expanding infrastructure, including roads and utility poles and wires.

8.6 *Energy Goals*

Stay abreast of federal, regional, and state energy programs and incentives and develop effective ways of informing townspeople, such as by maintaining a notebook and other relevant materials in the Town Clerk’s Office.

- Evaluate the role of the Newark Energy Coordinator and consider establishing a Newark Energy Committee.
- Work with Efficiency Vermont and state agencies to increase awareness of incentive programs.

Help residents reduce greenhouse gas emissions resulting from home heating by holding workshops and maintaining appropriate information in the Town Clerk’s Office.

- Encourage conversion of oil- and gas-heated homes to modern wood heating (efficient wood and pellet stoves, furnaces, and boilers).
- Encourage builders to adopt best energy practices in new construction.
- Encourage residents to upgrade thermal efficiency of existing buildings.
- Encourage residents to consider solar hot water.

Encourage alternative transportation options.

- Explore ride-sharing programs.
- Explore the creation of Park and Ride facilities with neighboring communities.
- Encourage cooperative transportation arrangements for Newark’s high school students.

Encourage residential-scale net metering.

- Encourage small net-metering projects.
- Discourage large-scale net metering that might saturate local distribution lines.
- Collaborate with VEC and LED to develop a strategy that will enable any Newark homeowner who chooses to net meter to do so without destabilizing the grid.

Discourage energy sprawl and energy development that would adversely affect wildlife habitat, agricultural soils, the character of the town, geotourism, or property values.

- Collaborate with VEC and LED to identify appropriate locations for electricity generation, consistent with Newark's goals and vision.
- Promote awareness of local sources of energy and opportunities to employ renewable energy in applications that are compatible with Newark's vision and goals.
- Explore opportunities to establish an appropriately sited community solar facility to power municipal properties.

Conduct energy audits of town buildings to identify areas of energy waste and areas of potential savings.

- Recommend cost-effective energy conservation and efficiency measures as well as modifications that will make use of renewable energy.
- Implement energy efficiency measures for existing and future community facilities as opportunities arise.
- Prioritize modifications and efficiency improvements (e.g., facility retrofits, renovations, and equipment upgrades) and incorporate them into the town's capital budget.

9 Housing

9.1 Overview of Housing in Newark

According to recent American Community Survey estimates (2009-2013), there are 472 housing units in Newark. (Note that this survey estimate differs from the state's E911 data described in Section 3.6.4 and depicted on Map 12.)

The overwhelming majority of these (439) are single-family detached structures, while the rest are mobile homes. About half are occupied year-round. Most of the remaining structures are used as seasonal homes and camps. Of the year-round or "residential" homes, about 85% are owner-occupied; the rest are rented. Newark has a considerably higher share of owner-occupied housing than either the county (73%) or the state (71%). About 62% of the owner-occupied units carry a mortgage.

The second-home market has seen significant growth throughout Vermont in recent decades. Newark has the highest proportion of seasonal units in Caledonia County.

The high proportion of seasonal and vacation housing affects other aspects of the region's housing. In Newark, seasonal homes command higher prices on the real estate market and may drive up other real estate prices in a community. Also, as Vermont becomes a more attractive destination for retirees, long-time seasonal residents may be more likely to become full-time residents.

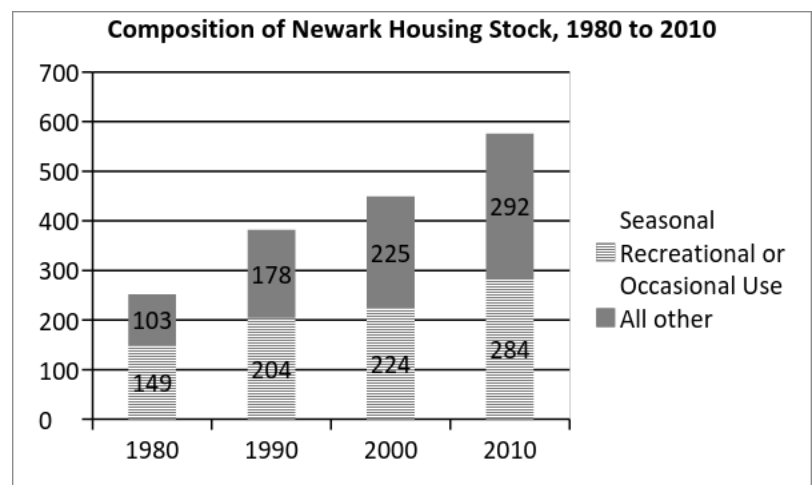


Figure 8 Newark housing stock

According to the town's most recent grand list data, Newark's residential properties are primarily on lots of 6 acres or more (161 versus 81 lots on less than 6 acres).

Table 4 Sales of Newark single-family residences in 2014

	Primary Residences Sold		Vacation Residences Sold	
	Average Price	Median Price	Average Price	Median Price
Newark	\$174,750	\$144,500	\$204,286	\$205,378
Caledonia County	\$154,758	\$137,750	\$155,000	\$155,000

(Source: Vermont Department of Taxes)

9.2 *Affordable Housing*

In Vermont statute, the term “affordable housing” refers to housing that meets a two-part test:

- The household’s inhabitants have a combined gross annual income of 80% or less of the county median income.
- The annual cost of housing for the household is not more than 30% of the combined gross annual income.

“Total costs” for homeowners include principal, interest, taxes, insurance, and condominium fees; costs for renters include rent, utilities, and condominium fees. Given the complexity of the definition and the difficulty of obtaining complete and consistent data, it is difficult to make statements about the affordability of housing in Newark.

In Newark, nearly a third of homeowners with a mortgage and about 17% of homeowners without a mortgage are paying more than 30% of their income on housing (American Community Survey data, 2009-2013). These figures are lower than statewide averages and slightly lower than for Caledonia County as a whole.

Renting is not necessarily a more affordable option in Newark. Forty-seven percent of Newark renters pay more than 30% of their gross annual income for housing. While this figure is better than the county and state averages (60.9% and 52.4%, respectively), rental options are relatively scarce in Newark.

Typically, a mix of housing types can help make a community’s housing stock more affordable. The large majority of Newark’s housing consists of single-family detached structures. There are few attached housing units, such as multiunit dwellings or accessory unit dwellings (also called “mother-in-law suites”), and only a few mobile homes.

9.3 *Housing Projections*

The state of Vermont released population projections in 2013 based on two possible scenarios: We could expect population growth and net migration similar to what happened in the 1990s, when the economy was more robust, or we could expect growth to be similar to the 2000s, when the economy was weak.

Either way, projections for Newark suggest a 30% increase in population by 2030. We don't expect to see a large influx of school-aged children, as the region's population is expected to age considerably. Projections for Caledonia County show a substantial increase in populations aged 70 and up. While these are projections, not predictions, it appears that rural living is a draw, and Newark may be an attractive destination for retirement.

9.4 *Housing Goals*

Maintain Newark's **rural character**, consistent with the historic built environment and avoiding habitat fragmentation and negative impacts to water quality and natural and community resources such as scenic, agricultural, open, and forested lands.

- Support housing that reinforces historic settlement patterns and preserves and improves existing structures.
- Preserve historic buildings—including homes, barns, and community buildings—as an important part of the town's heritage.
- Continue to explore the use of regulatory and nonregulatory methods of managing growth, discouraging types of development that would alter the character of the town or strain the capabilities of local transportation, safety, and health systems.
- Explore the creation of a village designation in the Newark Street area.
- Locate future expansion or development of publicly owned community facilities and buildings in the Newark Street village area.
- Avoid fragmentation in outlying areas by designing development so that the extension of roads, driveways, and other infrastructure is minimized or, preferably, shared.
- Promote smart-growth principles for subdivisions so as to avoid unnecessary fragmentation of wildlife habitats and distinct timber stands and to allow for access for long-term forest management.

Maintain and improve the availability of safe and **affordable housing** and property ownership for all income levels by encouraging a balance of housing for a mixture of incomes.

- Ensure a variety of housing units for all income levels within the town, emphasizing, when possible, the rehabilitation of existing structures.
- Task the Building Committee to evaluate the town's future needs for affordable housing and housing for seniors.
- Keep housing affordable by encouraging appropriately sized lots, accessory apartments or dwellings, and clustered developments, including multifamily housing and housing for seniors, consistent with the desire to maintain Newark's rural quality. Any such housing development should be approached using smart-growth principles.
- Promote and support federal and state programs for weatherization, rehabilitation, and home financing; construction and improvement of affordable housing; and housing for seniors by making information available through the Newark Town Clerk's Office.

- Encourage residential housing in Newark that is sufficiently valued to help defray the cost of public services in town.

Create a built environment that is consistent with Newark’s rural residential character, reduces energy consumption, and **reduces the long-term economic impact of rising energy costs.**

- Support town residents in their efforts to weatherize their homes, increase energy efficiency, and reduce energy consumption.
- Plan future housing for locations that complement existing or planned employment locations, reduce travel times and the need for road upgrades and extensions, and minimize the amount of energy spent on transportation.
- Incorporate sound principles of site design for reducing energy use, such as solar and slope orientation and protective wind barriers, where land development, including subdivision, is proposed.
- Compile examples of energy-efficient site design, landscaping, and structure design to guide and encourage homeowners and builders to construct high-quality, energy-efficient, and environmentally sound housing through the use of measures such as site and building design, materials selection, and energy-efficient lighting, heating, venting, and air-conditioning systems to reduce energy consumption and costs.

10 Economic Development

10.1 *Newark's Workforce*

According to recent American Community Survey (ACS) five-year estimates (2009-2013), about 270 Newark residents are in the labor force, 229 of whom are employed. This figure roughly correlates to U.S. Census Bureau data, which identifies 262 primary jobs held by Newark residents.

Newark is a bedroom community that relies heavily on commercial and industrial centers in larger, neighboring towns for employment. The Census Bureau uses quarterly employment earnings to show where workers are employed in relation to where they live.

Newark residents—like most people who live and work in the Northeast Kingdom—do not live close to work. A recent dataset (2011) shows that Newark residents primarily work in Caledonia and Orleans counties, with the remainder employed in widely scattered locations as far away as Burlington, Bennington, and Rutland.

About 40% of Newark residents live 50 miles or more from their employer (i.e., the employer who issues their W-2 form). Some of these residents may be field representatives for distant employers or may telecommute. Some may actually drive to a distant place of employment. The Census Bureau statistics may also be skewed by employers who issue all W-2 forms from a central, distant location.

About 40 Newark residents have employers located in Lyndon and St. Johnsbury. Although Newport is a major labor market and service center for the Northeast Kingdom, only about seven Newark residents have primary jobs in Newport or Derby.

According to ACS estimates, the median household income in Newark is \$45,809, which is just slightly higher than county-wide (\$45,395). The mean (average) household income in Newark, however, is \$54,494, considerably lower than mean county-wide income (\$57,426). This is because household incomes in Newark are weighted more heavily in the middle ranges—between \$35,000 and \$75,000.

Being largely a bedroom community, there is limited employment activity in Newark. Private-sector employment is mostly small goods-producing endeavors (home construction, arts and crafts, forestry) and various home-based businesses. A home occupation or business is defined as one conducted by the resident(s) of a residential building, which is carried out within the principal building or an accessory structure incidental to the dwelling, employs no more than four nonresidents, and does not substantially alter the character of the area. Newark encourages small, home-based businesses.

The Vermont Department of Labor Economic and Labor Market Information report for 2013 shows that Newark had 7 covered establishments employing 72 individuals, representing total wages of nearly \$2.3 million. This figure represents only employment activity that is covered by unemployment insurance and is likely to exclude small-scale employment activity, such as sole proprietorships.

The largest employers in Newark are the school and the town government. Collectively, they account for about 20 employees, some of whom live in Newark. Other Newark residents are employed in construction, professional and business services, and education and health services. Many Newark residents are self-employed in endeavors such as agriculture, forestry, and other home-based businesses.

10.2 *Tourism in Newark*

Economically, Newark is highly dependent on—and benefits from—tourism, an essential driver of the economy in the Northeast Kingdom. The characteristics that bring visitors to the region are the same ones that Newark residents treasure: rural character, wildlife, scenery, and recreational opportunities. Newark benefits greatly from its proximity to regional tourism facilities and activities, including skiing, snowmobiling, hiking, and bicycling.

Kingdom Trails Association (KTA), located in East Burke, provides a network of nonmotorized trails for all levels of ability. Known nationally for its mountain-biking opportunities, KTA reports approximately 80,000 user visits annually, with an economic impact greater than \$8 million. Twelve new businesses related to the recreation industry were created in the area since 2013.

The Northeast Kingdom Tourism and Travel Association (NEKTTA) has promoted the region as a geotourism destination.²⁸ The National Geographic Society defines geotourism as *Tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents*. As a result of NEKTTA’s campaign, the Northeast Kingdom has become a highly regarded geotourism destination. “Indeed the area is so special that in 2006 the National Geographic Center for Sustainable Destinations gave the region a Geotourism designation. Recently the Northeast Kingdom was ranked as the #1 Geotourism destination in the United States, and among the top 10 in the world.”²⁹

There are no restaurants, inns, hotels, or stores in Newark, but B&Bs have operated in the town and numerous cabins, cottages, and homes are available for vacationers to rent. Nearly half of Newark’s housing units are seasonal homes or camps (see Section 9). This helps the tax base in town and also brings outside money into the region.

²⁸ <http://www.travelthekingdom.com/about-geotourism.php>, accessed June 5, 2016.

²⁹ <https://www.vermontvacation.com/landing-pages/byways/northeast-kingdom-byway>, accessed June 5, 2016.

10.3 *Regional Perspective*

Since Newark is regarded as a bedroom community, economic development strategies are best viewed within a regional context. Life in the Northeast Kingdom region has long been marked by chronic underemployment and lagging personal incomes.

Historically, Caledonia County has had one of the highest unemployment rates in the state, and the unemployment rate in all three counties of the Northeast Kingdom has lagged the statewide rate.

Caledonia's annual average unemployment rate for 2013 was 5.3%, the third highest in the state after Orleans and Essex counties (6.2% and 5.8%, respectively.) The November 2014 non-seasonally adjusted figures put the county's unemployment rate at about 4.5%, compared to 4.0% statewide.

In 1990, the U.S. Congress created the EB-5 Program to stimulate the U.S. economy through job creation and capital investment by foreign investors. In the fall of 2012, an infusion of funds from the EB-5 program promised to bring a reversal of fortune to the Kingdom, with a number of large projects planned in the Jay, Newport, and Burke area. It appears, however, that local EB-5 funds may have been misappropriated, and the program is currently under federal receivership (spring 2016). On the other hand, significant development had already taken place at the Jay Peak and Burke ski areas. A 116-unit hotel and conference center at Burke Mountain opened in September 2016. Similarly in Jay, new ski amenities, as well as 100 new housing units and an 84-unit hotel, are completed or under way.

Other developments in the Kingdom include expansion to the Newport State Airport in Coventry and the designation of Foreign Trade Zone #286, which allows U.S.-based companies to defer, reduce, or eliminate customs duties on products admitted to the zone.

These developments will bring more people to the region. New hospitality and tourism jobs related to the resort development at both Jay and Burke are anticipated. Many of the hospitality jobs would require minimal postsecondary education. Indirect and induced job creation is also expected. Where newcomers might choose to live remains unclear, but the region is likely to see an increased demand for housing at various income levels, more visitors, and increased spending power.

In an economic analysis of job creation by counties between December 2009 and June 2014, economists in the Vermont Department of Labor found that Orleans County showed the greatest increase in job growth, with nonfarm jobs growing by 8.4%. Research also seems to suggest that traditional commuting patterns are shrinking. Although Census Bureau data do not show that Newark has a strong tie with the Burke or Newport labor markets, that relationship may change as employment opportunities expand. The Northeastern Vermont

Development Association (NVDA) continues to work with the state to monitor economic impacts.

10.4 *The Future of Newark's Economy*

Newark's economic future is inextricably linked to its access to the outdoors. Its rural beauty, large open tracts, and abundant wildlife are quality-of-life assets as well as economic engines. While it is important to measure the impacts of our region's outdoor economy in terms of the spending and jobs attributed to tourism and recreation, it is also important to recognize the broader benefits in terms of economic recruitment and workforce development. Research has shown that access to public lands, open spaces, and recreation correlates to higher levels of income and attracts skilled, higher wage jobs more rapidly than communities without such amenities.³⁰

Newark's goal is to maintain its unique rural atmosphere and natural scenic beauty, while encouraging the orderly and environmentally minded development of economic opportunities. Residents of the Northeast Kingdom view the rural character of the region, its natural resources, and its large tracts of undeveloped land as its most valuable resource and vital to an economic future that is most compatible with their lifestyles, sensibilities, and preferences. The Town of Newark encourages development that preserves and makes use of these economic drivers, respects the natural environment, and improves the well-being of residents. The town regards development that would compromise the rural character of the town, its natural resources, and its large tracts of undeveloped land as inconsistent with the town's vision and goals.

