



2018 Chittenden County ECOS Plan

Adopted 6/20/2018

For a healthy,
inclusive, and
prosperous
community



This plan is the Regional Plan, Metropolitan Transportation Plan, and Comprehensive Economic Development Strategy in one.

**This plan can be found online at:
www.ecosproject.com/plan**

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residents and institutions prepare for disruptions and respond to them swiftly, creatively and effectively.

3. **Foster innovation.** Sustainable communities capture opportunities and respond to challenges. Local governments in these communities cultivate a spirit of proactive problem solving to provide access to futures otherwise unobtainable and to enable the risk-taking inherent in innovation.
4. **Redefine progress.** Sustainable communities measure progress by improvements in the health and wellbeing of their people, environment and economy. Instead of focusing on GDP (throughput of dollars), local governments in these communities use a broad set of indicators.
5. **Live within means.** Sustainable communities steward natural resources so that future generations have as many opportunities available to them as we do today. They also recognize that resources exist for the benefit of life forms other than humans. Local governments in these communities assess resources, track impacts, and take corrective action when needed so that they meet the needs of today while maintaining and improving what they leave for future generations.
6. **Cultivate collaboration.** Sustainable communities engage all facets of society in working together for the benefit of the whole. Local governments in these communities bring government representatives, community members and organizations together and create a culture of collaboration that encourages innovation, sharing of resources, and jointly shared accountability for results.
7. **Ensure equity.** Sustainable communities allocate resources and opportunities fairly so that all people who do the full range of jobs that a community needs can thrive in it. Local governments in these communities actively eliminate barriers to full participation in community life and work to correct past injustices.
8. **Embrace diversity.** Sustainable communities feature a tapestry of peoples, cultures and economies underpinned by a richly functioning natural environment. Local governments in these communities celebrate and foster ethnic, cultural, economic and biological diversity and encourage multiple approaches to accomplish a goal.
9. **Inspire leadership.** Sustainable communities provide leadership through action and results. Local governments in these communities recognize their opportunity to effect change by backing visionary policies with practices that serve as an example for citizens and businesses to emulate.
10. **Continuously improve.** Sustainable communities engage in continuous discovery, rediscovery and invention as they learn more about the impacts of their actions. Local governments in these communities' track both performance and outcomes, are alert for unintended consequences, and modify strategies based on observed results.

Goals

There are 17 goals, organized under four Broad Goals as follows:

Natural Systems – Design and maintain a strategically planned and managed green infrastructure network composed of natural lands, working landscapes, and open spaces that conserve ecosystem values and functions, and provide associated benefits to our community.

1. Ecological Systems (Habitats, Water Quality, Air Quality) - Conserve, protect and improve the health of native species habitats, water quality and quantity, and air quality.

2. Scenic and Recreational Resources - Conserve, protect and improve valued scenic, recreational, and historic resources and opportunities.
3. Climate Change - Reduce greenhouse gas emissions contributing to climate change and adapt to become more resilient to a changing climate.

Social Community – Promote the skills, resources, and assurances needed for all community members to participate in the workforce and in their family, civic and cultural lives, within and among their neighborhoods, and in the larger community.

4. Education, Knowledge and Skills - All Chittenden County children and adults have the education, skills and opportunities necessary to meet their full economic and social potential and well-being.
5. Health - All Chittenden County residents are healthy.
6. Public Safety and Criminal Justice - Improve the safety of the public including the loss of life and property from natural and manmade hazards.
7. Social Connectedness - Increase opportunities for people of all backgrounds to engage in the multicultural social fabric and activities of the community.
8. Arts, Culture and Recreation - Increase access to, and participation in, arts, culture and recreational opportunities.
9. Civic Engagement and Governance - People from diverse backgrounds feel that they have a say in political and non-political decisions that affect their lives, neighborhoods and communities.

Economic Infrastructure – Build the region's capacity for shared and sustainable improvements in the economic wellbeing of the community through support of both local and globally competitive initiatives.

10. Economy - Retain and support existing employers and job growth, grow target sector employers and entrepreneurs, and work to attract a greater diversity of employers and employees.
11. Household Financial Security - Improve the financial security of households.
12. Working Lands - Support the growth and vitality of working farms and managed forests; and sustainably manage sand and gravel extraction operations.

Built Environment - Make public and private investments in the built environment to minimize environmental impact, maximize financial efficiency, optimize social equity and benefits, and improve public health.

13. Land Use - Encourage future growth in the Center, Metro, Enterprise, Suburban, and Village Planning Areas to maintain Vermont's historic settlement pattern and respect working and natural landscapes.
14. Housing - Increase the opportunities for safe, decent, energy efficient, affordable, accessible and fair housing for all types of households in all neighborhoods.
15. Transportation - Provide accessible, safe, efficient, interconnected, secure, equitable and sustainable mobility choices for our region's businesses, residents and visitors.
16. Infrastructure - Ensure adequate infrastructure and facilities (i.e. water supply, wastewater treatment, stormwater treatment, broadband coverage and solid waste recovery and recycling) to support areas planned for growth while conserving resources.

17. Energy - Move Chittenden County's energy system toward a cleaner more efficient and renewable system that benefits health, economic development, and the local/global climate by working towards the State's Comprehensive Energy Plan goals.

- i. Identify gaps in municipal implementation of State Fair Housing laws and ADA compliance (including but not limited to municipal bylaws should include language that explicitly permits officials to make reasonable accommodations to accommodate the needs of people with disabilities without delay or public input).
 - ii. The Vermont legislature should enact legislation that limits security deposits to no more than one month's rent with no more than one-half month's rent and no more than \$200 for pet deposits (excluding assistance animals for persons with disabilities). For tenants with rent subsidized through public programs, security deposit amounts should be based on the tenant's share of the rent before the application of any utility allowance. These limits do not apply to service deposits for residential care/assisted living settings.
 - iii. Implement the recommendations (as best as possible within current resource capacities) of the 2010 Burlington Analysis of Impediments and the 2012 State Analysis of Impediments. This includes tracking zoning variances, local permit applications, adjusted residential permit application and denials to identify disparities and trends.
- e. Increase enforcement and testing capacity of fair housing organizations such as Vermont Legal Aid. Currently, Vermont Legal Aid is only funded to test the protected classes included in federal fair housing law. Seek funding sources that would allow Vermont Legal Aid to test and enforce state protected classes (Age, marital status, sexual orientation, gender identity, receipt of public assistance).

4. Energy – Move the Region's energy system to meet the goals of Vermont's energy and greenhouse gas reduction goals while balancing economic vitality and affordability.

- a. Reduce energy consumption and decrease greenhouse gas emissions, to support the State's goals:
- Reduce greenhouse gas emissions 50% from 1990 levels by 2028,
 - Reduce greenhouse gas emissions 75% from 1990 levels by 2050,
 - Reduce per capita energy use across all sectors (electricity, transportation and heating) 15% by 2025,
 - Reduce per capita energy use across all sectors (electricity, transportation and heating) by more than 1/3 by 2050, and
 - Weatherize 25% of all homes by 2020.
- i. Continue and evaluate partnerships with Vermont Gas, Burlington Electric Department, Efficiency Vermont and the State Weatherization Assistance Program to facilitate the weatherization and increased energy efficiency of housing stock and other buildings.
 - ii. Decrease fossil fuel heating by working with partners such as Efficiency Vermont and Burlington Electric Department for Burlington residents to educate developers and homeowners on the benefits of technology such as cold climate heat pumps, wood heating and geothermal systems. Examples include district heating (for example, using waste heat from the McNeil Plant to heat buildings in Burlington) and biogas generation (capturing the methane produced by landfills or farms and using it instead of natural gas).
 - iii. Reduce fossil fuel consumption in the transportation sector, through the Transportation Demand Management and electric vehicle promotion strategies

outlined in Part 6 of this section and in the Metropolitan Transportation Plan (MTP) included in this plan.