10.5 *Economic Development Goals*

Encourage economic development that is compatible with existing land use and the Newark Town Plan, thus preserving Newark's rural character.

- Support orderly development that encourages, promotes, and preserves the town's natural scenic beauty, unique character, historic built environment, quality of life, and the economic well-being of Newark's citizens.
- Promote economic development that honors the rural, historic, scenic, natural resources, and character of Newark.
- Encourage local tourism by supporting efforts to protect Newark's historic and natural resources and by expanding recreational and cultural opportunities for local residents and visitors.

Encourage new small-business development that is compatible with existing or traditional land

³⁰ Center for American Progress: "The Government Should Begin to Measure America's Powerful Outdoor Economy," January 2015.

use and consistent with local and regional plans.

- Support economic development—particularly in the agribusiness, wood products, and tourism/recreation “clusters”—that encourages environmentally sustainable small and home-based enterprises.
- Encourage other goods-producing endeavors, such as home construction, the arts, artisanal work, forestry, and agriculture.
- Create an inventory of existing and potential recreational opportunities in town.
- Encourage sustainable, low-impact commercial and recreational enterprise in Newark.

Promote access for local businesses and entrepreneurs to local, regional, state, and federal supports that provide opportunities for business development and growth through education, training, financing, technical assistance, and other services.

- Work with NVDA and service providers to expand access to high-speed internet so as to increase opportunities for home-based businesses or for telecommuting.
- Maintain open positive communication and partnerships with neighboring towns and NVDA in efforts to attract businesses to the area.
- Work with the NVDA to promote economic growth through the use of regional, state, and federal programs, such as tax-increment financing, tax-credit programs, revolving loans, and business-development grants.
- Promote local economic development and a skilled workforce by supporting access for Newark residents—young and old—to educational and training opportunities that provide technical, business, and environmental skills and inspire innovation and sustainable economic enterprises.
- Encourage the selectboard and planning commission to review and actively participate in Act 250 proceedings as well as in other state, regional, and local hearings that involve commercial development in order to represent the goals of the Newark Town Plan.
- Inform local entrepreneurs about the availability of small-business services and funds by making the information available through the town office.
- Encourage a diversity of local commercial and service enterprises that use as much local labor as possible.
- Encourage Newark residents to buy local and support the economic well-being of their fellow community members.
- Leverage our proximity to the NVDA’s industrial parks and support NVDA efforts to add amenities and encourage businesses to locate there.

11 Flood-Resilience Plan

11.1 *Existing Conditions and Flood Risks*

Most of Newark lies in the Passumpsic River watershed, which drains into the Connecticut River (see Map 7). Only a small portion of northernmost Newark is located in the Clyde River watershed, which drains north into Lake Memphremagog and on to the St. Lawrence River.

The Town of Newark supports the goals of the tactical basin plans to protect water resources in both the Passumpsic and Memphremagog watersheds.

The Passumpsic and its tributaries have frequently flooded, inundating areas to the south of Newark, especially Lyndon. The channel bed of the East Branch has been degraded by both human activities and storm events. As a result, the river's natural flood-protection mechanisms may not be sufficient to protect Newark or the downstream commercial, emergency, and transportation assets that are vital to Newark residents. It is therefore essential for Newark to preserve and enhance its floodwater storage capabilities in order to reduce the vulnerability of the town and of neighboring towns downstream.³¹

Newark's flooding history has largely involved transportation infrastructure—washouts resulting from undersized culverts and from beaver activity at the outlet of Newark Pond. Table 5 shows the flooding events that have occurred in Newark since 1989, according to the Federal Emergency Management Agency (FEMA). Flooding in 2002 and 2004 caused extensive road damage, with 9 damage sites in 2002 and 16 sites in 2004.

Table 5 Federal Disaster Declarations in Newark

Disaster Declaration #	Date	Total FEMA Public Assistance Received
840	1989	\$1,575
1063	August 1995	\$2,951
1428	July 2002	\$117,140
1559	September 2004	\$104,614

Source: Retrieved from FEMA.gov August 4, 2014. FEMA and the Federal Government cannot vouch for the data or analysis derived from these data after the data have been retrieved from the Agency's website(s) and/or Data.gov.

The town has sought to reduce future flood damage through an ongoing program to replace undersized culverts. However, the most cost-effective measures the town can take involve the identification and protection of its natural flood-protection assets: its floodplains, river corridors, wetlands, and upland forested cover. The best protection of these assets is to

³¹East Branch Passumpsic River Corridor Plan, Caledonia County Natural Resources Conservation District, January 2009.

discourage development that would compromise their effectiveness. Restoration of some of Newark's riparian areas would also improve Newark's flood resilience.

11.1.1 Floodplains

Floodplains are low-lying areas adjacent to a water source that become inundated as floodwaters rise up and spill out over a riverbank. Floodplains provide an important ecological function by storing floodwaters, reducing downstream flood velocities, and minimizing riverbank erosion. They also help protect water quality and habitat by filtering nutrients and impurities from runoff, processing organic wastes, and moderating temperature fluctuations.³²

FEMA prepares Flood Insurance Rate Maps (FIRMs) identifying Special Flood Hazard Areas, which are floodplains that are likely to become inundated during a significant flood known as a "base flood" or "100-year flood." The term "100-year flood" is misleading, though, because it creates the false impression that a flood of that magnitude will occur only once a century. What the term really means is that the base flood has a 1% chance of flooding in *any given* year. With a 1% annual chance, a structure in a Special Flood Hazard Area has more than a one-in-four chance of being affected by a flood during a 30-year mortgage. By comparison, the same structure has less than a one-in-ten chance of being damaged by fire over the same mortgage.³³

Interpretation of the FIRMs can be difficult, since they lack the type of detail usually associated with maps, such as streets. The maps are important, though, because they are used to determine the cost and availability of flood insurance.

The FEMA FIRM maps for Newark are available on-line³⁴ and in the Town Clerk's Office. The flood-hazard areas tend to be located in three types of locations:

- Low-lying lands around ponds, including Newark Pond, Center Pond, and Sawdust Pond.
- Wetland areas, including those situated west of Beck Pond Road, near Bean Brook (below Newark Hollow), and on either side of VT Route 114 near Hawk Rock and Moose Lane.
- Riparian areas, including a small section along the West Branch Passumpsic River near VT Route 5A and a much larger section along the East Branch Passumpsic River east of VT Route 114 below bridge B20 (see Map 15). This latter hazard area extends south all the way to the East Haven town line.

Developed areas around Newark Pond and, to a lesser extent, Center Pond may be at risk of inundation flooding and property damage during extreme high-water events. Of greater concern is the potential risk of inundation and fluvial erosion along VT Route 114, where the

³² Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials, FEMA 2005.

³³ www.floodready.Vermont.gov.

³⁴ FIRMs are available at <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=97795922&IFIT=1>; for the Newark map, use <https://msc.fema.gov/portal/advanceSearch#searchresultsanchor>.

risk of moving water poses a danger to homes, property, and infrastructure. Several structures are situated within or very close to the mapped river corridor and flood-hazard area and may be susceptible to erosion, flash flooding, and channel movement.

11.1.2 River Corridors

River channels are constantly undergoing physical adjustments. They might be slow, resulting from gradual stream-bank erosion or sediment deposit, or they might be sudden and dramatic, in the case of a stream-bank collapse. In fact, flood-related damage occurs frequently in Vermont, owing in part to the state's mountainous terrain.

The Vermont Department of Environmental Conservation describes a river corridor as the river's channel and enough adjacent land to provide "wiggle room" as the channel changes over time. Lands near stream banks are particularly vulnerable to erosion damage by flash flooding, bank collapse, and stream-channel dynamics.

A statewide base map of river corridors was released in November 2014. The map is essentially a computer model, completed on all streams with a watershed area of more than 2 square miles. Each river corridor includes a meander belt—the lateral extent that the river can move to maintain channel equilibrium—and an area extending from the edge of the meander belt to provide a natural vegetation buffer that can inhibit stream-bank erosion and dissipate stream energy. Over time, the base map can be updated to reflect field-based data as they become available. In Newark, the streams included in the base map are the East Branch Passumpsic, Sleeper Brook, Bean Brook, and the West Branch Passumpsic.

If buildings are sited in river corridors, not only are they at risk, but they pose a threat to downstream infrastructure, such as culverts, roads, and bridges. Downstream harm (a blocked culvert, for example) can, in turn, increase risks to upstream properties. Accordingly, Newark discourages development in its river corridors.

11.1.3 Uplands and Wetlands

Often missing from FEMA's FIRMs are natural assets that help reduce the impacts of downhill flows and help retain and filtrate drainage.

Proper management of upland areas plays an important role in minimizing flood hazards. Newark's topography consists of several north-south ridges. The town's rivers and streams, including Bean, Sleeper, and Roundy Brooks, the West and East Branches of the Passumpsic River, and many smaller tributaries, flow between these ridges. The most prominent north-south ridge is known as Hogback Mountain and includes Walker Mountain, Hawk Rock, Packer Mountain, and Sugar Hill. The forested cover on the higher elevations along this ridge is part of the largest block of contiguous forest in Newark (7,900 acres). While these areas are very

important for supporting wide-ranging species of wildlife, their flood-resilience function is also critical. Limiting the clearing of upland slopes will help attenuate flood flows and reduce stormwater runoff. Newark's forest cover, particularly in areas with steep slopes and high elevations (where headwaters are located), should be protected.

Wetlands also have the capacity to retain significant amounts of water. According to the Vermont Significant Wetlands Inventory maps, Newark's wetlands cover 1,292 acres and are divided among 98 discrete wetlands. They are mostly concentrated along the East and West Branches of the Passumpsic River and the Bean, Sleeper, and Roundy Brooks. The largest wetlands are found along the East Branch Passumpsic, Bean Brook, and a small tributary of the East Branch that drains Packer Mountain and Hawk Rock.

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 I wetlands and 50 feet of Class II wetlands. Any activity in a Class I or II wetland requires a state permit. The Town of Newark supports and assists the state in regulating and protecting wetlands.

11.1.4 Riparian Restoration Zones

Riparian areas consist of both the aquatic and the terrestrial ecosystems of streams, rivers, lakes, ponds, and wetlands.³⁵ Restoring compromised riparian areas can promote biodiversity, prevent erosion, protect water quality, and provide habitat and wildlife corridors.³⁶

The *Natural Resource Inventory of the Town of Newark* identified the highest value riparian restoration opportunities by means of a screening process that involved:

- Delineating 100-foot-wide buffers along streams and rivers.
- Identifying areas within buffer zones that are not currently covered by forest, shrubland, or wetland vegetation.
- Excluding sites with an existing building, road, or pond.
- Evaluating the remaining sites for restoration potential.

Of the sites evaluated, those given the highest priority for restoration lie along the East Branch of the Passumpsic River (see Map 17). According to the inventory, many of these sites could best be restored by planting appropriate native floodplain or wetland vegetation. Some unstable stream banks might require more aggressive treatment.³⁷

³⁵ Creating and Maintaining Resilient Forests in Vermont: Adapting Forests to Climate Change, Vermont Department of Forests, Parks and Recreation, May 2015, p. 40.

³⁶ *ibid.*, p. 53.

³⁷ Gerhardt, *Inventory*, pp. 51-53.

The inventory report emphasizes that restoring the appropriate vegetation and habitats would serve to store floodwaters, reduce stream-bank erosion, filter nutrients and sediments, and create high-quality fish and wildlife habitat.³⁸

11.1.5 Transportation Infrastructure

Newark has an ongoing program to upgrade and maintain its transportation infrastructure. The town has received assistance from the Caledonia County Natural Resources Conservation District (NRCDC), the NorthWoods Stewardship Center, and the Northeastern Vermont Development Association (NVDA).

- Newark received a Better Backroads grant (from the Vermont Agency of Transportation) to identify the conditions of smaller road erosion (ditching, driveway culverts, some crossover culverts). The NRCDC conducted an inventory, identifying and prioritizing projects. The inventory provides a budget framework for a 5-year plan to implement the projects. A Road Erosion Inventory and Capital Budget Plan is recommended every 5 years, to create a budget cycle for road-improvement projects as well as a tool for town officials to track road-improvement progress. Projects identified in the inventory may be eligible for additional Better Backroads grants.
- The NorthWoods Stewardship Center has helped the town address some of the deficiencies identified by the NRCDC project.
- In 2015, the NVDA worked with Lyndon State College to train individuals to assess the conditions of the town's short structures (bridges with spans between 6 and 20 feet), classifying them as "good," "fair," or "poor." This assessment will be important for identifying medium- to long-range costs for maintaining, upgrading, and repairing these bridges. Towns are responsible for inspecting their own short structures; the state does not do so.

Newark uses the data that these projects provide to update the state's inventory of bridges and culverts (www.vtculverts.org). The inventory currently includes 299 culverts, the majority of which are shown to be in fair or good condition (88%).

The state inventory shows five bridges on Newark's town highways, three of which are depicted on maps as short structures: B7 on Hollow Road located near the base of Center Pond, B9 on Maple Ridge Road, and B10 on Bald Hill Pond Road near Sawdust Pond.

11.2 *Vermont's Emergency Relief and Assistance Fund*

The flooding events in 2002 and 2004 each resulted in more than \$100,000 in damage to roads and bridges in Newark. Federal and state government assisted in covering the cost to repair the

³⁸ Gerhardt, *Inventory*, p. 53.

damages, but Vermont's formula for providing assistance has changed. As a result, future flooding events could cost Newark taxpayers more.

FEMA provides public assistance covering 75% (or more) of infrastructure damage resulting from a presidentially declared disaster. Vermont's Emergency Relief Assistance Fund (ERAF) used to cover 50% of the remaining damage, leaving the town responsible for 12.5% or less.

To encourage towns to undertake flood-resilience initiatives, Vermont has changed ERAF's rules. In order to qualify for full ERAF assistance, a town must now take *all* of the following steps, described more fully in the following subsections:

- Adopt the most current Town Road and Bridge Standards (which are listed in the *VTrans Orange Book: Handbook for Local Officials*).
- Adopt flood regulations that meet the minimum standards for enrollment in the National Flood Insurance Program (NFIP); note that actual enrollment is not required.
- Maintain a Local Emergency Operations Plan (LEOP).
- Adopt a FEMA-approved All-Hazard Mitigation Plan.

Towns that fail to meet these requirements will receive 30% assistance rather than 50% from ERAF, thus raising the town's share of the cost of a disaster from 12.5% to 17.5%.

Currently, Newark does not meet the new ERAF requirements. Thus, if Newark were to suffer \$100,000 in damages from a federally declared disaster, its share of the burden would be \$17,500. If the ERAF requirements were met, the burden would be \$12,500.

11.2.1 Town Road and Bridge Standards

The intent of Vermont's Town Road and Bridge Standards is to improve safety, reduce life-cycle costs, and reduce environmental impacts. Adoption of these standards may also increase the amount of state funding for repairs and replacement of bridges and culverts on town highways (Classes 1 through 3).

The state share for the replacement and repair of bridges and culverts is limited to \$175,000 per project. The local share is 20% of the project cost, but that share can drop to 10% if the town has adopted the standards *and* completed a highway infrastructure inventory within the past 3 years.

Thus, if Newark were to adopt the standards, the town's share of a \$100,000 project would drop from \$20,000 to \$10,000.

Newark has chosen not to adopt the state standards because they would be costly and impractical to implement on Newark's rural roads. Even with financial assistance from the state, adopting the standards would drive the town's highway budget to unsustainable levels.

Newark's road system is safe and flood resilient despite the town's decision not to adopt the state standards.

11.2.2 Flood-Hazard Regulations and the National Flood Insurance Program

Newark is not currently enrolled in NFIP. Enrolling in the program would enable Newark property owners to obtain affordable flood insurance. It would also help some property owners qualify for federally backed mortgages.

Enrolling in the NFIP would require Newark to adopt flood-hazard regulations for the Special Flood Hazard Areas designated on the FEMA Flood Insurance Rate Map. These are Sawdust Pond, a swamp to the west of Center Pond Road and Beck Pond, the East Branch of the Passumpsic River, Bean Brook, Newark Pond, Center Pond, tributaries of Howard Brook, and the brief portion of the West Branch Passumpsic near VT Route 5A. The most significant concentration of development in a Special Flood Hazard Area appears to be the East Branch, where six properties may be located in or near inundation hazard areas.

The (minimally compliant) regulations would not prohibit development in a Special Flood Hazard Area, but *new* development would have to meet certain standards, such as elevation or flood-proofing. If an existing residential structure in a hazard area were to suffer extensive flood damage, it would have to be brought into compliance. This might require, for example, elevating it and modifying its basement to allow flood waters to flow through.

While minimally compliant flood-hazard regulations will allow property owners to purchase flood insurance at more affordable rates, the regulations may not reduce flood risks. The minimally compliant standards still allow development in a Special Flood Hazard Area, so it is possible that new development could reduce the effectiveness of flood-protection assets and increase the vulnerability of other properties, roads, and bridges to flood risks.