- iv. Collaborate with the State of Vermont and utilities to ensure that state energy policy implementation (i.e. permits for non-renewable fuels) reflect state energy goals and our policies in Section b.
 - v. Encourage the State of Vermont to implement a single energy standard which includes a process for verifying compliance.
 - vi. Provide assistance to municipalities when requested to enhance town plans to be consistent with Act 174 standards for the purpose of enabling municipalities the ability to gain substantial deference in the Certificate of Public Good Section 248 process. This assistance will include working with municipalities to identify natural, cultural, historic, or scenic resources to be protected from all development types, identify preferred locations for renewable energy generation facilities, and encourage municipalities to lead by example with respect to energy efficiency for buildings and transportation and the deployment of renewable energy.
 - vii. Use the Energy Action Network (EAN) [Community Energy Dashboard](#) to educate residents and municipalities about opportunities to reduce energy use and switch to renewable energy sources. Additionally, institutions (including municipalities, institutions of higher education, businesses and non-profits) can use the Vermont Climate Pledge Coalition Tracker to upload actions that will help the State achieve its 90% renewable energy 2050 goal.
 - viii. Support a wide variety of renewable energy generation types, including sustainable uses of biomass for heating, passive solar building design, bio-digesters for electricity generation, photovoltaic solar, wind turbines, and optimizing the energy potential for existing hydro-electric dams.
 - ix. Work with the utilities on long-range infrastructure capacity planning.
 - xi. Support in-place upgrades of existing facilities, including existing renewable energy generation, storage, transmission lines, distribution lines and substations as needed to reliably serve municipalities and the region.
 - xii. Support changes in federal, state, and local policies to achieve the state of Vermont Comprehensive Energy Plan goals.
- b. CCRPC supports the generation of new renewable energy in the County to meet the Vermont Comprehensive Energy Plan's goal of using 90% renewable energy by 2050, in a manner that is cost effective and respects the natural environment. Specifically, Chittenden County needs to generate a total of 756,250 MWh (Megawatt hours) of energy to meet the low target (a 51% increase), or 1,265,134 MWh to meet the high target (a 152% increase). Currently, Chittenden County generates 501,661 MWh of renewable energy. The targets are technology neutral, meaning that they can be met with any mix of technologies. The following statements are CCRPC's renewable energy generation facility siting policies and will inform CCRPC's preferred sites policy.

Constraint Policies: Ground mounted renewable energy generation is constrained in certain areas due to state and local restrictions on development.

- i. Site renewable energy generation to avoid state and local known constraints and to minimize impacts to state and local possible constraints, as defined in Strategy

- 3, Action 1.f, and Strategy 4, Action 1.f, and Action 2.e. Renewable energy generation sited on existing structures or parking lots complies with this policy.
- ii. Site ground-mounted solar development in accordance with setback standards as defined in [30 V.S.A. §248\(s\)](#) and municipal screening requirements adopted in accordance with [30 V.S.A. §248\(b\)\(B\)](#).

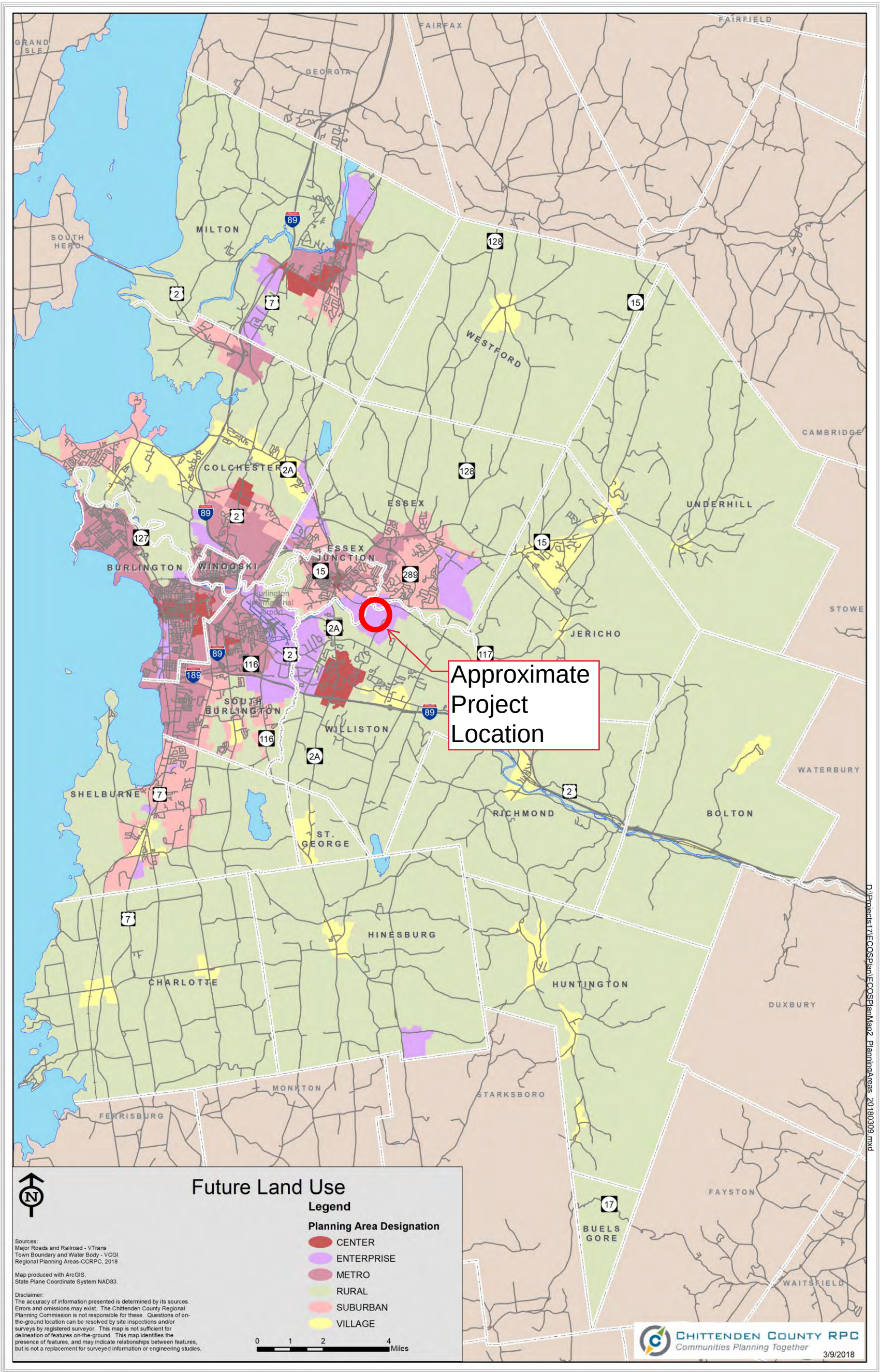
Suitability Policies: After considering the constraints referenced above and found in Supplement 3, different levels of suitability exist for different scales and types of renewable energy generation depending on location within the County. To determine an appropriate location for a facility, first review the constraints above and then look at the policies below to determine how and where CCRPC encourages renewable energy generation facilities. CCRPC recommends the location of renewable energy generation facilities in accordance with the relevant guidelines below. Inability to meet these guidelines does not necessarily preclude the ability to develop renewable energy generation development.

- i. Locate energy generation proximate to existing distribution and transmission infrastructure with adequate capacity and near areas with high electric load (See Green Mountain Power's [Solar Map](#) and Burlington Electric Department's [Distributed Generation Map](#))
- ii. Locate renewable energy generation in areas designated by a municipality in an adopted plan for such use, including specific preferred sites for solar (state preferred sites are mapped on Map 5).
- iii. Locate solar generation (including but not limited to net metering) on previously impacted areas (such as, parking lots, previously developed sites, brownfields, State regulated landfills with post-closure certification, gravel pits/quarries, or on or near existing structures).
- iv. Locate ground-mounted solar larger than 15 kW AC and wind turbines with a hub height larger than 30 meters (98 ft.) outside of state designated village centers, growth centers, downtowns, new town centers, neighborhood development areas, and historic districts on the State or National Register.
- v. Locate ground-mounted solar generation, and small-scale wind (1 or 2 turbines, up to 50 meters (164 ft.) in Chittenden County's areas planned for growth, while allowing infill development wherever reasonably practical.
- vi. Locate wind generation in areas with high wind potential, such as the prime and base wind potential areas shown on Map 7.

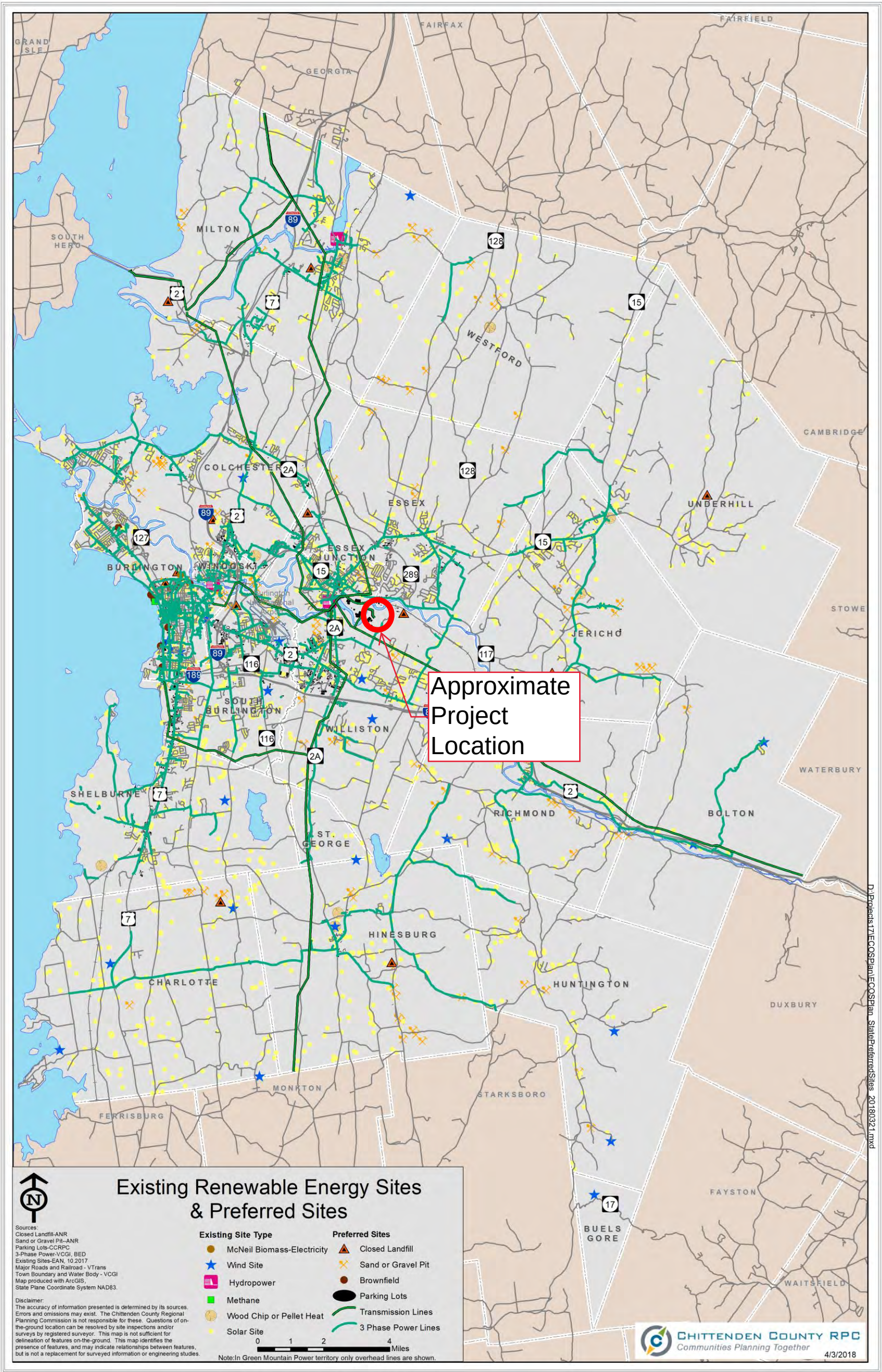
5. State/Local Permitting Coordination & Improvement

- f. Support changes to the local and state permitting process to make the two more coordinated and effective. Participate in the Commission on Act 250 to improve the State's development review process, particularly to encourage development in appropriately planned places and discourage development outside of those areas. This could include expedited permitting processes for projects in areas that are: a) designated for growth; and b) where a community has a robust plan, regulations and staff capacity. In conjunction with a reduction of permit review redundancies in areas planned for growth it may be appropriate to develop more stringent standards and thresholds for development review in rural areas.