The development and adoption of flood regulations might be both difficult and controversial, but it would be required in order to make affordable flood insurance available to Newark property owners and to make Newark eligible for the maximum amount of state aid through ERAF.

Even though Newark is not enrolled in the NFIP, the town encourages builders and property owners to meet NFIP's minimum requirements for new structures or substantially improved structures being built in a flood zone. Newark encourages inclusion of an additional 2 feet of freeboard above the base flood elevation for any new structure being built in the flood zone.

11.2.3 Local Emergency Operations Plan

The LEOP establishes lines of responsibility during a disaster and identifies high-risk populations, hazard sites, procedures, and resources. This information is particularly important in coordinating responses through mutual-aid towns and with regional and state entities.

The LEOP must be reviewed annually (after Town Meeting) in order to ensure that it is up-to-date with respect to community needs and contains correct contact information for critical responders. Copies are available at the Town Clerk's Office.

11.2.4 All-Hazard Mitigation Plan

The All-Hazard Mitigation Plan prioritizes hazard issues and details steps for addressing them. It is required by FEMA in order to receive grant funding for reducing or eliminating hazards. In 2005, a local All-Hazard Mitigation Plan was developed for Newark as an annex to the regional plan for the Northeast Kingdom. Since that time, the FEMA approval process has become more rigorous. It is likely that Newark will have to develop a single-jurisdictional plan if the town wishes to seek FEMA funds for mitigation projects, such as replacing bridges, elevating structures, acquiring repetitive-loss structures, or purchasing a generator for an emergency shelter.

11.3 *Instream Emergency Protective Measures*

Some flood and erosion hazards pose an immediate threat to safety and property. These hazards may require swift action that cannot be encumbered by standard permitting procedures. Vermont statute gives selectboards some authority to undertake stream-alteration measures when they are needed to prevent loss of life or severe property damage. However, such action needs to be taken in a manner that provides adequate notice to landowners, minimizes impacts to stream stability and habitat, and remains eligible for reimbursement by state and federal funds. Act 138, which was passed in 2012, establishes a protocol for taking emergency action.

Under Vermont law, a selectboard is authorized to approve an emergency protective measure if it meets the following conditions:

- It is necessary to preserve life or to prevent severe imminent damage to public or private property, when such property has experienced damage or is under threat of imminent failure within the next 72 hours.
- It is limited to the minimum amount necessary to remove imminent threats to life or property. To meet this criterion, the emergency measures must be proportional to the threat and shall cease when the threat to life or of severe damage to a property has ended.

The emergency measure must meet the Agency of Natural Resources' (ANR) implementation standards for stream alterations. As soon as a municipality approves an emergency protection measure, the municipality must notify the ANR within 24 hours. It is very important that local officials are aware of required procedures so that they can act swiftly and decisively when an emergency arises.

11.4 *Flood-Resilience Goals*

Protect water resources and areas essential to floodplain function, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests to reduce the risk of flood damage to infrastructure and property.

- Work with landowners to preserve and restore riparian areas in order to improve coverage of native plants in floodplains and wetlands.
- Work to increase forest cover in riparian areas and upland forests adjacent to riparian areas and wetlands so as to moderate stream temperatures, maintain wildlife corridors, and mitigate flooding impacts.
- Work with the ANR and Agency of Agriculture to ensure that forest-management plans improve, rather than reduce, flood resilience; that property owners adhere to forest-management plans; and that agricultural practices do not detract from flood resilience.
- Support the conservation of lands located within the FEMA-mapped flood-hazard areas, especially important upland areas that protect watershed functions, and undeveloped river corridor areas along the East and West Branches of the Passumpsic River, where flood and fluvial erosion pose a significant risk to nearby properties, homes, and infrastructure.
- Support orderly development that encourages, promotes, and preserves the town's water and forest resources and oppose development or land-use changes that are counter to the health and function of Newark's watersheds.
- Review and actively participate in Act 250 and Section 248 proceedings and in other state, regional, and local hearings that involve development that may impact water resources so as to represent the goals of the Newark Town Plan.
- Work with landowners in priority areas with important floodplain protection or restoration opportunities to encourage participation in conservation and restoration programs.

Establish and sustain flood-hazard education and outreach efforts to support flood-damage mitigation and to help protect community residents and property against future flood damage.

- Support established guidelines for forestry (Best Management Practices) and agriculture (Required Agricultural Practices) that reduce runoff and impacts to riparian areas by making information available through the town office.
- Consider standards for stream-bank setbacks and buffers based on geomorphic

standards and river-corridor information identified by the Vermont Department of Environmental Conservation.

- Work with the Newark Selectboard to review and update the town's LEOP and All-Hazards Mitigation Plan.
- Work with the Newark Selectboard to evaluate the costs and benefits of meeting the state's ERAF requirements.
- Coordinate with the NVDA, Vermont League of Cities and Towns, state agencies, and others to conduct a workshop to inform Newark's citizens and taxpayers about flood resilience.

Ensure that the town and its facilities are prepared to meet the demands of the next flood by mitigating flood hazards and minimizing risk exposure in a sustainable, cost-effective manner.

- Work with the selectboard to determine the next steps on how best to proceed with Newark's flood-resilience plan.
- Work with the selectboard and road commissioner to keep the town's road-erosion inventory and capital-budget plan current and updated in the state database of bridges and culverts.
- Work with NVDA, the state, and others to identify funding for necessary capital improvements.
- Work with the selectboard and road commissioner to ensure that all maintenance and new infrastructure projects meet best practices for flood resilience.

12 Regional Context, Adjacent Towns, and State Goals

The towns of Westmore, Ferdinand, Sutton, Burke, East Haven, and Brighton border Newark. These towns are also rural in nature. Westmore, Sutton, Burke, Brighton, and the Unified Towns and Gores (UTG, of which Ferdinand is a part) have town plans that are very similar in content to Newark's. Unlike Newark, however, these neighboring towns have adopted zoning bylaws. Among Newark's neighbors, only East Haven has neither a town plan nor zoning bylaws.

While Newark's town plan shares visions and goals with the Northeastern Vermont Development Association's (NVDA) regional plan and the plans of the surrounding towns, all but one of the six abutting towns regulate development more strictly than does Newark. Thus, Newark may be attractive for development activities that cannot pass muster under the zoning bylaws of neighboring towns. Residents should be particularly aware of zoning districts that abut Newark. These are described below in the sections relating to each of the towns.

The Newark Selectboard and Newark Planning Commission keep current with the area's development plans and issues by participating in monthly planning meetings and by attending various planning-related workshops offered by Vermont state agencies, the NVDA, and the Vermont League of Cities and Towns.

While the NVDA provides a framework for Newark to work cooperatively with neighboring towns, members of Newark's town government have attended planning commission and development review board meetings in adjoining towns. The Newark, Brighton, and Unified Towns and Gores (of Essex County) have conferred and held joint meetings.

12.1 NVDA

Newark supports the NVDA and stays abreast of regional development plans and issues. Newark's town plan is both compatible with and supportive of the visions and goals of the NVDA's regional plan.

12.2 Burke

The area of Burke that abuts Newark is a low-density district called "Agricultural – Residential II." The stated purpose of this district is to "maintain and preserve the agricultural character and scenic qualities of outlying areas while providing the opportunity for low-density residential housing, limited non-residential development and the continued operation and expansion of agricultural operations, forest management, and other resource based activities."³⁹ This district has a 5-acre minimum lot size. It should also be noted that this district allows for commercial

³⁹ Town of Burke Zoning and Subdivision Regulations, July 11, 2011, P. 13.

and industrial uses, such as earth extraction, heavy equipment yards, log and lumber yards, and truck terminals, although many of these uses are limited to VT Route 5. Much of the area in question is in a “Scenic Conservation Overlay” (i.e., areas with an elevation of 1,500 feet or more), which gives the Burke Development Review Board a degree of discretion regarding clearing of forested cover and landscaping when approving building sites.⁴⁰ The town is currently contemplating the use of performance standards that might accommodate a broader array of industrial uses in this area.

The ski resort on nearby Burke Mountain is undergoing substantial development under a plan that includes more than 1,000 living units, hotels, and other commercial buildings and businesses. The first large hotel is expected to open in September 2016; the remaining plans are unclear at the present time. The Burke Mountain development will impact Newark and its citizens. Development plans in Burke, as well as in other neighboring towns, are reviewed on an ongoing basis by the Newark Selectboard and the Newark Planning Commission.

12.3 *Brighton*

The area of Brighton that abuts Newark is characterized by forestry and agriculture, as well as by camps and scattered homes. There are few roads and limited electrical infrastructure in this district. While the camps and homes rely on on-site water and wastewater disposal, area soils tend to have difficulty supporting on-site wastewater disposal. The town of Brighton considers many areas of this district to have “great scenic values that would be lost, if the land were overdeveloped.” To protect its scenic assets, the 2013 Brighton Town Plan says that any development on its mountains “should not extend above the tree line.” Brighton’s “Rural Lands” district (minimum 5 acres) largely consists of single-family dwellings and camps, although earth extraction is permitted. The Brighton Town Plan has provisions for planned residential development.⁴¹

12.4 *Ferdinand*

Where Ferdinand abuts Newark is wooded with no public-road access. Commercial, industrial, and residential development is restricted to 500 feet of the centerline of publicly owned and maintained roads. The UTG has a Conservation Overlay for areas with hydric soils and wetlands, slopes greater than 20%, critical natural wildlife habitat, and elevations greater than 2,500 feet.

An industrial wind-energy project was proposed for a ridgeline in Ferdinand in 2012. UTG voters and property owners soundly rejected the proposal. In 2014, the UTG adopted a town plan that states, “The UTG absolutely prohibits any commercial energy generation facility upon the

⁴⁰ Burke Zoning, p. 15.

⁴¹ Brighton Town Plan, April 15, 2013, p. 32.

ridgelines or mountain areas.”⁴² This explicit discouragement of industrial wind turbines is similar to the language contained in this Newark Town Plan.

12.5 *Sutton*

The area of Sutton that abuts Newark is considered “rural,” which, according to its land-use objectives, provides for “limited residential development” and for activities that are deemed compatible with agriculture and forestry. Manufacturing and commercial uses may be approved conditionally. The maximum allowable density abutting Newark is 2 acres.

Industrial wind turbines in neighboring Sheffield encroach on Sutton, adversely impacting the town. The 2013 Sutton Town Plan states that “such developments because of their visual impact, their accompanying noise, their potential impact on wildlife and the environment, and their impact on property values are not appropriate for these areas (high elevation ridgelines) or in adjacent areas in other towns where Sutton’s viewshed is affected.”⁴³

12.6 *Westmore*

Westmore’s zoning has two minimum lot sizes: 20,000 square feet for shoreland development and 40,000 square feet for all others. The town is zoned for very limited commercial development. The commercial development that is allowed (conditionally) is largely related to retail and hospitality industries. Westmore’s town plan states, “Large scale commercial wind development, including test towers is incompatible with our community’s rural character and land use values.”⁴⁴

12.7 *East Haven*

East Haven borders Newark to the east. East Haven has neither a town plan nor zoning regulations.

12.8 *State Planning Goals*

The Newark Town Plan meets all relevant state planning goals as required by statute.

Goals/Objective	Addressed in Plan?	Comment
(1) To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.	Yes	Historic settlement patterns are referenced in sections on land use, transportation, and housing. Protection of rural countryside is a primary goal of the town and a theme of the Newark Town Plan.

⁴² Unified Towns & Gores of Essex County, Vermont LOCAL DEVELOPMENT PLAN, October 13, 2014, p. 22.

⁴³ Sutton Town Plan, October 24, 2013, p. 20.

⁴⁴ Westmore Town Plan, April 8, 2013, p. 31.

(A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.	Yes	Newark does not have the infrastructure to support intensive residential development. The plan discourages strip development. See Section 3.6.4.
(B) Economic growth should be encouraged in locally designated growth areas, employed to revitalize existing village and urban centers, or both, and should be encouraged in growth centers designated under chapter 76A of this title.	Yes	Newark has no growth centers; the plan directs economic growth to regional centers, which have the appropriate infrastructure. See Sections 3.6.6 and 10.5.
(C) Public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.	Yes	Newark's road system is its primary infrastructure. The town discourages the development of new roads. See section 3.6.4.
(D) Development should be undertaken in accordance with smart-growth principles as defined in subdivision 2791(13) of this title.	Yes	Smart-growth principles are discussed in the sections on energy in housing.
(2) To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita incomes.	Yes	See Section 10.
(3) To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.	Yes	See Section 7.
(4) To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.	Yes	See Section 4.
(A) Highways, air, rail, and other means of transportation should be mutually supportive, balanced, and integrated.	Yes	In the absence of air, rail, or public transportation, the accommodation of pedestrian and bicycle traffic and the promotion of Park and Ride facilities are the primary mechanisms available to Newark. See section 4.
(5) To identify, protect, and preserve important natural and historic features of the Vermont landscape, including:	Yes	This is a theme of the Newark Town Plan.
(A) Significant natural and fragile areas;	Yes	This is a theme of the Newark Town Plan.
(B) Outstanding water resources, including lakes, rivers, aquifers, shore-lands, and wetlands;	Yes	This is a theme of the Newark Town Plan.
(C) Significant scenic roads, waterways,	Yes	This is a theme of the Newark Town Plan.

and views.		
(D) important historic structures, sites, or districts, archaeological sites, and archaeologically sensitive areas.	Yes	See Section 6.2.
(6) To maintain and improve the quality of air, water, wildlife, and land resources.	Yes.	This is a theme of the Newark Town Plan.
(A) Vermont's air, water, wildlife, mineral and land resources should be planned for use and development according to the principles set forth in 10 V.S.A. § 6086(a).	Yes.	See Section 3.7.
(B) Vermont's water quality should be maintained and improved according to the policies and actions developed in the basin plans established by the Secretary of Natural Resources under 10 V.S.A. § 1253.	Yes.	See Sections 3.5 and 11.
(7) To encourage the efficient use of energy and the development of renewable energy resources.	Yes	See Section 8.
(8) To maintain and enhance recreational opportunities for Vermont residents and visitors.	Yes	See Sections 3.6.5 and 10.
(A) Growth should not significantly diminish the value and availability of outdoor recreational activities.	Yes	See Sections 3.6.5 and 10.
(B) Public access to noncommercial outdoor recreational opportunities, such as lakes and hiking trails, should be identified, provided, and protected wherever appropriate.	Yes	See Sections 3.6.5 and 10.
(9) To encourage and strengthen agricultural and forest industries.	Yes	See Section 10.5.
(A) Strategies to protect long-term viability of agricultural and forest lands should be encouraged and should include maintaining low overall density.	Yes	Plan contains numerous suggestions for minimizing fragmentation of working lands.
(B) The manufacture and marketing of value-added agricultural and forest products should be encouraged.	Yes.	See Section 10.5.
(C) The use of locally grown food products should be encouraged.	Yes	Establishment of a local food economy and preservation of agricultural lands are themes of the Newark Town Plan.
(D) Sound forest and agricultural management practices should be encouraged.	Yes	See Sections 3, 6, and 11.
(E) Public investment should be planned so as to minimize development pressure on agricultural and forest land.	Yes	Preservation of agriculture and forest land are themes of the Newark Town Plan.
(10) To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of the aesthetic qualities of the area.	Yes.	The preservation of natural resources is a theme of the Newark Town Plan. Extraction of nonrenewable earth resources is addressed explicitly in Section 6.4.

(11) To ensure the availability of safe and affordable housing for all Vermonters.	Yes	See Section 9.
(A) Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.	Yes	See Section 9.
(B) New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers, and coordinated with the provision of necessary public facilities and utilities.	Yes	Newark lacks employment and commercial centers and many public facilities. The Newark Town Plan supports these goals to the extent feasible. See Section 9.
(C) Sites for multi-family and manufactured housing should be readily available in locations similar to those generally used for single-family conventional dwellings.	Yes	Newark lacks employment and commercial centers and many public facilities. The Newark Town Plan supports these goals to the extent feasible. See Section 9.
(D) Accessory apartments within or attached to single-family residences that provide affordable housing in close proximity to cost-effective care and supervision for relatives, elders, or persons who have a disability should be allowed.	Yes	See Sections 3.6.4 and 9.
(12) To plan for, finance, and provide an efficient system of public facilities and services to meet future needs.	Yes.	The Newark Town Plan supports efficient public facilities and services and supports planning through the use of a capital budget.
(A) Public facilities and services should include fire and police protection, emergency medical services, schools, water supply, and sewage and solid-waste disposal.	Yes	See Sections 5 and 7.
(B) The rate of growth should not exceed the ability of the community and the area to provide facilities and services.	Yes.	See Sections 3.6.4, 7.3, and 9.
(13) To ensure the availability of safe and affordable child care and to integrate child-care issues into the planning process, including child-care financing, infrastructure, business assistance for child-care providers, and child-care work force development.	Yes	See Section 7.1.
(14) To encourage flood-resilient communities.	Yes	See Section 11.
(A) New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion.	Yes	See Section 11.
(B) The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and	Yes	See Section 11.

fluvial erosion should be encouraged.		
(C) Flood-emergency preparedness and response planning should be encouraged.	Yes	See Section 11.

13 Implementation Plan

The plan recommends many different actions to work toward our vision for the future. The implementation plan lists each recommendation and suggests a time frame in which it will be accomplished or begun. Since planning is a dynamic process, the priorities may change somewhat over time. “OG” indicates that the action is ongoing and is implied for many actions with a recommended start date.

The following abbreviations are used:

BC=Building Committee; CC=conservation commission; EC=energy coordinator/committee; L=listers; LA=lake/pond association; NSS=school board/community; NVDA=Northeastern Vermont Development Association (regional planning commission); PC= planning commission, RC=road commissioner; SB=selectboard, TBD=Unknown, to be determined; TC=town clerk; VFD=Newark Volunteer Fire Department; WMD=waste management district.

Note: These are abbreviated versions of the recommendations. For the full text, please refer to the section within the plan.

<u>Action</u>	<u>When</u>	<u>Who</u>
LAND USE		
Establish a Newark Conservation Commission	2017	SB, PC
Assist Newark landowners to conserve forest and agricultural lands, implement management plans, enroll in the state’s Current Use program, participate in the Forest Legacy Program, and use other state and federal assistance programs	OG	PC, CC
Work with landowners to keep lands open to recreation and discourage activities that degrade the environment, violate rights of property owners, or interfere with other positive uses of Newark lands	OG	PC, CC
Participate in proceedings under Act 250, Section 246, and Section 248 to ensure that Newark’s conservation objectives are understood and considered	OG	PC, SB
Make landowners aware that, under Vermont’s Landowner Liability Law, they are not liable for injuries to recreationalists who use their land	2017	PC, TC
Discourage development and incompatible activities that damage headwaters or compromise the integrity of forests and prime agricultural lands	OG	PC, SB
Develop mechanisms that promote Newark’s forest and farm products and support farming operations	OG	PC, SB
Participate in the development of management plans for state recreational	OG	PC, SB

facilities in Newark		
Explore land-acquisition opportunities for other recreational assets	OG	PC, CC, SB
Explore tax-stabilization options to help forest and farmland owners avoid parcelization	OG	PC, CC, SB
Encourage home-based occupations and small businesses such as forestry, agriculture, arts, and home construction	OG	PC, SB
Maintain working relationships with ANR and Agency of Agriculture personnel and stay abreast of programs that help farmers and farmland owners	OG	PC, SB
Support NVDA's efforts to promote industrial parks that provide infrastructure and services to support industrial development in the region	OG	SB, PC
Seek grant money to identify and preserve sites, buildings, and features that have environmental or historical significance	2018	PC, CC
Work with the Conservation Commission to identify historical sites and features in Newark	OG	CC, PC, NSS
TRANSPORTATION		
Carry out road improvements so as to protect, conserve, and enhance natural resources, scenic features, and wildlife	OG	RC, SB
Cooperate with VTrans and neighboring towns to provide an effective transportation system	OG	RC, SB
Adopt construction and maintenance practices that minimize maintenance costs	OG	RC, SB
Seek grants for road-improvements expenses	OG	RC, SB, PC
Prioritize maintenance of existing roads over upgrades to Class 4 or private roads	OG	RC, SB
Create a long-term road-improvement program and review periodically	OG	RC, SB
Design new culverts for high-flow events and aquatic passage	OG	RC
Work with VTrans to identify conflicts between wildlife and transportation and identify solutions	OG	RC, PC, CC
Ensure that new roads and lot layouts minimize fragmentation of habitats, forests, and farmland	OG	RC, SB, PC, CC
Ensure that adequate standards are followed in upgrading Class 4 and private roads to Class 3, including landowner payment and consistency with the Town Plan	OG	RC, SB, PC
Cooperate with NVDA and neighboring communities to encourage public transportation, ride sharing, and Park and Ride facilities	OG	PC, SB, RC
Conduct a town-wide survey of bike-ped trails, routes, and resources to assess	2018	PC, CC, NSS

opportunities for development		
Encourage development of community pathways and trails for bike-ped use	2018	PC, CC, NSS
Increase safety for bike-ped and other uses on Newark Street	2018	PC, SB, NSS
Encourage access to high-speed Internet services to reduce the need for commuting	OG	SB, PC
UTILITIES AND FACILITIES		
Assess present condition and future needs of Town Clerk's Office, Town Garage/Fire Department, and Town Hall and seek funds for renovations or replacements	2018	BC, SB, PC
Work with selectboard, town clerk, fire department, and road commissioner to address on-going priorities for town properties	2018	PC, TC, SB, VFD, RC
Establish a Conservation Commission to guide management of the Town Forest, support resource-conservation projects, and provide resources for landowners	2017	SB, PC, CC
Support pew holders who care for Newark Union Church	OG	SB, PC, CC
Encourage formation of Newark Historical Society or Committee to preserve town's history and highlight community's historic sites, buildings, and artifacts	2018	SB, PC, CC
Work with selectboard and cemetery sexton to ensure that town cemeteries are maintained	OG	SB
Participate in and support efforts of Town Building Committee to ensure adequate facilities in Newark	OG	PC, BC, TC
Ensure that all road names are posted clearly and encourage property owners to display E911 numbers	OG	RC, VFD, SB, PC
Encourage community support and membership in Newark Volunteer Fire Department	OG	VFD, SB, PC, NSS
Encourage efforts to reduce solid waste	OG	SB, CC, BC
Educate residents about universal recycling and appropriate disposal of items by making information available	OG	WMD, SB, PC, TC, CC
Work with selectboard and the Waste Management District to support state enforcement of waste-disposal laws	OG	WMD, SB, PC, CC
Encourage owners of junk vehicles to dispose of or store them properly	OG	WMD, SB, CC
Encourage residents to decrease solid waste by reducing use of disposable items and recycling all possible items	OG	WMD, SB, CC, TC
Work with NVDA, the state, and other consumers to urge providers to continue line and equipment upgrades for better phone and high-speed	OG	SB, PC, TC, NVDA

internet service		
PRESERVATION		
Establish Newark Conservation Commission	2017	SB, PC, CC
Support efforts to protect important natural and recreational areas through sustainable management, easements, and acquisition	OG	PC, CC
Encourage sustainable forest-management practices	OG	PC, CC
Support community standard opposing large-scale commercial and industrial facilities on town's ridgelines and high-elevation areas	OG	PC, SB, CC
Urge residents, property owners, and visitors to be attentive to the amount and timing of noise, especially near town ponds	OG	PC, SB, CC, LA
Encourage residents and property owners to minimize exterior lighting impacts on night-sky by making best practices information available at Town Clerk's Office	2017	PC, CC, TC
Encourage roofing and exterior colors that are congruent with natural surroundings, especially near ponds and scenic areas	OG	PC, CC, LA, TC
Discourage development and land uses that fragment or compromise Staying Connected Initiative habitat linkage area through education, easements, or land acquisition	OG	PC, CC
Preserve historic resources by identifying and protecting sites, buildings, and features that contribute to Newark's rural, working landscape	OG	PC, CC, SB
Distribute Newark Town Plan through Town Clerk's Office and encourage individuals to be mindful of the town's preservation goals	2016	PC, CC, TC
EDUCATION		
Find creative ways to pay for unfunded state and federal mandates	OG	NSS, SB
Support efforts to design and implement cost-effective educational plans	OG	NSS
Encourage continued participation of local residents in school activities	2016	NSS
Encourage collaboration with neighboring towns to ensure a rich offering of school programs and opportunities	OG	NSS
ENERGY		
Evaluate role of Newark Energy Coordinator and consider establishing Energy Committee	2017	PC, SB, EC
Work with Efficiency Vermont and state agencies to increase awareness of incentive programs	OG	EC, PC, SB, TC

Encourage conversion to modern wood heating	OG	EC
Encourage builders to adopt best energy practices in new construction	OG	EC
Encourage residents to upgrade thermal efficiency of existing buildings	OG	EC
Encourage residents to consider solar hot water	OG	EC
Explore ride-sharing programs	OG	PC, RC, EC
Explore the creation of Park and Ride facilities with neighboring communities	2018	PC, RC
Encourage cooperative transportation arrangements for Newark's high school students	OG	NSS
Encourage small net-metering projects	OG	EC, PC
Discourage large-scale net metering that might saturate local distribution lines	OG	EC, PC
Collaborate with VEC and LED to help Newark homeowners net meter	OG	EC, PC
Collaborate with VEC and LED to identify appropriate locations for electrical generation, consistent with Newark's goals and vision	2017	EC, PC
Promote awareness of local sources of energy and opportunities to employ renewable energy in applications that are compatible with Newark's vision and goals	OG	EC, PC
Explore opportunities to establish an appropriately sited community solar facility to power municipal properties	2017	EC, PC, SB, BC
Recommend cost-effective energy conservation and efficiency measures as well as modifications that will make use of renewable energy	2017	EC, PC
Implement energy efficiency measures for existing and future community facilities as opportunities arise	OG	EC, PC, SB, BC
Prioritize modifications and efficiency improvements and incorporate them into town's capital budget	OG	SB, BC, EC
HOUSING		
Support housing that reinforces historic settlement patterns and preserves and improves existing structures	OG	PC, BC
Preserve historic buildings as an important part of the town's heritage	OG	PC, BC
Explore the use of regulatory and nonregulatory methods of managing growth, discouraging types of development that would alter the character of the town or strain local transportation, safety, and health systems	OG	PC, SB
Explore the creation of village designation in the Newark Street area	2019	PC, SB
Locate future public community facilities in the Newark Street village area	2017	SB, BC, PC
Avoid fragmentation in outlying areas by designing development so that the extension of roads, driveways, and infrastructure is minimized or shared	2017	SB, BC

Promote smart-growth principles for subdivisions so as to avoid unnecessary fragmentation of wildlife habitats and distinct timber stands and to allow for access for long-term forest-management	2017	SB, PC
Ensure a variety of housing units for all income levels and rehabilitate existing structures when possible	OG	SB, PC
Task the Building Committee to evaluate the town's future needs for affordable and senior housing	2019	SB, PC, BC
Keep housing affordable by encouraging appropriately sized lots, accessory dwellings, and clustered developments, consistent with desire to maintain Newark's rural quality	OG	SB, PC, BC
Promote and support federal and state programs for weatherization, rehabilitation, and home financing; construction and improvement of affordable housing; and housing for seniors by making information available through Town Clerk's Office	2018	SB, PC, TC, BC, EC
Encourage housing in Newark that is sufficiently valued to help defray the cost of public services	OG	SB, PC
Support efforts to weatherize homes, increase energy efficiency, and reduce energy consumption	OG	SB, PC, EC
Plan future housing for locations that complement existing or planned employment locations, reduce travel times and the need for road upgrades and extensions, and minimize the energy spent on transportation	OG	SB, PC, EC
Incorporate sound principles of site design for reducing energy use	OG	SB, PC, EC
Compile examples of energy-efficient site design, landscaping, and structure design to guide builders, and homeowners in order to promote high-quality, energy-efficient, and environmentally sound housing	OG	SB, PC, EC, BC
ECONOMIC DEVELOPMENT		
Support orderly development that encourages, promotes, and preserves the town's scenic beauty, character, historic built environment, quality of life, and economic well-being of Newark's citizens	OG	SB, PC
Promote economic development that honors the rural, historic, scenic, natural resources, and character of Newark	OG	SB, PC
Encourage local tourism by protecting historic and natural resources and expanding recreational and cultural opportunities for residents and visitors	OG	SB, PC, CC
Support economic development that encourages environmentally sustainable small and home-based enterprises	OG	SB, PC
Encourage goods-producing endeavors, such as home construction, the arts, forestry, and agriculture	OG	SB, PC

Create an inventory of existing and potential recreational opportunities in town	2018	PC, CC, NSS
Encourage sustainable, low-impact, commercial and recreational enterprise	OG	PC, SB, CC
Work with NVDA and service providers to expand access to high-speed Internet	OG	SB, PC
Maintain open communication and partnerships with neighboring towns and NVDA to attract businesses to the area	OG	SB, PC
Work with the NVDA to maximize benefit from regional, state, and federal programs to support local economic growth	OG	SB, PC
Promote local economic development and a skilled workforce by supporting access to educational and training opportunities	OG	SB, PC
Encourage selectboard and planning commission to review and participate in Act 250 proceedings and other state, regional, and local hearings that involve commercial development	OG	SB, PC
Inform local entrepreneurs about small-business services and funds by making information available through the town office	2019	PC, SB, TC
Encourage a diversity of local enterprises that use local labor	OG	SB, PC
Encourage residents to buy local and support fellow community members	OG	SB, PC
Leverage our proximity to the NVDA's industrial parks and support NVDA efforts to add amenities and encourage businesses to locate there.	OG	SB, PC
FLOOD RESILIENCE		
Work with landowners to preserve and restore riparian areas	OG	PC, CC, SB
Work to increase forest cover in riparian areas and upland forests adjacent to riparian areas and wetlands	OG	PC, CC, SB
Work with ANR and Agency of Agriculture to ensure that property owners adhere to forest-management plans that improve flood resilience and agricultural practices that do not detract from flood resilience	OG	PC, CC
Support the conservation of lands located in the FEMA-mapped flood-hazard areas	OG	PC, CC, SB
Support orderly development that preserves the town's water and forest resources and oppose development that negatively impacts watershed health and function	OG	PC, CC, SB
Review and participate in Act 250, Section 248, and other proceedings that involve development that may impact Newark's water resources	OG	PC, CC, SB
Work with landowners in priority areas with important floodplain protection or restoration opportunities to participate in conservation and restoration	OG	PC, SB

programs		
Support best practices guidelines in forestry and agriculture and make information available in the town office	OG	PC, SB, TC
Consider standards for stream-bank setbacks and buffers based on geomorphic standards and river-corridor information identified by the Vermont Department of Environmental Conservation	2019	PC, SB
Work with Newark Selectboard to review and update the town's LEOP and All-Hazards Mitigation Plan	2017	PC, SB
Work with Newark Selectboard to evaluate costs and benefits of meeting the state's ERAF requirements	2017	PC, SB
Coordinate with NVDA, Vermont League of Cities and Towns, and others to conduct a workshop on flood resilience	2017	PC, SB
Work with selectboard to determine next steps in Newark's flood-resilience plan	2017	PC, SB
Work with selectboard and road commissioner to update town road-erosion inventory and capital-budget plan	OG	PC, SB, RC
Work with NVDA and others to identify funding for necessary capital improvements	OG	PC, SB, RC
Work with selectboard and road commissioner to ensure that all maintenance and new infrastructure projects meet best practices for flood resilience	OG	PC, SB, RC



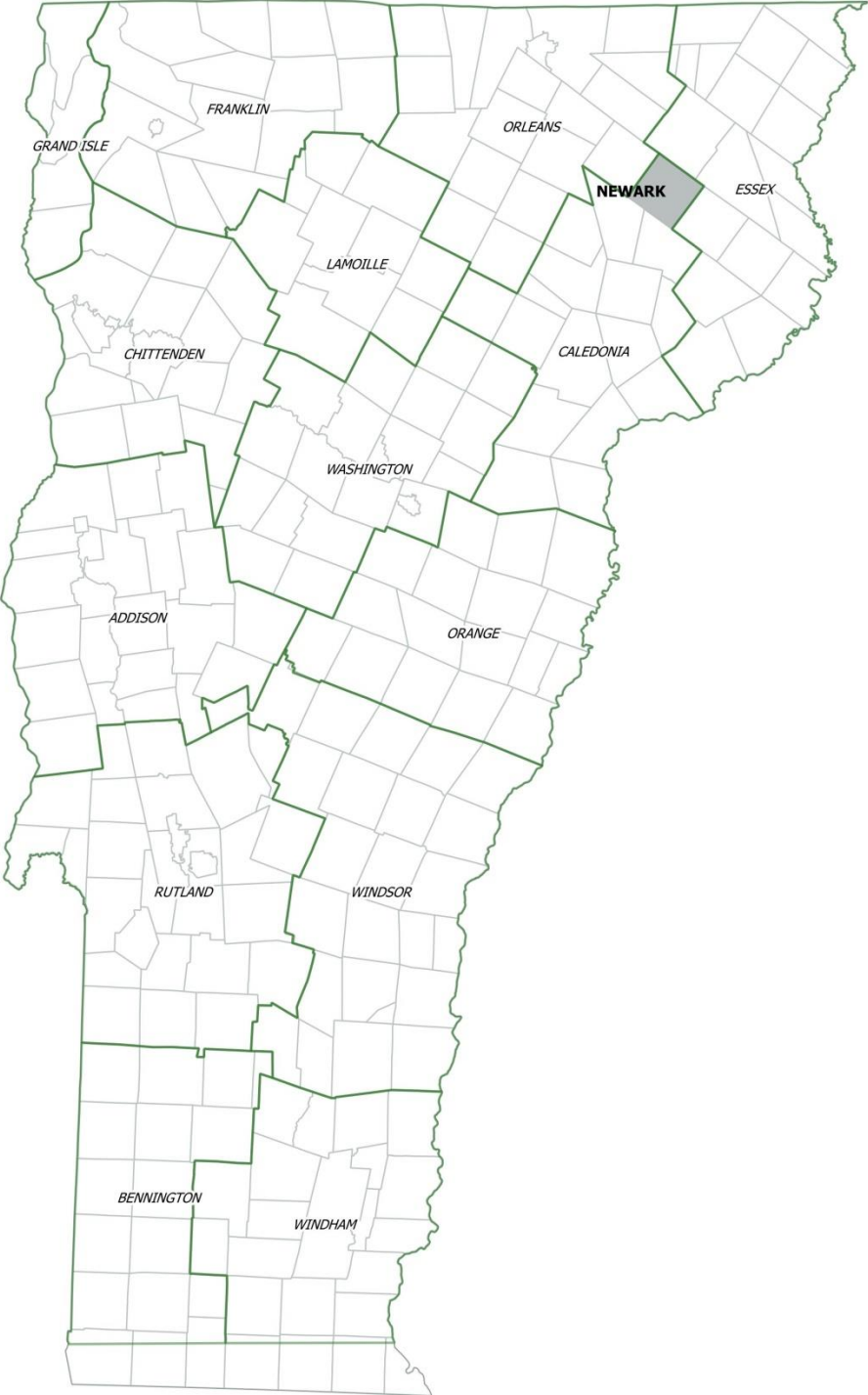
**2016 Town Plan
Newark, Vermont
December 14, 2016
Appendix A—Maps**