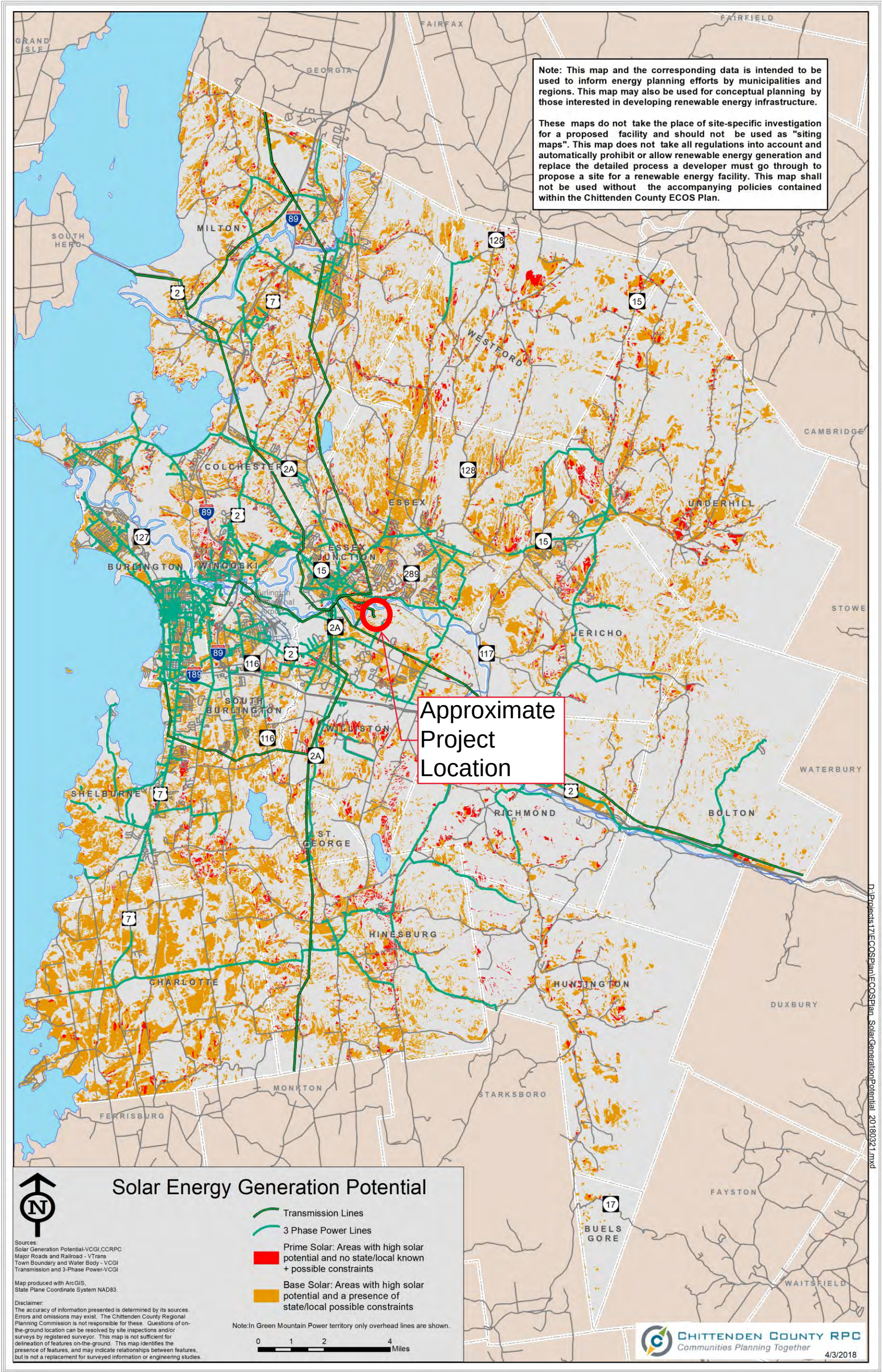
MAP 2 - FUTURE LAND USE

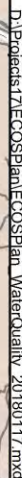


MAP 5 – STATE PREFERRED SITES FOR SOLAR GENERATION + EXISTING RENEWABLE ENERGY GENERATION SITES

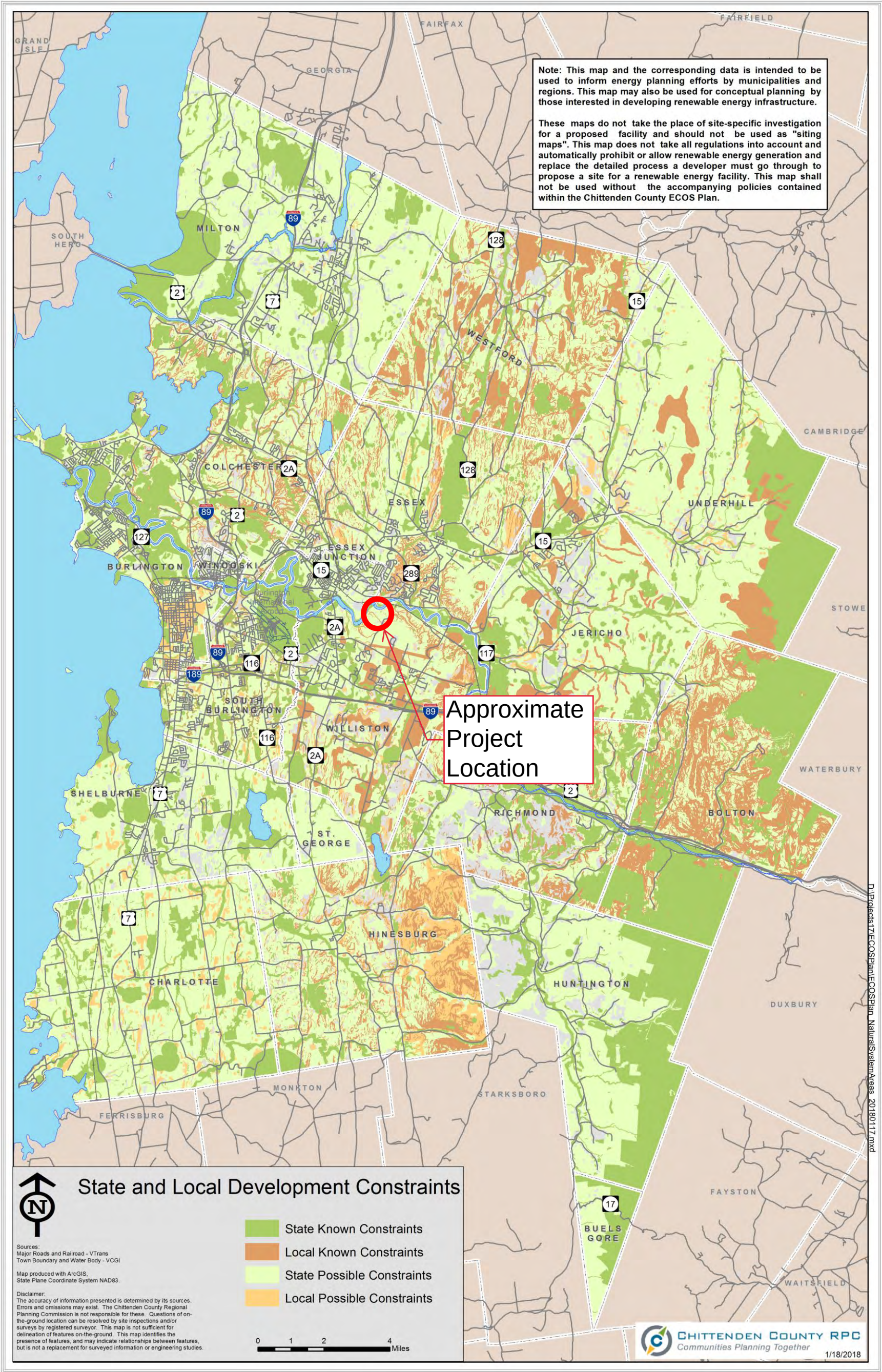


MAP 6 – SOLAR GENERATION POTENTIAL

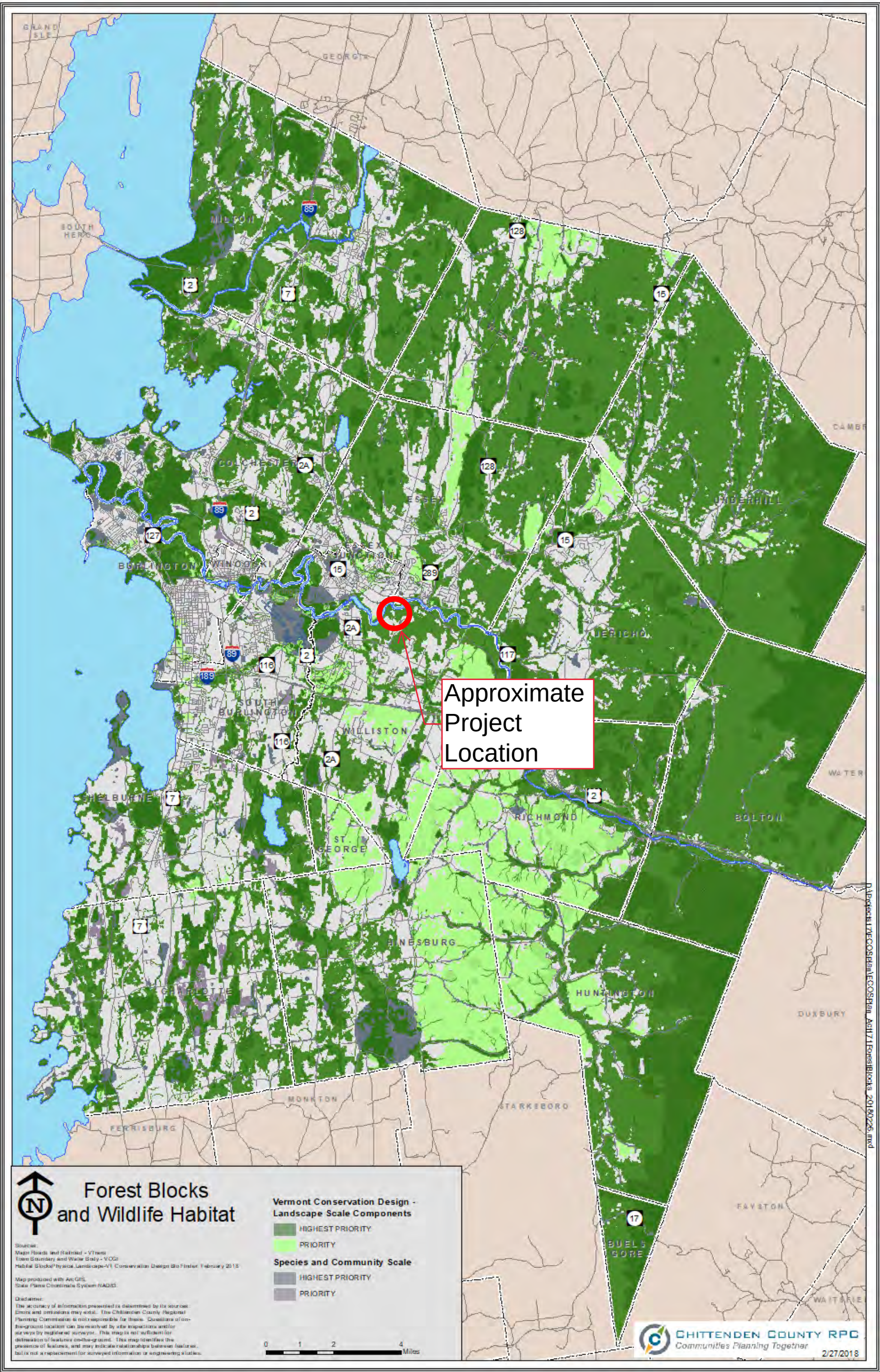




MAP 9 – NATURAL SYSTEMS/DEVELOPMENT CONSTRAINTS



MAP 10 – FOREST INTEGRITY



3. IMPROVE THE SAFETY, WATER QUALITY, AND HABITAT OF OUR RIVERS, STREAMS, WETLANDS AND LAKES IN EACH WATERSHED.

While striving toward all of these ECOS strategies, and particularly Strategy #2 – 80% of growth in 15% of our land area, it is essential to do so in such a way that we do not impair our essential water resources (including potable water) and that we prepare ourselves for the impacts of a changing climate.