Table of Maps

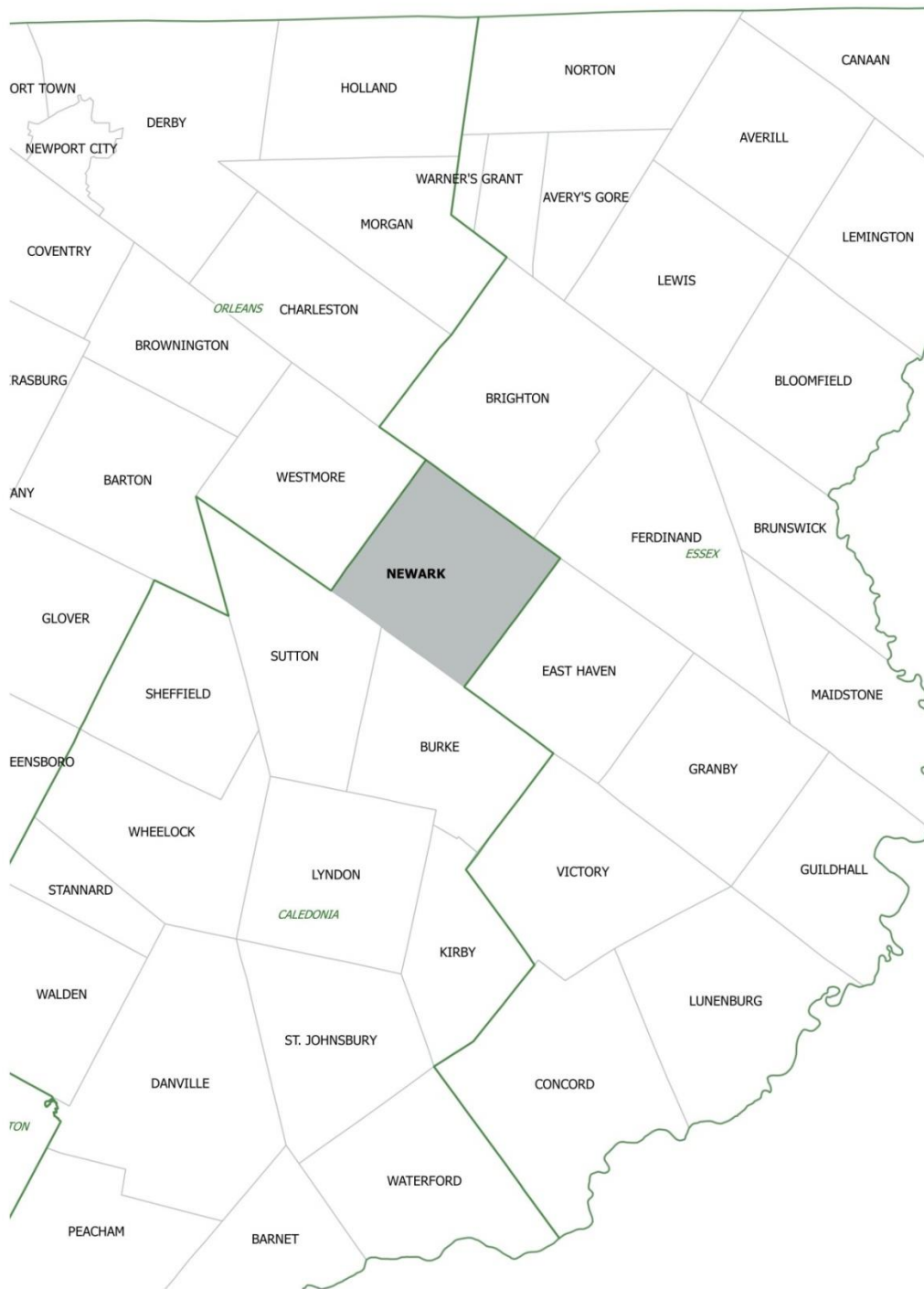
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These maps were gathered from a variety of sources, including archives, the *Newark Natural Resource Inventory*, the Staying Connected Initiative, and various state agencies. Some of the maps were constructed for the Newark Town Plan with data obtained from state and federal sources.

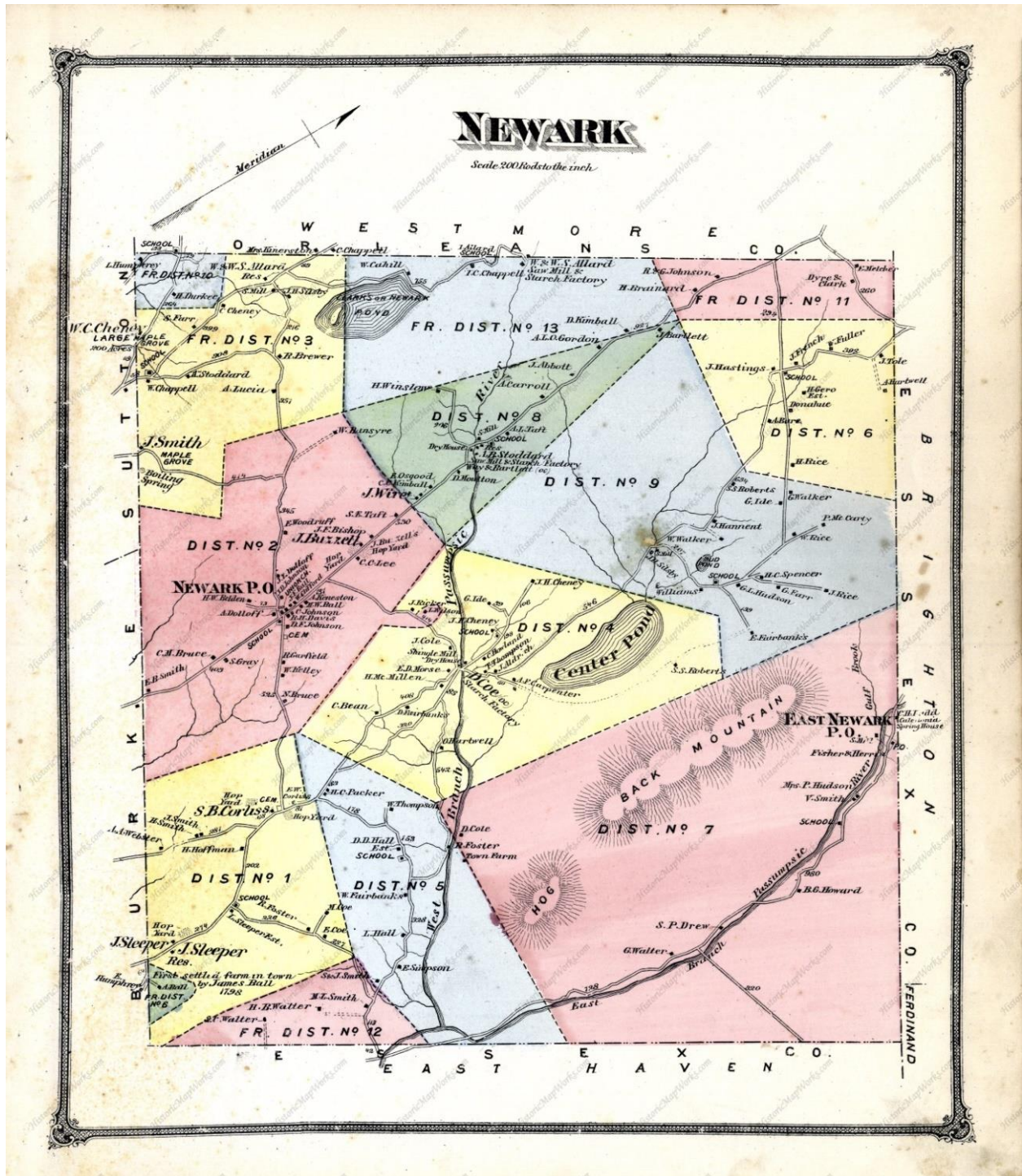
There is simply too much land-use information to place on a single map. Information from other maps should be used to supplement *Map 4 Newark land-use map* in order to inform decisions about appropriate uses of land in Newark.



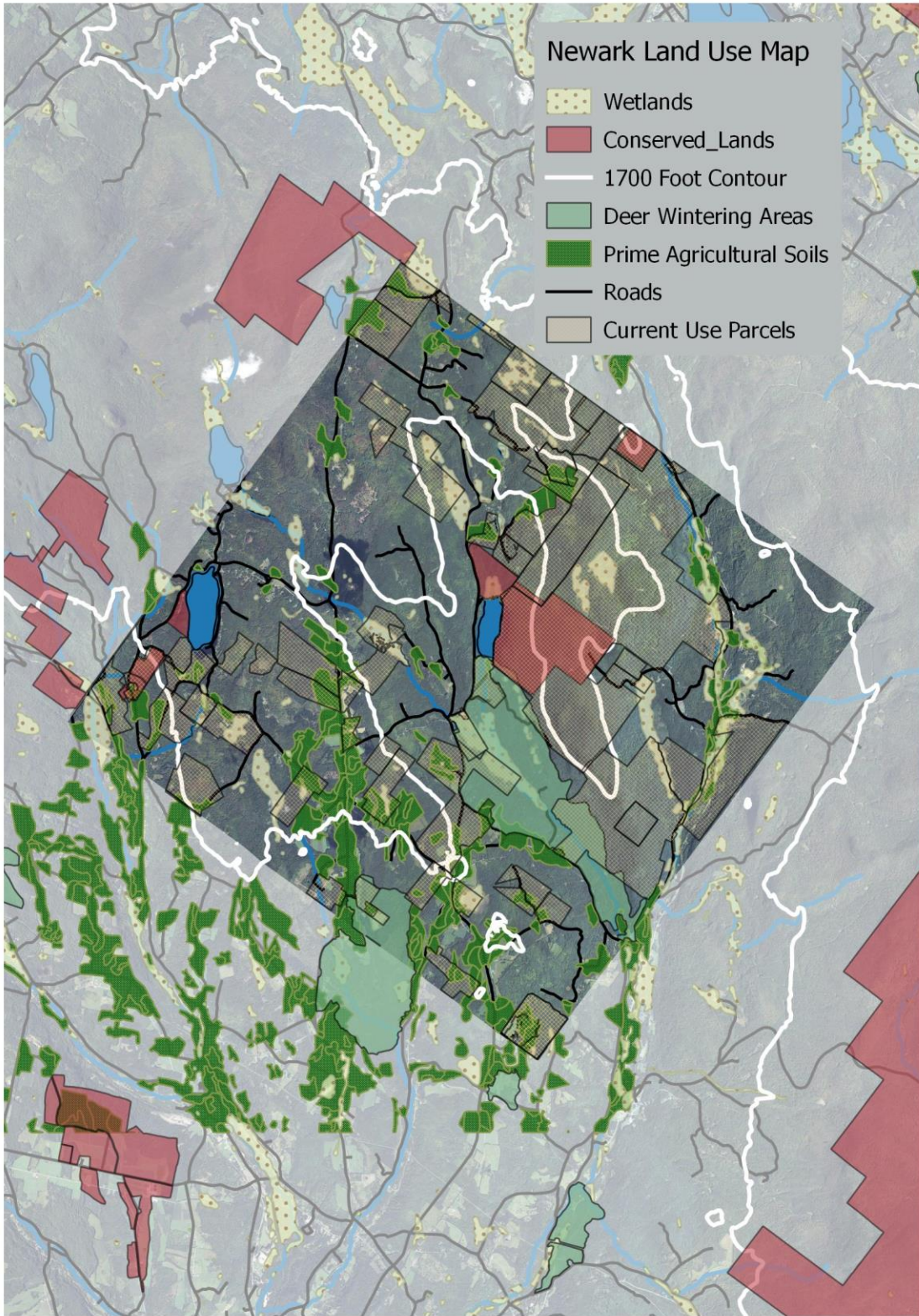
Map 1 Newark's location in Vermont



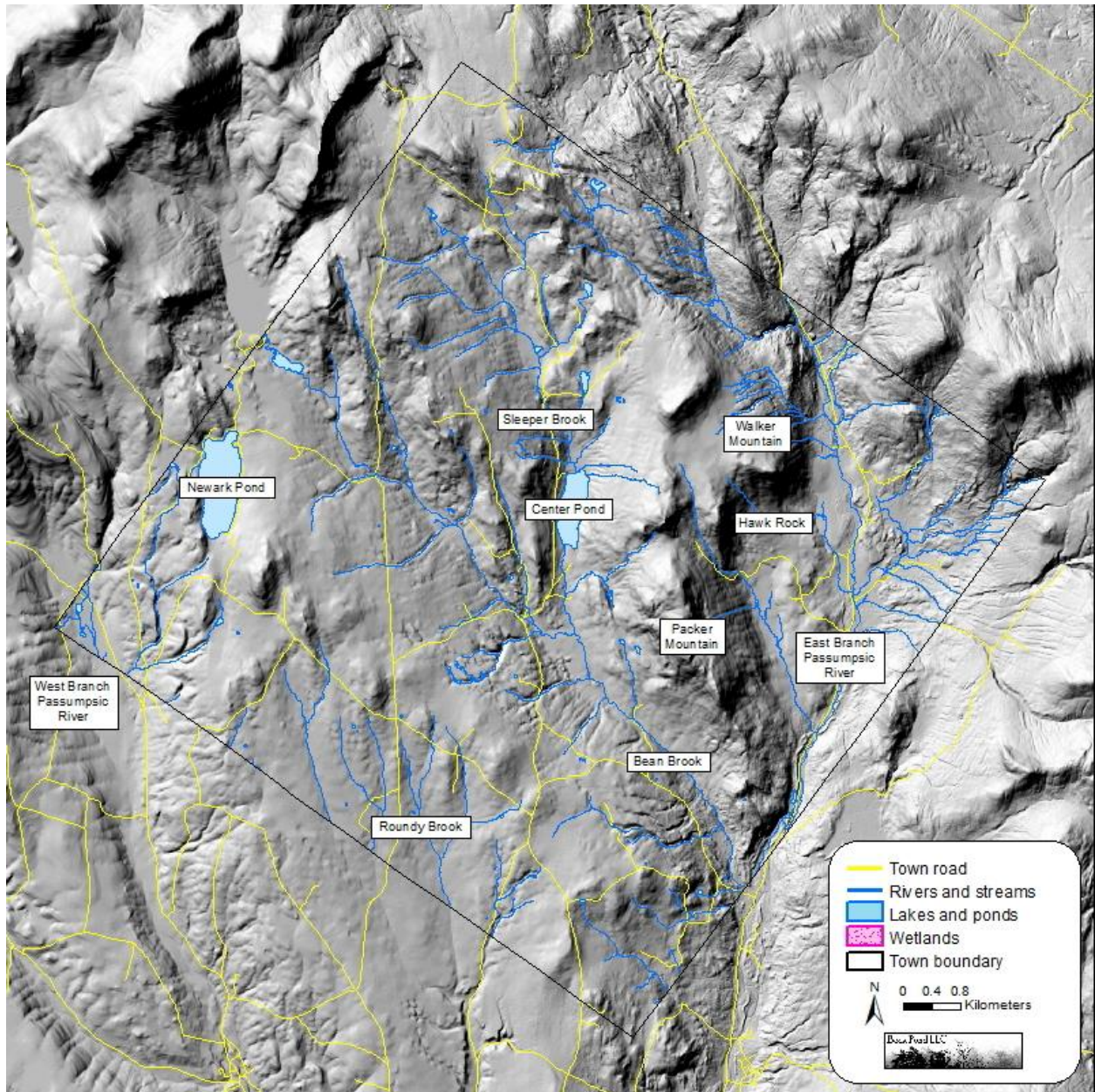
Map 2 Newark and neighboring towns



Map 3 Newark in 1875

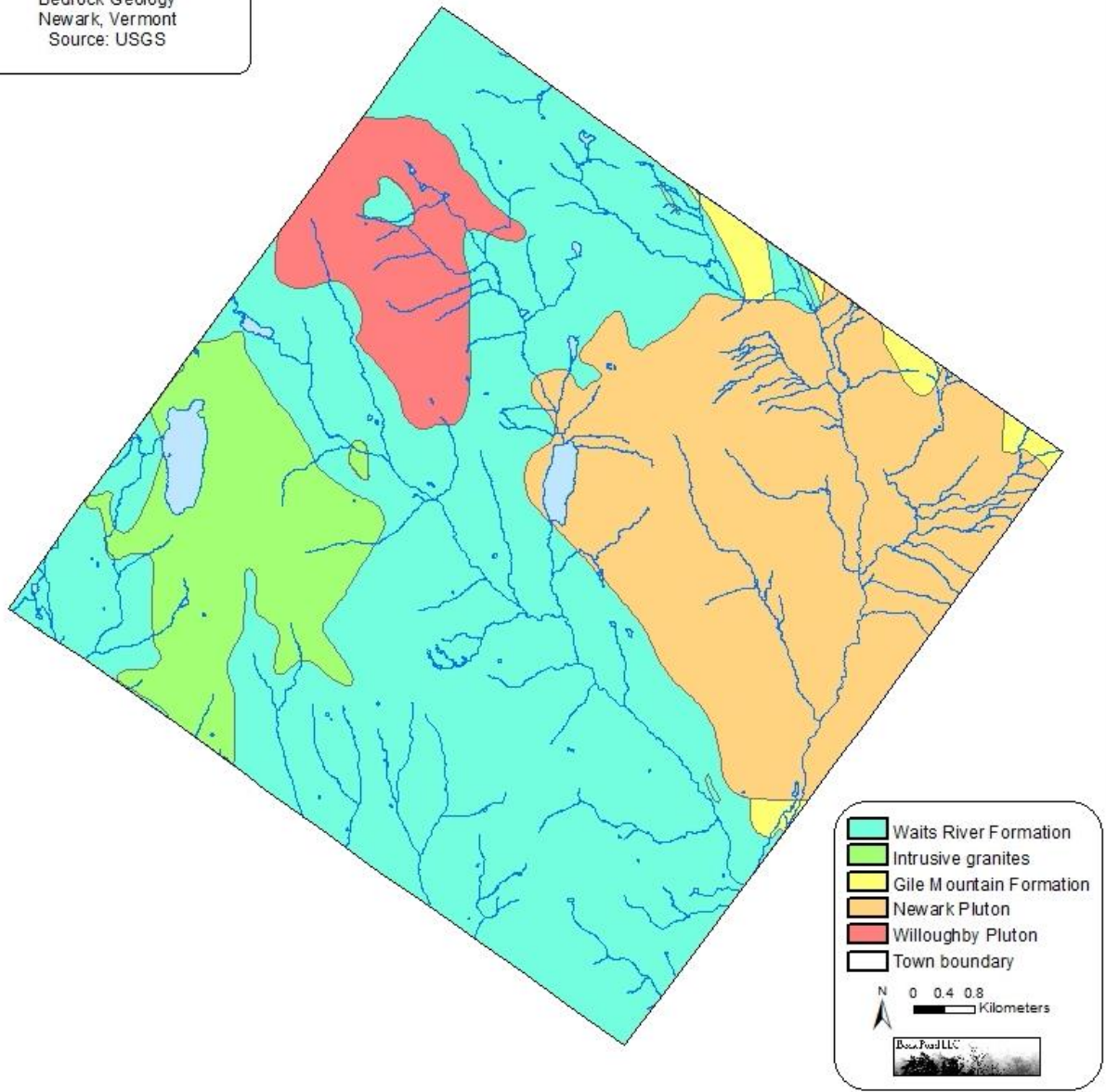


Map 4 Newark land-use map

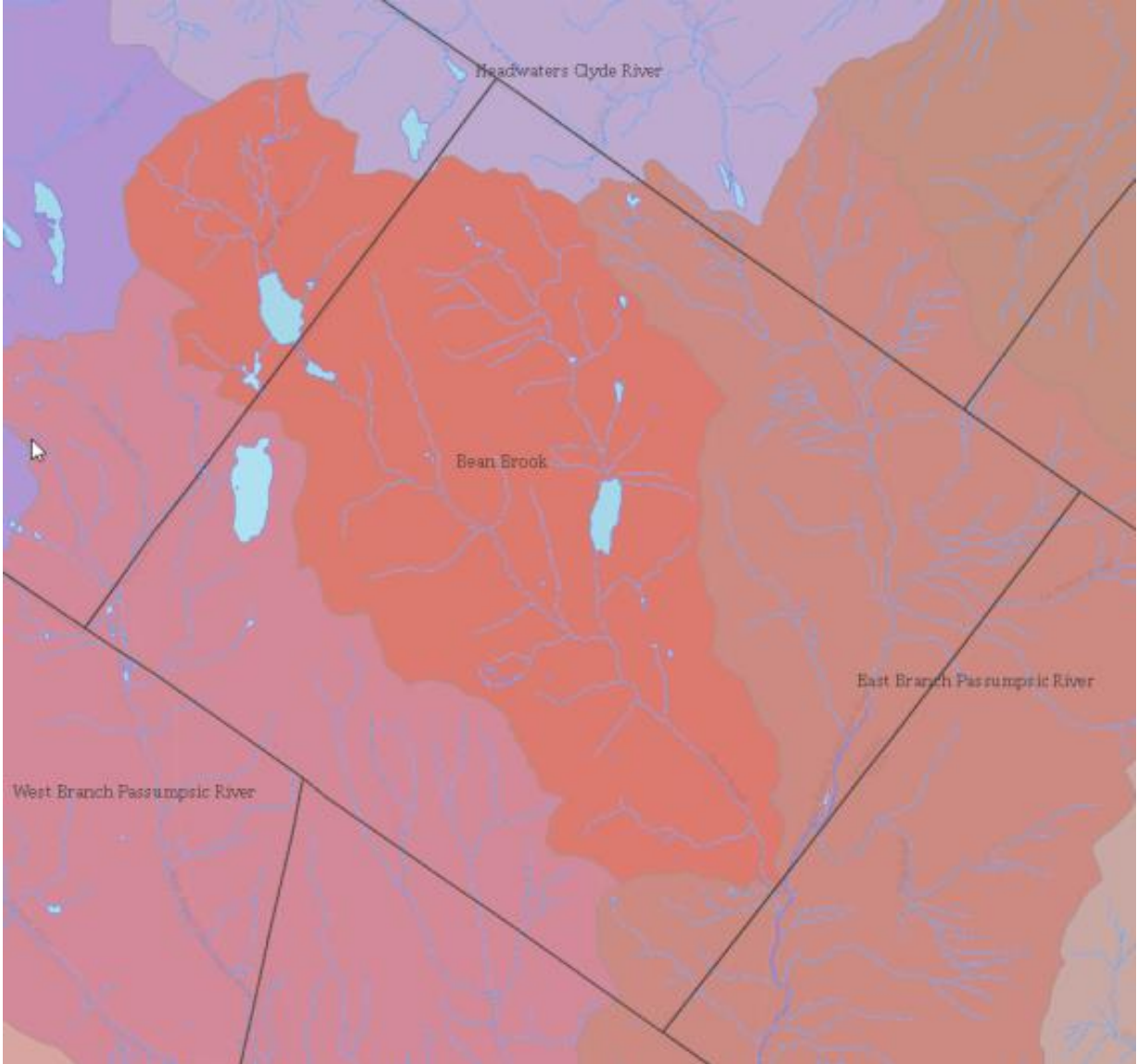


Map 5 Topographical features

Bedrock Geology
Newark, Vermont
Source: USGS

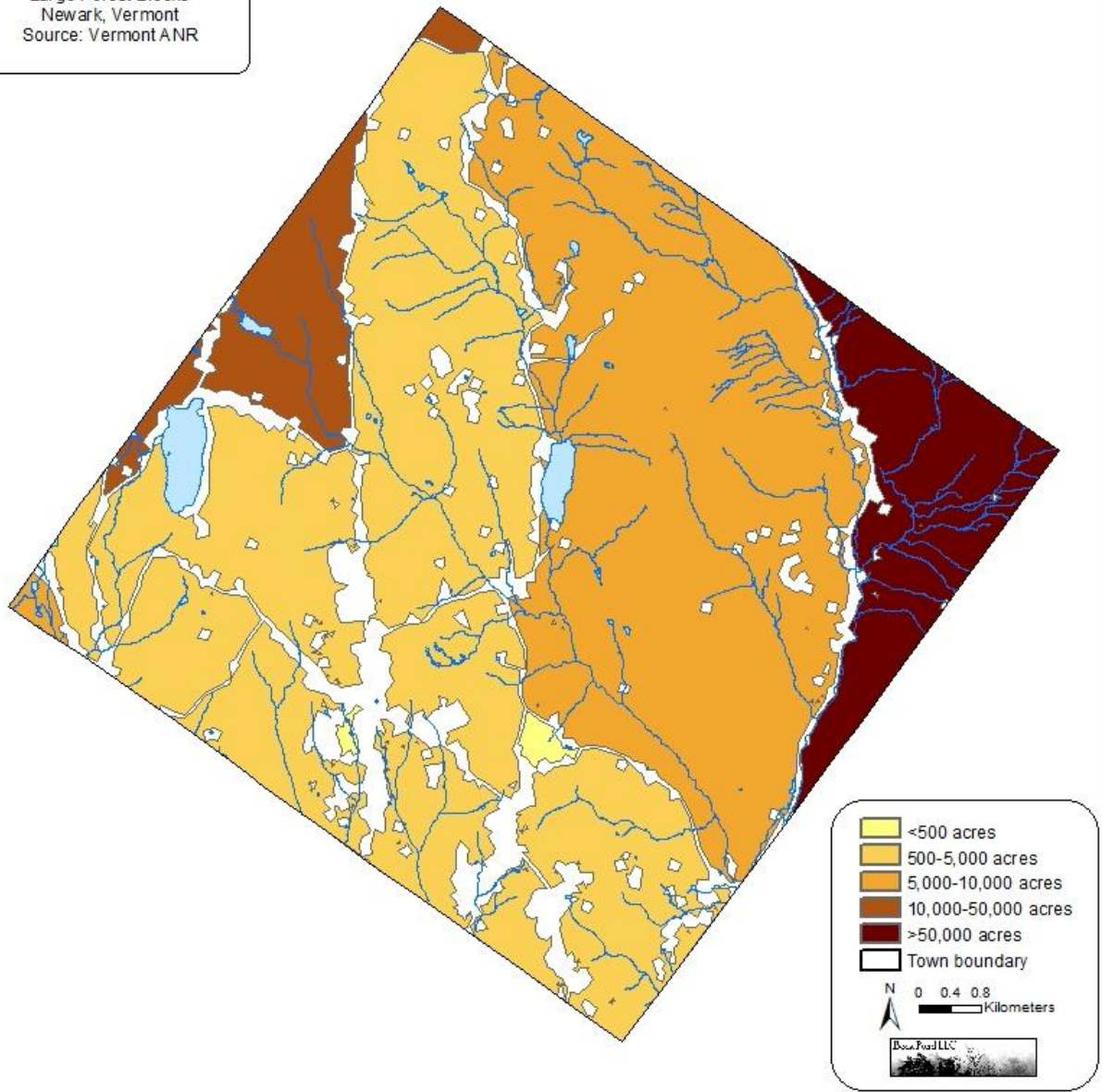


Map 6 Newark's bedrock formations

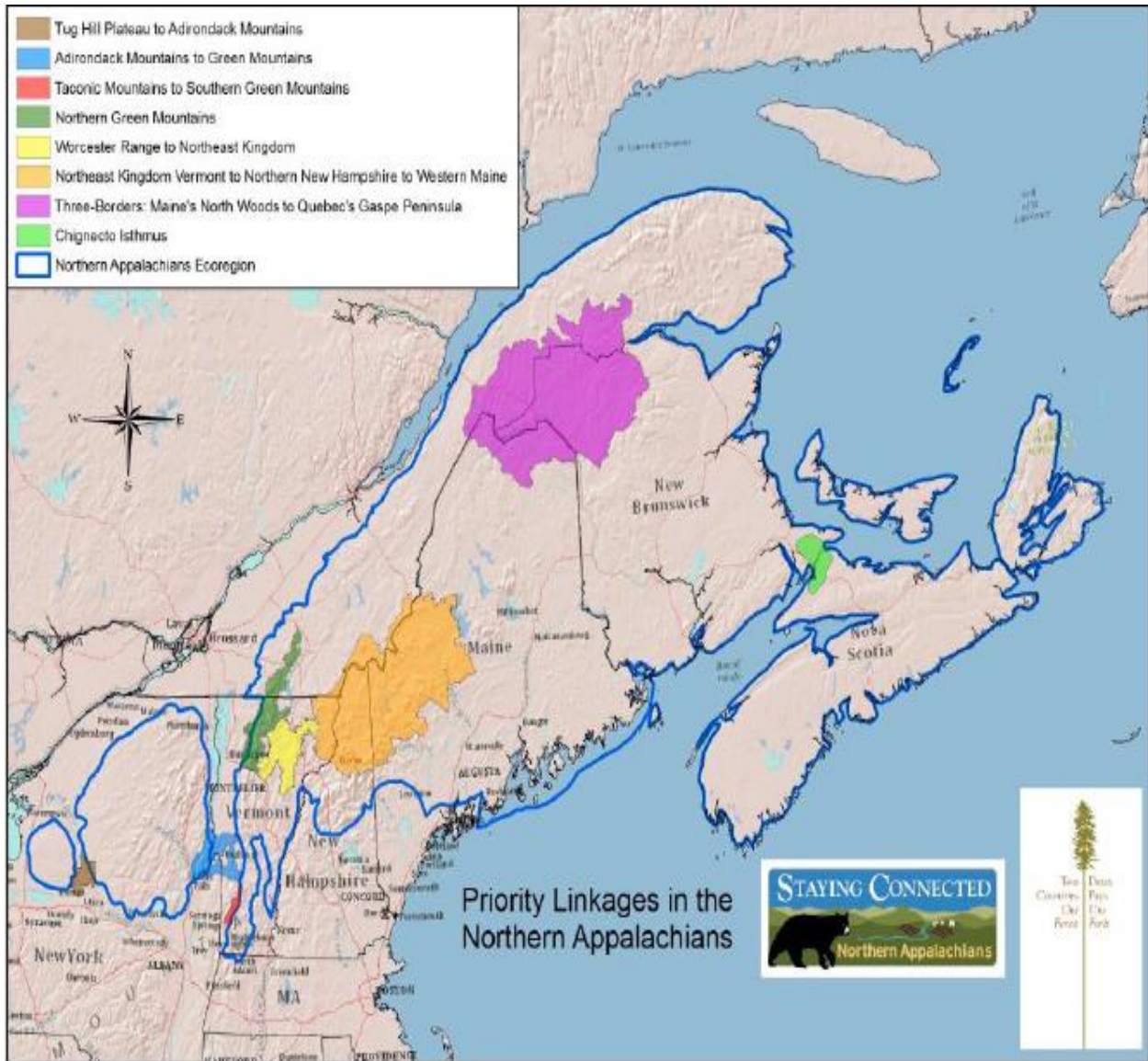


Map 7 Newark's watersheds