1. **River Hazard Protection** – Develop and implement adaptation strategies to reduce flooding and fluvial erosion hazards. While supporting planned growth, ensure that growth is evaluated in terms of preparedness for a changing climate. Chittenden County will continue its efforts, along with the municipalities, to avoid development in particularly vulnerable areas such as floodplains, river corridors, wetlands, lakeshore and steep slopes; protect people, buildings and facilities where development already exists in vulnerable areas to reduce future flooding risk; plan for and encourage new development in areas that are less vulnerable to future flood events (see Strategy 2); and implement stormwater management techniques to slow, spread and sink floodwater (see the Non-Point Source Pollution section below).
 - a. Identify problem locations - Conduct on the ground inventories and map flow and sediment attenuation locations and problematic infrastructure (undersized culverts, eroding roadways, "vulnerable infrastructure" - infrastructure subject to repeat damage and replacement, etc.).
 - b. Revise bridge/culvert designs - Revise public works and zoning ordinances with culvert and bridge design specifications that allow for wildlife passage and movement of floodwater and debris during high intensity events. Implement culvert and bridge designs that produce stable structure in river channels (i.e. fluvial geomorphology).
 - c. Protect river corridors– Existing bylaws protect the majority of Fluvial Erosion Hazard (FEH) areas with stream setbacks and floodplain regulations. Work with ANR to get the FEH data incorporated into the River Corridor Protection Area maps. Work with municipalities and ANR to improve bylaws to protect the River Corridor Protection Areas or River Corridors not currently protected and enforce these bylaws. Continue protection of river corridors including non-regulatory protection measures such as stream re-buffering, river corridor easements on agricultural lands, river corridor restoration and culvert and bridge adaptation.
 - d. Support non-regulatory conservation and/or preservation of vulnerable areas through public and land trust investments, including identification of repetitively damaged structures and provide assistance to elevate, relocate or buy out structures, and identify where flood storage capacity may be restored and conserved.
 - e. Participate in the development and implementation of the Lamoille, Winooski and Direct to Lake Tactical Basin Plans. CCRPC will work with the State, municipalities and other partners to address river hazard protection, flood resiliency and water quality through these Plans – including prioritizing projects for funding.
 - f. To protect water quality, development should be located to avoid state and local known constraints that have been field verified, and to minimize impacts to state and local possible constraints that have been field verified.
 - i. State and Local Known Constraints, as protected by municipalities and State agencies, are shown on Map 9 and include the following: DEC River Corridors,

4. INCREASE INVESTMENT IN AND DECREASE SUBDIVISION OF WORKING LANDS AND SIGNIFICANT HABITATS, AND SUPPORT LOCAL FOOD SYSTEMS.

1. **Habitat Preservation** - Protect forest blocks, wildlife connectivity resources and crossings, surface waters, riparian areas and other significant habitats (e.g. wetlands) from development and fragmentation; and promote vegetative landscaping in urban areas to maintain natural habitats, natural storm water management, water quality, air quality, carbon sequestration and cultural heritage. This work should focus on the broader concept of the pattern of forest cover versus focusing on core forest areas because forest blocks in Chittenden County are getting smaller and more isolated from other forest blocks, as well as surface water and riparian areas. Leaving isolated islands of habitat contributes to losses in biodiversity.
 - a. Inventory – Map 10 provides a starting point for regionally important forest blocks and wildlife habitat and is the basis for this Plan’s compliance with Act 171 of 2016 (Forest Integrity). The map includes Vermont Conservation Design’s highest priority and priority resources defined as two scales: Landscape Scale (aka forest blocks and connectivity resources) and Species and Community Scale (aka rare, threatened and endangered species and other specific habitat sites). This data and the component layers are located on the State’s BioFinder website. Over the coming years CCRPC will work with municipalities to be compliant with this new statutory requirement, by:
 - i. assisting with on the ground surveys and inventories of forest blocks, wildlife crossings, natural communities (i.e. special features within the forest blocks and surface water and riparian areas), and other significant habitats (e.g. wetlands), scenic resources and locations of invasive species and map this information.
 - ii. Prioritize these resources based on ecological information, connectivity and local information. For example, a landscape scale forest block may be more important than another if it contains multiple community species within it. Or a portion of a forest block may be more important than another if it is planned for growth. For example, the Forests, Wildlife & Communities: Science to Action project was done in the Towns of Richmond, Bolton, Jericho, and Huntington, by Vermont Natural Resources Council, Arrowwood Environmental, Vermont Fish & Wildlife Department, VT Forests, Parks & Recreation Department, and CCRPC. Hinesburg has also done some great work in this area. Also, the VT Agency of Transportation’s BioFinder and *Planning: A Key Step Towards Protecting Forest and Wildlife Resources* are helpful resources for this work.
 - iii. incorporate this data into municipal and regional plan text and maps and establish specific policies that address and protect these resources. This data can be added to a natural features map, and the highest priority resources can be added to the future land use map as an area to be protected in the future.

- iv. Aggregate these locally important forest blocks, wildlife habitat and associated resources into a regionally significant map so that we can see these resources across municipal boundaries and work together to protect them.
 - b. Resource Protection Audit – Identify what resources are being protected and to what standard. Map this information based on tiers of resources based on scale (i.e. small scale rare species locations and wetlands versus landscape scale forest blocks) and protection standards. Small scale resources may require higher standards, where landscape scale resources may accommodate some development and require less protective standards to maintain functions and values.
 - c. Municipal Development Review Regulations - Develop clear definitions of the resources to be protected and establish standards to describe how to protect these resources within zoning and subdivision regulations.
 - d. Education - Educate engineers, developers, real estate professionals, planners and the public regarding resources and methods for restoration and protection.
 - e. Non-regulatory Protection - Support non-regulatory conservation and/or preservation through public and land trust investments. Establish invasive plant removal management plans, implement the plans and include long-term monitoring.
 - f. To protect significant habitats, development should be located to avoid state and local known constraints that have been field verified, and to minimize impacts to state and local possible constraints that have been field verified.
 - State and Local Known Constraints, as protected by municipalities and State agencies, are shown on Map 9 and include the following: State - significant natural communities and rare threatened and endangered species, vernal pools (unconfirmed and confirmed), and Class 1 and Class 2 Wetlands, Local Known Constraints: see constraint tables under the description of Map 9 in Supplement 3.
 - Possible State and Local Constraints, as protected by municipalities and State agencies, are shown on Map 9 and include the following: Protected Lands (state lands in fee simple ownership and privately conserved land), deer wintering areas, the Agency of Natural Resources Vermont Conservation Design Highest Priority Forest Blocks, Local Possible Constraints: see constraint tables under the description of Map 9 in Supplement 3.
2. **Working Lands Implementation** – To preserve the soul of Vermont, as well as move forward into the future with resiliency, Vermont needs to protect the farmland and forestland we have and support existing and new operations (including, but not limited to, un-intensive urban and suburban home gardens and mini-homesteads). Support implementation of the Farm to Plate Strategic Plan and the VT Working Landscape Partnership Action Plan.
- a. Municipal Development Review Regulations - Develop clear definitions of working lands to be protected and establish zoning and subdivision standards to describe how to protect these areas from development so that they may be retained and accessible as “working” lands. Maintain access and scale of working lands to ensure



2018 Chittenden County ECOS Plan

Supplement 2 – Regional Analysis
Adopted 6/20/2018

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NATURAL SYSTEMS

Broad Goal: Design and maintain a strategically planned and managed green infrastructure network composed of natural areas, working lands, wildlife habitat, scenic views and air quality that help to conserve ecosystem values and functions (including climate change adaptation and mitigation), and provide associated benefits to our community.

INTRODUCTION: A sustainable community preserves natural systems in order to maintain quality of soil, air and water and because they offer a richness that nurtures the human spirit. Healthy landscapes are necessary to sustain the complex myriad of plant and animal species that share our habitat. We are dependent on the surrounding landscapes for many resources such as food, water and fuel; for recreational opportunities and aesthetic values; and for vital natural processes such as water retention and recycling, air cleansing, carbon sequestration, and nutrient cycling. Preservation of our natural systems can help guide new growth into existing developed areas. In addition, a network of healthy natural systems and green infrastructure can make very important contributions to the overall prosperity of the region.

As a result of our topography and historic development patterns the eastern side of Chittenden County contains large intact habitat blocks, while the western side does not; however, many important habitats exist throughout the entire County. Therefore, this plan calls for efforts to maintain the existing natural systems throughout the County, and minimize fragmentation of habitats and maintain wildlife corridors. The [*Conserving Vermont's Natural Heritage Guide*](#) (Vermont Fish and Wildlife Department and the Agency of Natural Resources, 2004) identifies the following seven mechanisms by which current development patterns degrade Vermont's natural heritage: 1. direct loss of diversity; 2. destruction of habitat; 3. habitat fragmentation; 4. disruption of movement, migration, and behavior; 5. introduction of invasive exotic species; 6. degradation of water quality and aquatic habitat; and 7. loss of public appreciation for the environment. Methods to combat or mitigate these mechanisms are crucial to the sustainability of the County as we continue to grow.

This section also touches on the local impacts of a changing climate. Our region's climate is already changing; warmer, wetter conditions are expected to increase this century ([*Chittenden County Climate Change Trends and Impacts*](#)). These changes will adversely impact forest and aquatic communities, water quantity and quality, public health, agriculture, winter sports businesses, and buildings and infrastructure in flood and fluvial erosion hazard areas. Curbing climate change will require planet-wide actions to reduce greenhouse gas emissions; and preparing locally so that we can be resilient in light of these changes is imperative.

This Plan uses a multidisciplinary, holistic 'ecological systems' approach to understanding our natural and built environment, in which we look at the complex relationships between living elements (such as vegetation and soil organisms) and nonliving elements (such as water and air) of a particular area to understand the whole ecosystem. In that same way, we must look beyond our municipal, county and state political boundaries to understand the impacts, both positive and negative, we have on each other. We need to collaborate with each other and adjust our actions in a measured fashion in support of ecosystem health.

1. ECOLOGICAL SYSTEMS

Ecological Systems Goal: Conserve, protect and improve the health of native species habitats, water quality and quantity, and air quality.

Key Issues/Trends/Insights

[Data for this section drawn from [Natural Systems Analysis Report](#) and [Lake Champlain Basin Program's State of the Lake Reports](#)]

- **Wildlife and Native Species** Vermont's forest cover was as low as 35% in the mid to late 1800's; but after major reforestation it is now 74%. However, for the first time in a century the State is experiencing an overall loss of forest cover. This is true in Chittenden County as well; the County sees fragmentation and loss of forest blocks and *habitat* connectors largely due to scattered residential development. While 86% of our growth has occurred in our areas planned for growth since 2011; we still experience incremental growth that breaks up the forests. The most significant change is the pattern of the forest cover and relative connectedness of forest blocks to each other and riparian areas. The Agency is seeing forest blocks in Chittenden county getting smaller and more isolated from other forest blocks, as well as surface water and riparian areas. Leaving isolated islands of habitat contributes to losses in biodiversity. Growth outside of planned areas has had a visible (and ecological) impact on the pattern of forests and forest cover. These trends speak to the broader concept of the pattern of forest cover versus focusing on core forest areas. Increasing land parceling and subsequent habitat conversion, lack of local regulations responsive to wildlife habitat concerns, and construction of transportation infrastructure (including roads and trails) continue to adversely impact forest and habitat integrity. In addition, acid deposition from air pollution, migration of invasive species including destructive insect species, and climate change continues to threaten native forest plant and animal habitat.
- **Water Quality** Vermont water bodies continue to face mounting pressures from unsustainable development, farm and forest activities. Cumulative impacts from these land use activities have degraded water quality, aquatic habitat and altered the stability of river corridors and lakeshores. Issues that predominate in the County include disappearing wetlands, increasing impervious surfaces, steady high pollutant loads (mainly from nonpoint sources such as unmanaged stormwater), that result in nutrient enrichment and sedimentation, as well as other impairments. In addition, aquatic nuisance species continue to enter our waterways, contributing to the degradation of both habitat and recreational opportunities. Climate change is expected to bring us more intense storms at a higher frequency, which will only exacerbate the problem. Support of water quality improvement has been an ongoing effort of the Vermont Agency of Natural Resources and since 2012 the following initiatives have come into effect or been updated: Shoreland Protection Act and Permit; Update of Lake Champlain Watershed Basin Plans - Lamoille and Northern Lake Champlain; Flood Hazard Area and River Corridor Protection Rule and Permit; Update of Stormwater Rules and Permits; and Designation of Sandbar Wetlands as a Class I Wetland.
- **River Corridors** *River corridor resilience* is also critical to the health of our ecological systems as well as protection of nearby infrastructure. Channelization of streams and rivers, reduction and alteration of natural floodplains, river corridor encroachment, stormwater runoff and reduction and elimination of vegetative buffers are practices that lead to river corridor instability causing excessive erosion of river channels, pollution and additional fluvial erosion hazards. Of the river miles assessed in Vermont, 74% have become confined to deeper, straighter channels and no longer have access to historic floodplains essential to stable streams and sustainable water quality management. River Corridor means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable

channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition, as that term is defined in 10 V.S.A. §1422, and for minimization of fluvial erosion hazards. River Corridor maps are officially posted on the ANR Natural Resources Atlas. In the coming year the maps will be updated to represent field-based Phase 2 data which have been delineated for many Chittenden County communities. An FEH is essentially equivalent to a River Corridor Protection Area (RCPA). Both delineate the extent of the rivers meander belt, however the FEH areas are field-based data and more accurate than the current State mapped RCPAs. A River Corridor includes the meander belt *and* the area to maintain a riparian buffer (defined as 50 feet from the meander belt). These areas are mapped in the 2016 update of the *Chittenden County All Hazards Mitigation Plan* and associated municipal Annexes, and are officially posted on the ANR Natural Resources Atlas. River Corridor protection is a goal in statute for municipalities, regions and state agencies. Important incentives such as the Emergency Relief Assistance Fund (see the Public Safety, Criminal Justice & Hazard Mitigation Section in this Supplement for more information) are available to communities protecting river corridors.

- **Groundwater** As of 2005, 22,120 residents of Chittenden County (almost 15% of the population) relied on *groundwater* sources for their drinking water (Source: USGS Water Use Compilation). Protection of groundwater resources from failing septic systems and petroleum spills/leaks is critical.
- **Regulations** *Local zoning lags behind town plans.* There is a disconnect between the vision for natural systems as expressed in Municipal Plans, and the Zoning Regulations that implement those plans. In addition, many zoning regulations have vague review standards and definitions, a situation that complicates enforcement and opens the town to due process legal challenges. Conversely, local bylaws protect the majority of Fluvial Erosion Hazard areas in the County with stream setbacks and floodplain regulations from new development. However, agriculture and forestry practices are exempt from local review and without State enforcement of accepted agricultural practices fluvial erosion hazard areas are subject to degradation.
- **Air Quality** *Outdoor air pollution* in significant concentrations can raise aesthetic and nuisance issues such as impairment of scenic visibility; unpleasant smoke or odors; and can also pose human health problems, especially for more sensitive populations like children, asthma sufferers, and the elderly. While Chittenden County's air quality meets current National Ambient Air Quality Standards (NAAQS), we are close to the limits for ground-level ozone and fine particulates. We are also subject to pollution from the mid-west that we cannot control. If the NAAQS are revised to be more stringent - or air pollutant levels increase - so that we exceed the NAAQS, additional and costly environmental regulations will apply to our region (Source: <http://dec.vermont.gov/air-quality>).
- **Climate Change Mitigation & Adaptation** – Plants remove carbon from the atmosphere and store it in biomass and soils – a process called carbon sequestration. Maintaining forests, wetlands, agricultural lands and vegetated spaces in developed areas is important for ensuring current and future carbon sequestration. Vegetated landscapes are also important for the natural absorption of stormwater, reducing runoff and the potential for flooding. By concentrating development we can protect vegetative cover throughout the County. Also, reducing fragmentation of forest blocks and riparian areas will help limit the effects of climate change on species. As species adjust their ranges, they will need to cross roads and less suitable habitats. Maintaining a connected network of lands and waters is the one of the most important climate change adaptation strategies.

Key Indicators

- **Chittenden County Land Cover Losses (Source: USGS 2001 and 2006 National Land Cover Data):**
 - .19 net acres of agricultural land and natural resource land lost annually to development per new resident between 2001 and 2006.

2. SCENIC, RECREATIONAL, AND HISTORIC RESOURCES

Scenic and Recreational Resources Goal: Conserve, protect and improve valued scenic, recreational, and historic resources and opportunities.