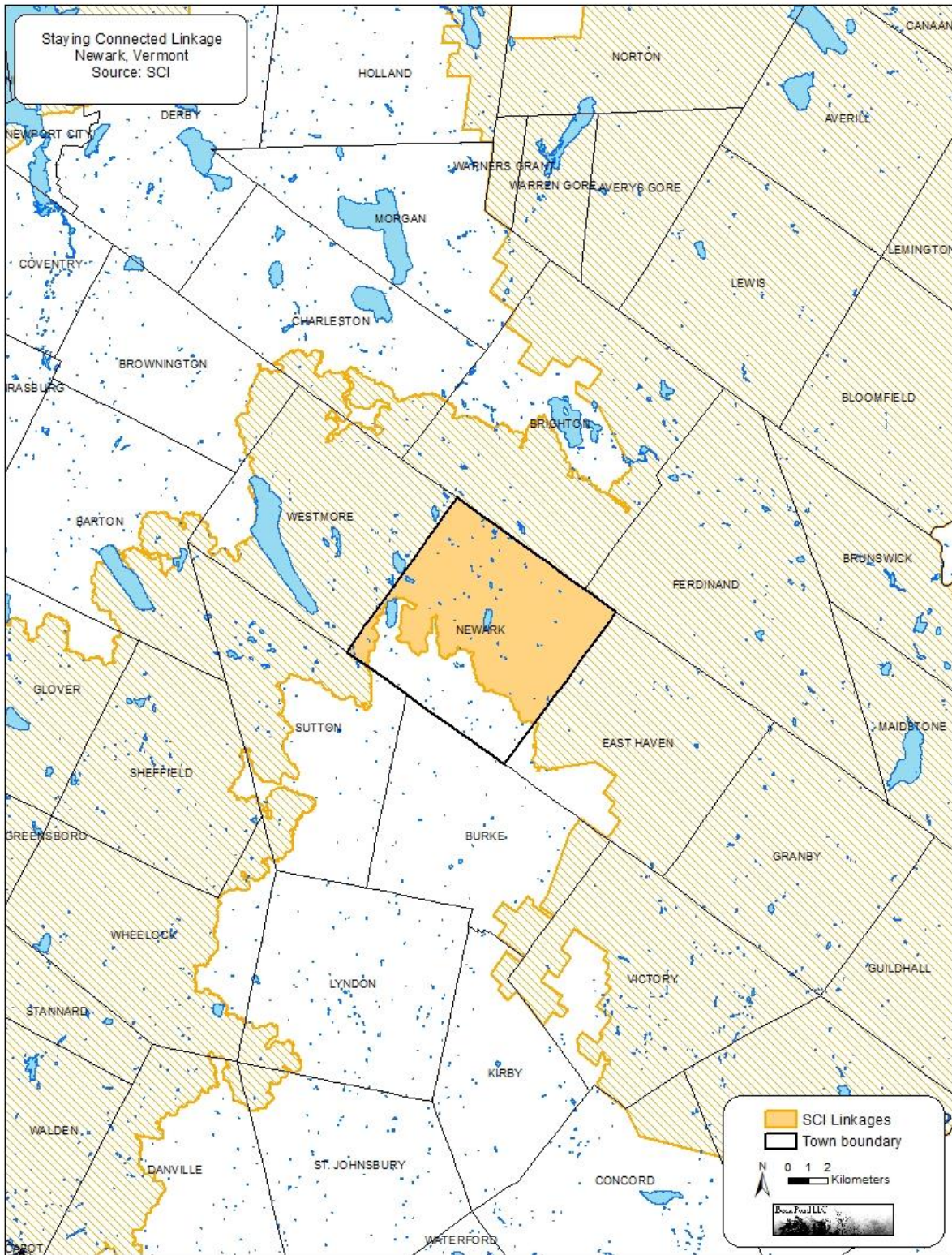
Large Forest Blocks
Newark, Vermont
Source: Vermont ANR



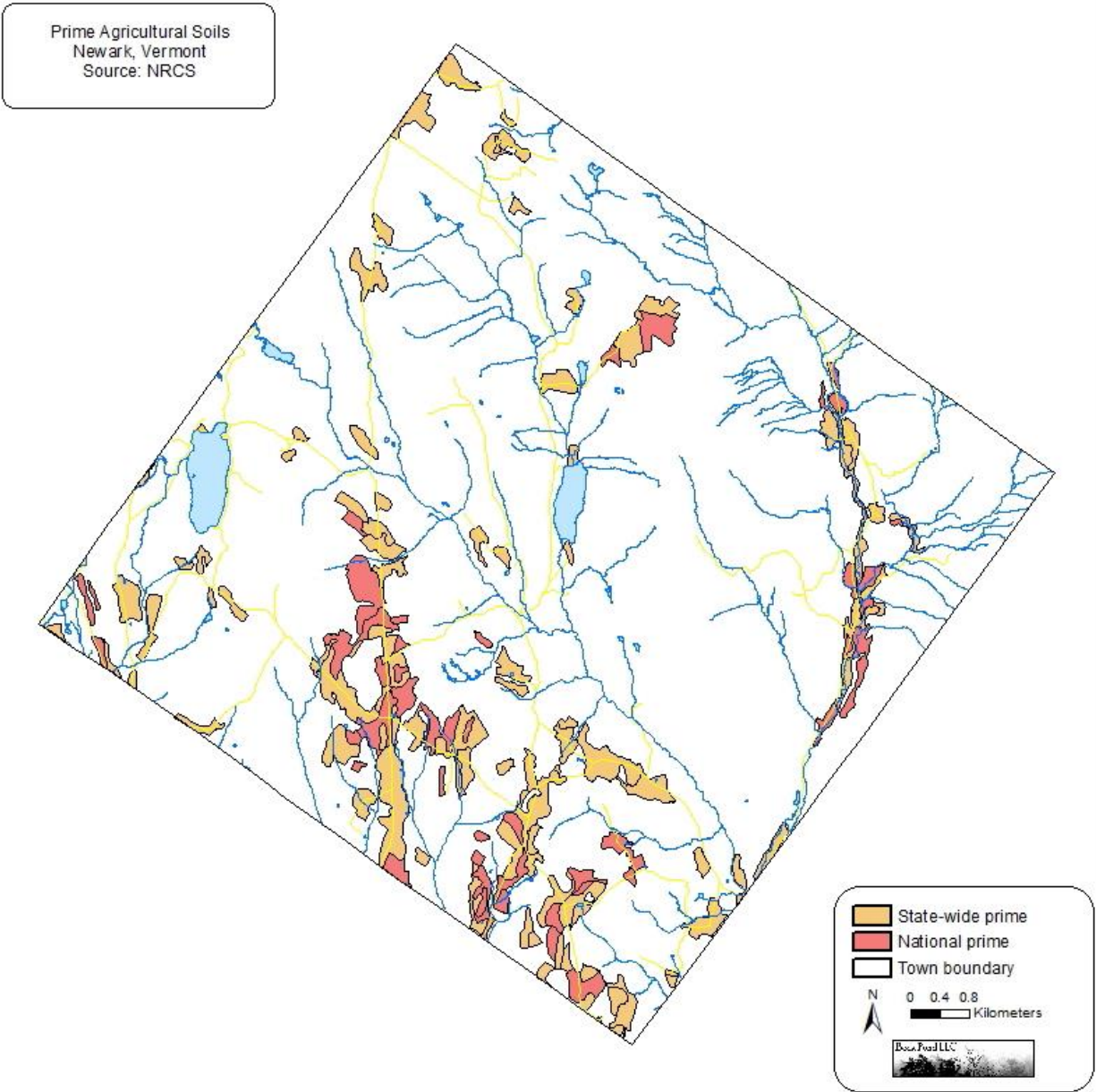
Map 8 Newark's forest blocks



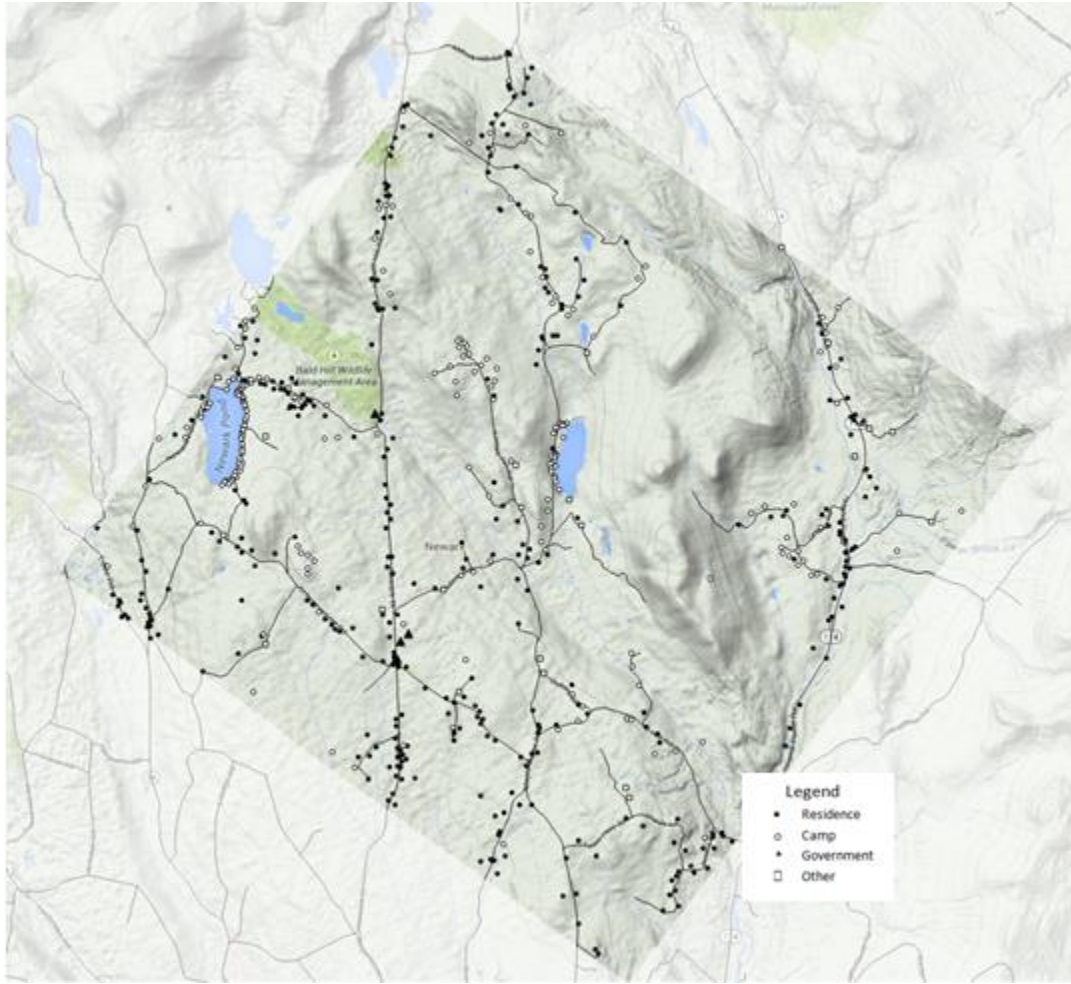
Map 9 Six priority wildlife linkages identified by the Staying Connected Initiative



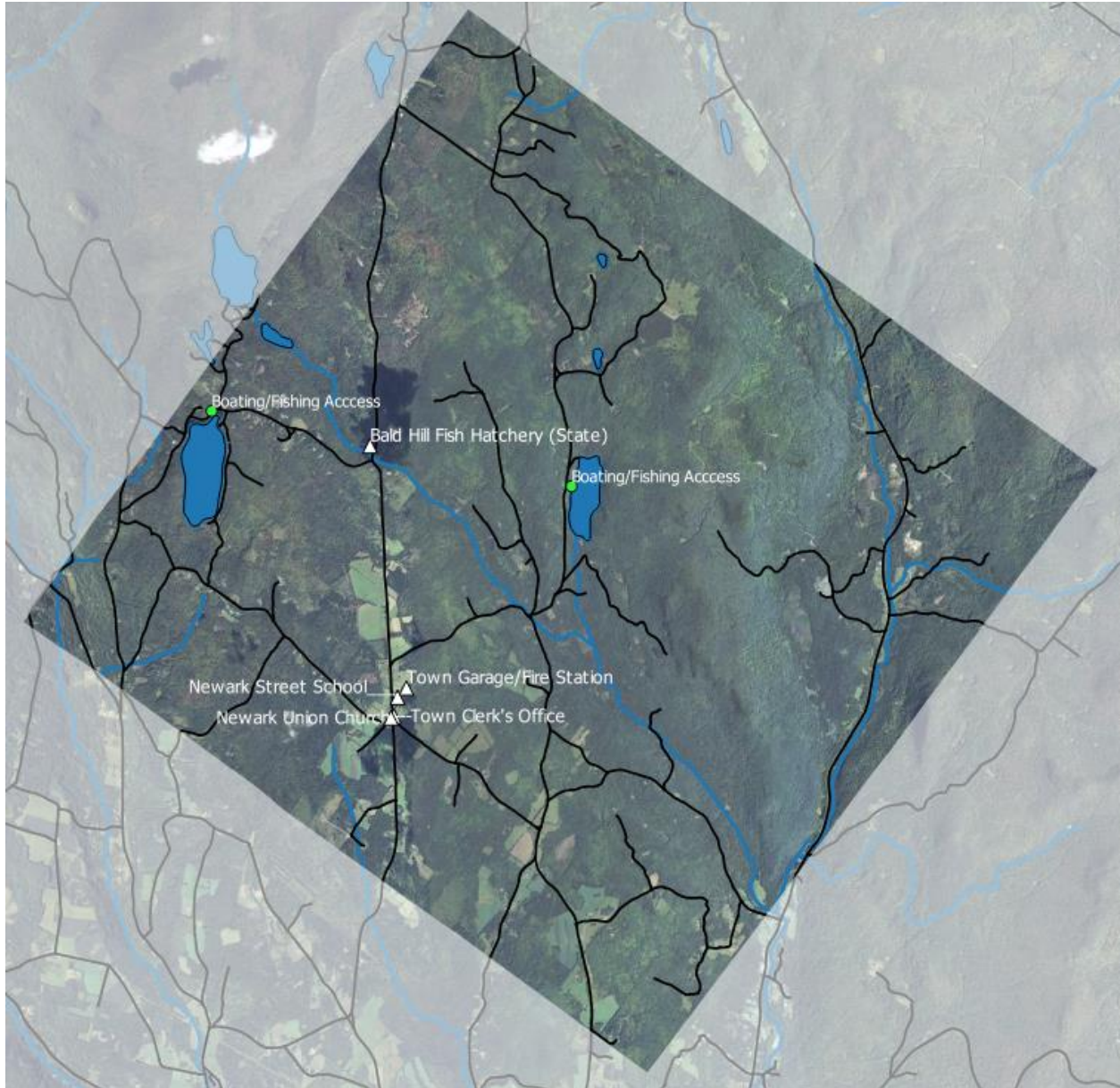
Map 10 Newark's critical location in the SCI wildlife corridor



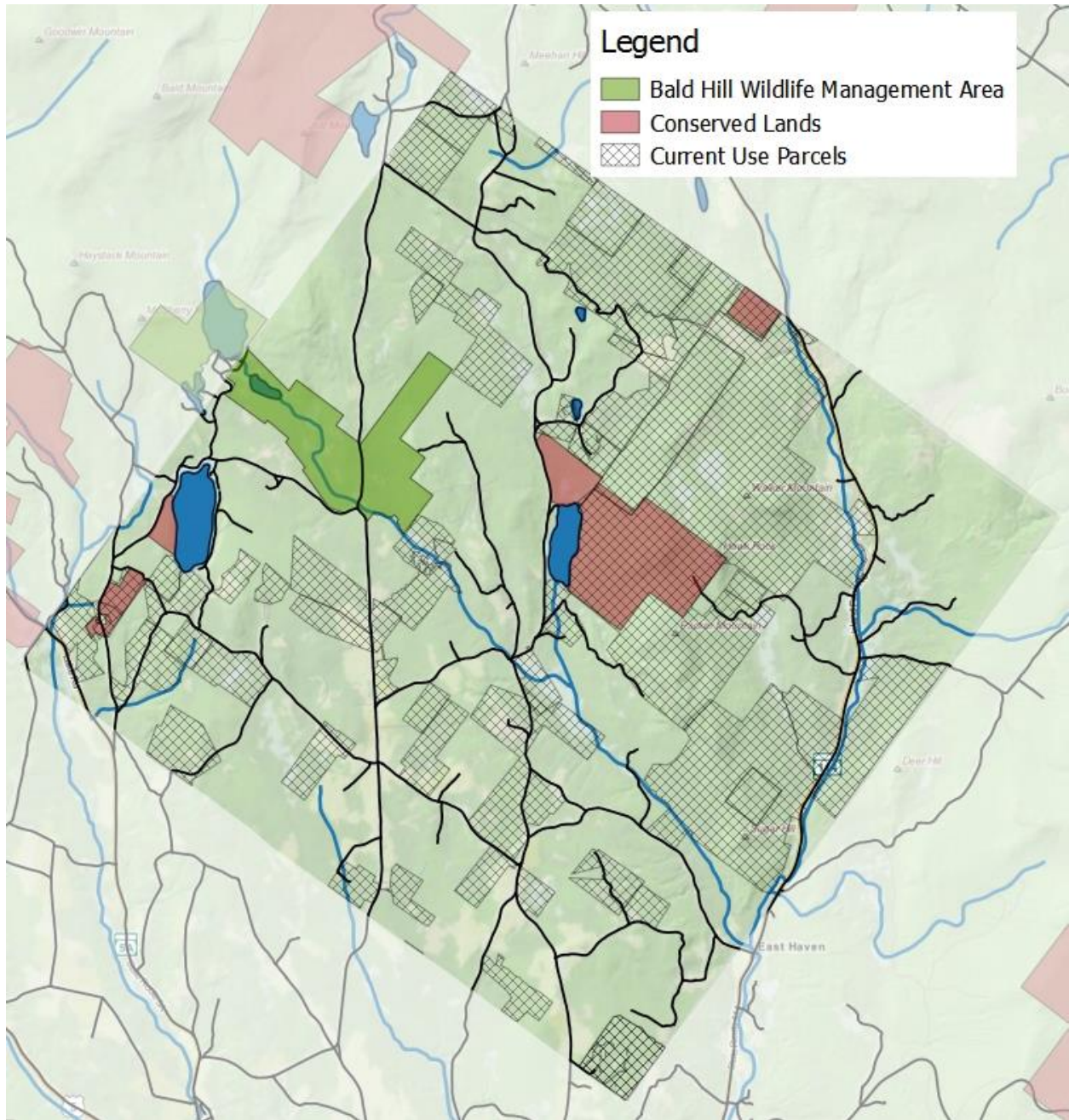
Map 11 Prime agricultural soils in Newark