Key Issues/Trends/Insights

[Data for this section drawn from [Natural Systems Analysis Report](#)]

- Chittenden County is rooted in its scenic, recreational, and historic resources. These provide residents a place to relax, play, gather, and learn about nature, conservation, and our heritage. They also provide important ecological functions including wildlife habitat, and water and air quality protection. These are supplemented by indoor and outdoor recreation facilities. In addition to the many recreational opportunities associated with Lake Champlain (swimming, boating, fishing, etc.), an extensive system of shared-use paths, on-road bike lanes, and off-road trails connect the County's recreational facilities and areas (this data can be found under the Natural Systems section of the online map located here: <http://maps.ccrpcvt.org/ChittendenCountyVT/>). In addition, municipalities are planning for new facilities and improvements to existing facilities to expand access and opportunities for recreation. See the CEDS Project list in Supplement 4 for cost estimates, funding sources and proposed timelines for six recreation related projects throughout the County.
- Scenic resources represent an important element of the region's landscape and contribute directly to sense of place, quality of life and economic vitality through tourism and by attracting new residents and businesses.
- Historic resources include buildings, structures, landscapes, and archeological site land and under water. There are over 4,400 designated historic sites in Chittenden County and over 80 designated historic districts (this data can be found under the Natural Systems section of the online map located here: <http://map.ccrpcvt.org/ChittendenCountyVT/>).
- The recreational value of our water bodies (swimming, fishing, boating, etc.) is critically dependent on water quality. E-coli and algal blooms lead to beach closures, while invasive species threaten our native fish populations. Events and encroachments such as these are exacerbated by the effects of climate change.
- As we work toward encouraging future development in areas planned for growth to maintain VT's historic settlement pattern of villages and urban centers, surrounded by rural countryside, **access** to valued scenic, recreation and historic resources should also be maintained and improved for all residents and visitors. In addition, accessible design standards should be incorporated into recreation facility projects.
- Eight of the County's municipalities (Milton, Colchester, Essex Junction, Winooski, Burlington, South Burlington, Shelburne and Charlotte) are member communities of the Lake Champlain Byway, a State-designated Scenic Byway that extends from Alburg in the Champlain Islands through Chittenden County on U.S. 7 and south into several towns in Addison County. Since 2002 these communities have secured competitive grants from the National Scenic Byway Program to improve the visitor experience by implementing projects such as wayfinding signage, interpretive panels, brochures, kiosks, and other amenities. In particular, the Byway focuses on improving interpretation and information about municipal and non-profit intrinsic resource sites such as parks, town forests, natural areas, trails and smaller museums.

- There is low compatibility between municipal plan recommendations for natural and scenic resources and the implementation of those recommendations through zoning bylaws and subdivision regulation. Further, there are often contradictory goals within municipal plans regarding natural and scenic preservation and new infrastructure for energy generation and transmission. Reconciliation of these is necessary to meet community visions and bring predictability to the development process.

Key Indicators

- **56,450 acres or 17% of Chittenden County's land area is available for recreation in the form of town & state parks, athletic fields, and natural areas.** Source: CCRPC

Additional Indicators can be found on the ECOS Scorecard.

Indicator	Location
Conserved Land, 2010,2015	Scorecard

Working Lands Goal: Support the growth and vitality of working farms and managed forests; and sustainably manage sand and gravel extraction operations.

Key Issues/Trends/Insights

[Data for this section drawn from [Natural Systems Analysis Report](#); Farm to Plate Annual Reporting; [Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information](#) – Vermont Natural Resources Council, September 2010; [The Action Plan of the VT Working Landscape Partnership](#); [Vermont Wood Fuel Supply Study](#) – Biomass Energy Resource Center, 2010]

- Working lands and resource extraction industries are critical components of a self-reliant and diverse economy, making a region less vulnerable to market crises. Local food and fuel production is preferred since the transportation to import these products consumes tremendous amounts of energy and generates pollution. In addition, when food is imported from far-away places, nutrient value is reduced during the transport time.
- Meeting Vermont's goal of obtaining 90% of energy from renewable sources by 2050 may necessitate an increase in biomass used for advanced wood heating, district heat and electricity production. The McNeil Generating Station in Burlington is the region's largest user of biomass for energy generation. Most of the wood fueling the McNeil Station in Burlington comes from within 60 miles of the station and is a byproduct of other forestry operations. At full load, approximately 76 tons of wood chips are consumed per hour (about 30 cords). This far exceeds Chittenden County's abilities to produce biomass. A study conducted in 2010 showed that even if Chittenden County's entire annual wood harvest was put towards the McNeil Station, and all non-constrained forest land were harvested at a comparable rate, the McNeil Station could only run for 57 days on wood from Chittenden County. Large amounts of available wood can be found in other parts of Vermont, and neighboring counties in New Hampshire, Massachusetts and New York. Chittenden County may continue to rely on sustainably harvested forest products from both inside and outside the county to meet its biomass needs.
- Working lands and resource extraction industries are economically viable within the constraints of our natural landscape. Sustainably managed farmland and forest land means less developed land, fewer impervious surfaces, and thus a greater presence of the natural ecosystem's features and functions. Conversely, high quality food and productive forests are dependent upon clean water and clean, nutrient-rich soils. It is imperative that we maintain high quality water and soils for healthy and viable food and forest product industries. Working lands are also a significant contributor to our economy. The harvest and manufacturing of forest products is a \$1.4 billion annual industry in the state. The challenge is to plan and manage future growth, including economic development, so that it sustains and enhances these economic resources. A major challenge to forest and farm businesses is the value of the land in these industries versus the value of the land for development. Often when these industries are no longer economically viable, the land is sold and developed, resulting in forest fragmentation and increased parceling of land. The number of parcels has gone up, while their size has gone down, diminishing their economic viability and the ecological services they provide. This situation has far-reaching potential consequences for the future of Vermont's local economies, including tourism.
- Markets for forest products are necessary to ensure that landowners can afford to hold and manage their forest land (Vermont Forest Resource Plan, page 57). Unfortunately, the Vermont forest products industry is in slow and unheralded decline which has resulted in dramatic reductions in wood processing and manufacturing (Action Plan of the Vermont Working Landscape Partnership, page 14)). In the face of increasing gas prices and international trade,

13. LAND USE

Land Use Pattern Goal: Encourage future growth in the Center, Metro, Enterprise, Suburban, and Village Planning Areas to maintain Vermont's historic settlement pattern and respect working and natural landscapes.

Key Issues/Trends/Insights

[Data from this section drawn from [Historic Development and Future Land Use/ Transportation Analysis Report](#)]

- Over the past 60 years development trends, zoning regulations, and consumer preference have shifted growth away from the metropolitan areas around Burlington, to more suburban and rural locales. This shift has resulted in scattered development at low densities that consume large amounts of land, high infrastructure costs, with little opportunity for social interactions, and less ability to walk to services. Since 2011, the region has seen at least 80% of new housing built in the areas planned for growth which are the center, metro, suburban, and village planning areas. This land use pattern reduces energy for transportation and land use because homes are located near jobs and services which promotes increased opportunities for carpooling, pedestrian/bicycle travel, availability of transit, and reduction in vehicle miles traveled.
- Overall, Chittenden County is moving in the right direction of developing and implementing policies that encourage more growth in these areas. As of 2012, Chittenden County includes 10 Villages, 2 Downtowns, 2 Growth Centers, 2 New Town Centers, and 1 New Neighborhood that are part of the State Designation Program that promotes smart growth principles. Recent studies and surveys indicate that households are choosing to live in areas with shorter commute times, nearby shops and services, and more transit options. This growing demand indicates that the small lot and attached accessible housing stock may be in short supply.
- Forest and agricultural land fragmentation and increased parceling have meant that the number of parcels in rural areas has increased while their size has decreased, diminishing their economic viability, scenic, and the ecological services they provide.
- Future land-based opportunities for farming and forest-based products, recreation and tourism may become more limited as suitable open land becomes less available. This possibility has far reaching consequences for the future of Vermont's local and tourism economies.
- There are over 4,400 designated historic sites in Chittenden County (over 2,500 in Burlington alone) and over 80 designated historic districts (see historic resources map here: <http://maps.ccrpcvt.org/ChittendenCountyVT/>).
- A sustainable society operates without contributing new contaminants to the environment, but also cleans up old contaminants and returns those lands into productive use. Contamination impairs the environment, poses risks to human health, and discourages productive use or reuse of the property. Of 702 Chittenden County sites with reported contamination, 476 (68%) have completed corrective action (VT DEC Waste Management Identification Database).

17. ENERGY

Energy Goal: Move Chittenden County's energy system toward a cleaner, more efficient and renewable system that benefits health, economic development, and the local/global climate by working towards the State's Comprehensive Energy Plan goals.