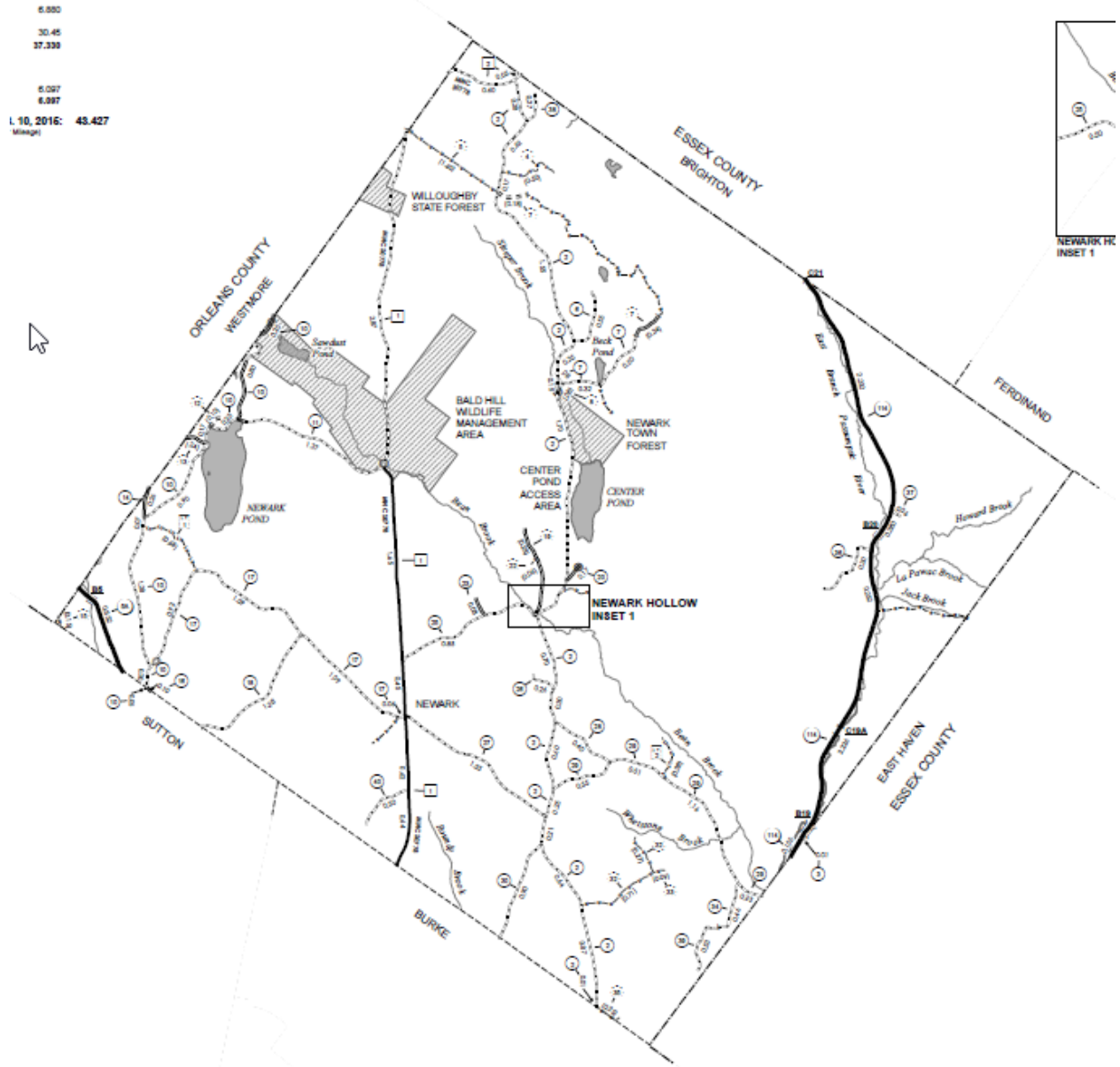
Map 12 Homes, camps, and other buildings



Map 13 State and municipal recreational, service, and educational facilities



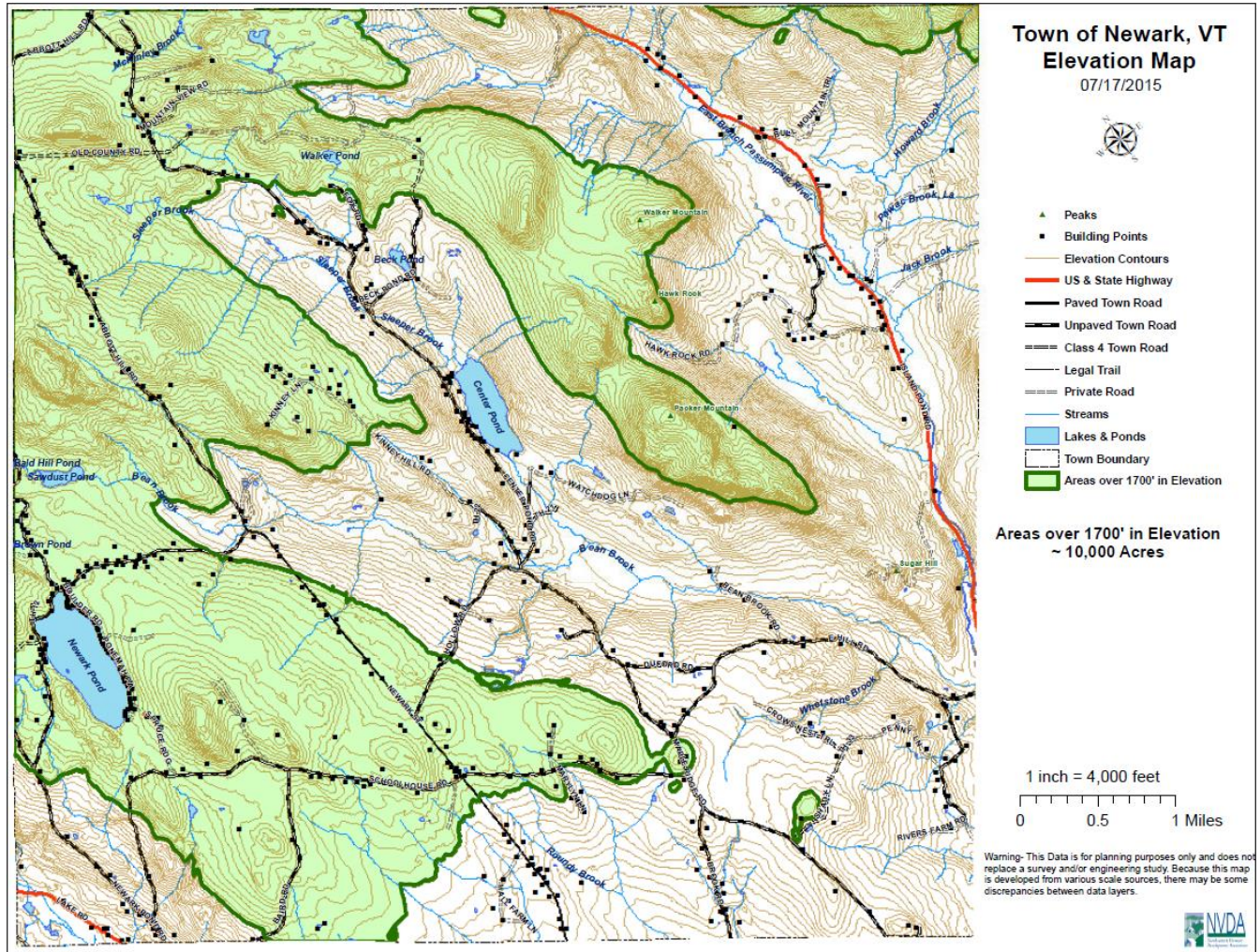
Map 14 Bald Hill WMA, conserved lands, parcels enrolled in Current Use



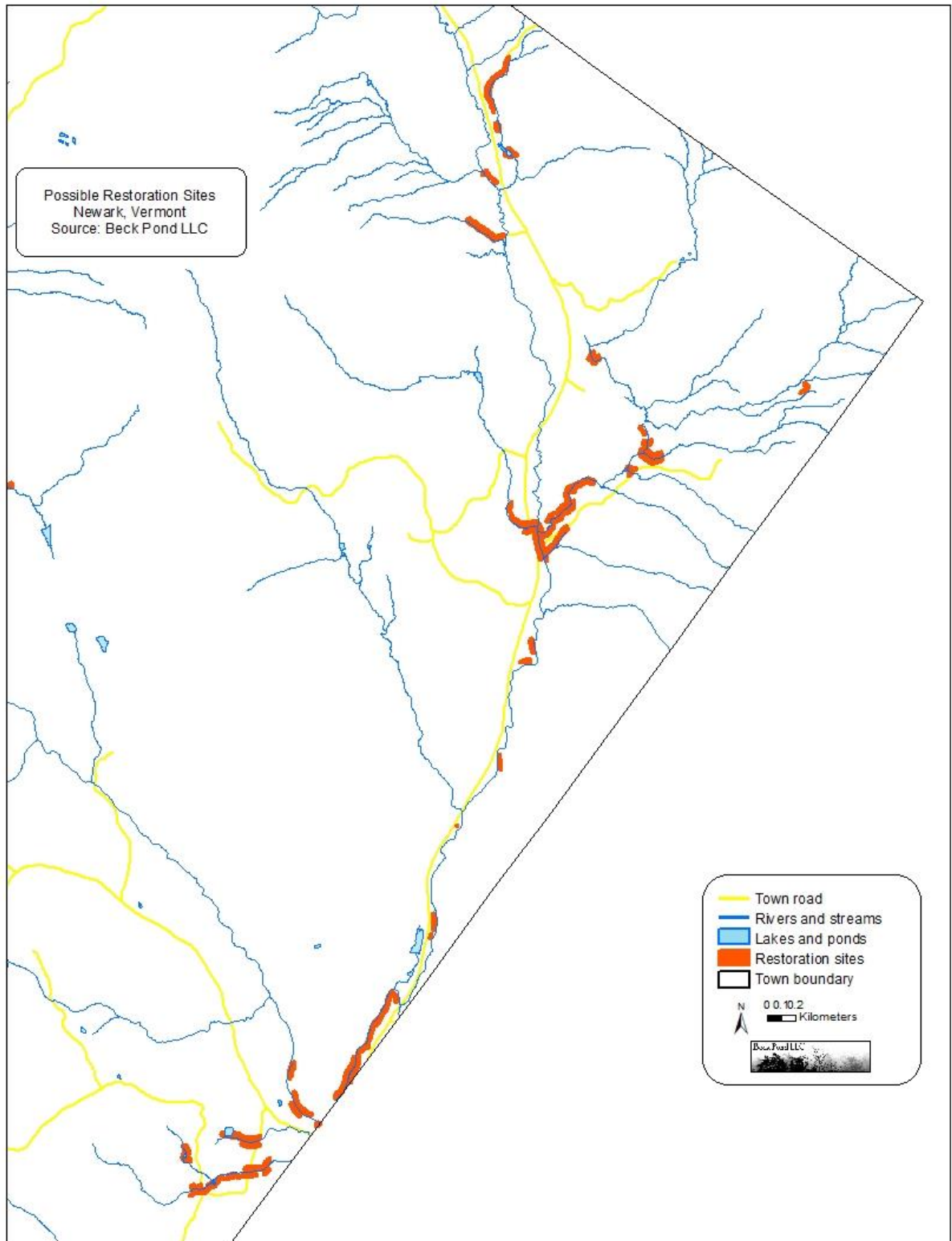
Map 15 Newark Highway Map (Vermont Agency of Transportation)

Note: an uncropped version of this map is available at

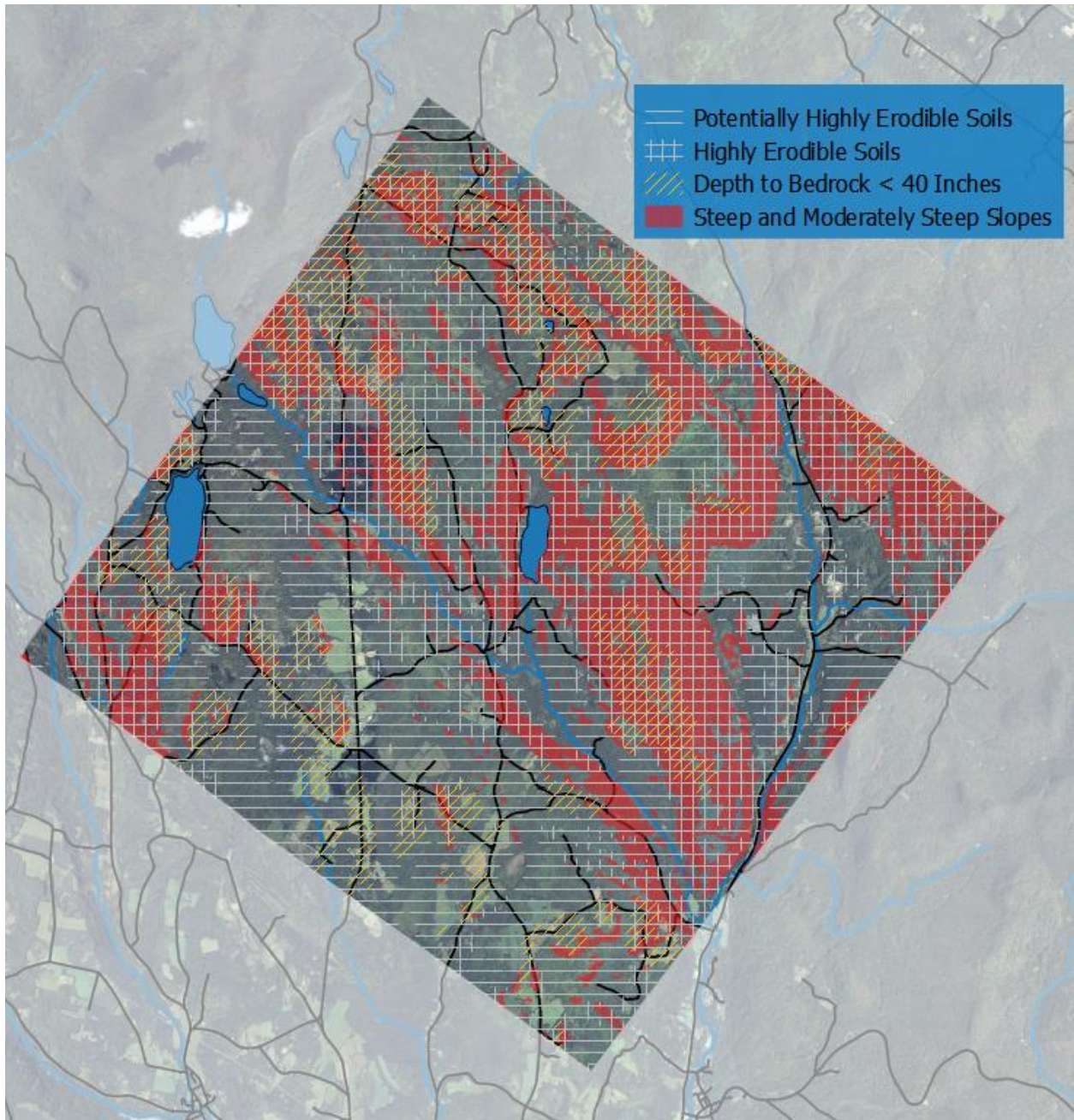
http://vtransmap01.aot.state.vt.us/Maps/TownMapSeries/CALEDONIA_Co/NEWARK/NEWARK_MILEAGE_2015.pdf



Map 16 Newark elevation map



Map 17 Potential riparian restoration sites along the East Branch of the Passumpsic River



Map 18 Erodible and shallow soils and steep slopes