The goals of the 2016 Vermont Comprehensive Energy Plan are to:

- Weatherize 80,000 Vermont homes by 2020
 - o Intermediate goal of 60,000 homes by 2017
- Get 90% of Vermont's energy from renewable sources by 2050
 - o Intermediate goal of 25% of energy from renewable sources by 2025, including 10% of transportation energy
 - o Intermediate goal of 40% of energy from renewable sources by 2035
- Reduce total Vermont energy consumption by more than 1/3 by 2050
 - o Intermediate goal of 15% reduction by 2025

To meet state energy goals, the region is planning for a major shift away from fossil fuels in the transportation and heating sector to renewable sources of energy, efficiency in all sectors, and an increase in state renewable energy generators.

Key Issues/Trends/Insights

[Data for this section drawn from: Energy Analysis, Targets & Methodology in Supplement 6 of this Plan, [Energy Analysis Report](#) and associated appendices and [Climate Change Trends and Impacts Report](#)].

Efficiency and Conservation

- Chittenden County has a long history of electrical and natural gas energy efficiency programs, dating back to 1990, which have provided significant energy savings and economic benefits to the state and County. These programs along with improvements in federal standards have led to a reduction in per household and per employee energy consumption of electricity and natural gas. Reduction in energy consumption directly results in a reduction in energy bills. Following the Home Performance with ENERGY STAR® guidelines and building/renovating to the State's Building Energy Code are two programs which assist Vermonters with reducing energy consumption from heating and electricity in homes and businesses. See Indicators for data on efficiency gains.
- The State of Vermont's goal to weatherize 80,000 Vermont homes by 2020 and 60,000 homes by 2017 is optimistic. Progress on weatherization has been low despite programs such as the State of Vermont's Heat Saver Loan Program. According to the LEAP analysis Chittenden County would need to weatherize 14% of homes by 2025 and 70% of homes by 2050.
- Electric efficiency programs have always worked to reduce the region's overall load. As demand for electricity increases and renewables continue to become part of our energy supply managing demand is vital to maintaining grid health. Smart Grid technology coupled with education, behavior change, price signaling (e.g. time of use rates), and load control technologies can help reduce peak demand and defer substation upgrades which can result in substantial cost saving.

for a switch to electric vehicles, carpooling, transit ridership, walking/biking and a smaller energy footprint per household. Dense population centers make distributed generation easier, because energy can be produced near significant numbers of customers. Finally, the county's dense land use pattern may allow for innovative energy solutions, such as district heating and microgrids. Switching home heating away from fossil fuels is a key strategy for meeting our energy goals. Cold climate heat pumps, which use heat from the outside air to heat a home, and biomass systems, such as pellet stoves, are home heating alternatives that do not use fossil fuels.

- Chittenden County citizens, businesses, and industries spent about \$669 million on energy in 2015 (25% of Vermont's total). Much of this money leaves the County and state immediately. This outflow of energy dollars acts as a drain on the local economy.
- The price of energy is forecasted to continue increasing in the future, which will result in an additional burden on the County's residents and businesses, unless energy consumption can be reduced.
- Fossil fuel combustion increases the atmospheric concentration of carbon dioxide and other greenhouse gases, which are the causes of global climate change. Climate change will have profound impacts on the environment, public health, infrastructure, and economy of Chittenden County.
- Vermont, and the County, relies heavily on gasoline and diesel for transportation. Gasoline consumption has increased as more residents drive to and from work, and run errands.
- Chittenden County is home to an international airport and a National Guard base, therefore the transportation fuel consumption in the County not only includes gasoline, diesel, and compressed natural gas, but also aviation gasoline and jet fuel. It is important to note fuel use in the aviation sector was removed from CCRPC's LEAP analysis and modeling of future energy use, as this is a sector the region will have little influence over.
- As we transition to more renewables, grid resilience is valued by both residents and business, especially because Vermont's climate makes us vulnerable to grid outages. When storage is coupled with distributed energy generation it can provide a source of backup power and also offer the potential to minimize loads at peak times, thereby reducing energy costs.
- A Vermont statute passed in 2015, Act 56 requires Vermont's Electric Utilities to be 55% renewable by 2017, 75% by 2032, and 90% by 2050. Also as part of Act 56, electric utilities need to work with customers to reduce fossil fuel and decrease carbon emissions from transportation and thermal heating by offering new innovative programs and services to their customers. Shifting from fossil fuels to an ever-increasing renewable energy resource will drive down carbon emissions. The electric utilities subject to Act 56 are offering innovative products and services to meet the statute and deliver innovation. These electric utilities offer a host of services and programs that encourage strategic electrification to reduce fossil fuel use.
- Vermont Gas Systems is currently working to deploy renewable natural gas in their service territory. The economic viability of renewable natural gas, its impacts on climate change, and its classification as a renewable resource will be monitored.

Renewable Energy Generation

- Chittenden County has many non-fossil fuel based, renewable energy production sites owned by utilities, private parties, and municipalities. Reliable, cost effective, and environmentally sustainable energy availability is critical to support the economy and natural resources of Chittenden County.
- Vermont's rural nature offers challenges for the transmission and distribution of energy. It is important to maintain and develop an energy production, transmission, and distribution infrastructure in Chittenden County that is efficient, reliable, cost-effective, and environmentally responsible. Current energy distribution projects include: Extension of 3-phase power in south

Hinesburg along VT116 by Green Mountain Power; and Extension of natural gas service to St. George village center; and Burlington is hoping to advance a district heating system using McNeil's waste heat for distribution to the down town core, among other venues. See the CEDS Project list in Supplement 4 for cost estimates, funding sources and proposed timelines for these projects.

- The cost of electricity is related to the distance it travels. When electricity is transmitted over long distances, a significant amount of electricity is lost. Improving line efficiency or encouraging distributed generation (such as locally sited small scale renewable projects) reduces losses and could result in more cost-effective rates.
- Every three years, Vermont Systems Planning Committee (VSPC) launches a process to update and identify constrained areas and reliability needs for the electric transmission grid. Chittenden County has areas identified as needing improvement. An adequate distribution grid that is able to accommodate the planned increase in electricity use and reduces energy loss is necessary to meet the goals of this section.
- CCRPC has undergone a process to look at areas suitable for solar and wind energy generation to determine our ability to meet the 90% renewable by 2050 goal. See the key indicators below for an analysis of existing generation and future generation possibilities.
- In 2016, the Vermont Legislature Enacted Act 174 to improve energy planning and give town and regional plans greater weight or "substantial deference" in Public Service Board proceedings. The effects of "substantial deference" have yet to be tested in PSB proceedings.

Key Indicators

Additional indicators can be found on the ECOS Scorecard.

Indicators	Location
Annual Natural Gas Consumption	Scorecard
Annual Electricity Consumption	Scorecard
Percent of Electricity Saved	Scorecard
Renewable Energy Capacity Sited in Chittenden County	Scorecard

See Supplement 6 for the complete Act 174 Energy Planning Analysis and Targets



2018 Chittenden County ECOS Plan

Supplement 3 – Regional Plan
Adopted 6/20/2018

For a healthy,
inclusive, and
prosperous
community



This plan is the Regional Plan, Metropolitan Transportation Plan, and Comprehensive Economic Development Strategy in one.

**This plan can be found online at:
www.ecosproject.com/plan**

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state designated New Town Center, Growth Center, Tax Increment Financing District, or high density Village Center. Development in downtown centers primarily happens through infill development of underutilized vacant land and adaptive reuse of older structures whereas, development in municipal growth centers occurs in targeted areas that will accommodate future anticipated growth. These land uses are locally planned and managed to coexist successfully with neighborhoods and natural areas. Places within Center Planning Areas are served by wastewater facilities, other infrastructure, and offer a variety of transportation options, including non-motorized modes

Metro Planning Areas are areas where local zoning authorizes places to accommodate jobs and housing in a compact development pattern that supports transit service and encourages pedestrian activity and are within the sewer service area. Commercial land uses found in the Metro Planning Area are intended to serve the nearby residential area. Existing densities within Metro Planning Areas are typically higher than those found in the Suburban, Rural, Village, and Enterprise Planning Areas and generally range between 4 and 20 dwelling units per acre. Future development in the metro area should be encouraged to occur at the higher end of this range to ensure that there are adequate housing and jobs in these areas.

Suburban Planning Areas are areas near a Center Planning Area, Metro Planning Area, Village Planning Area, or Enterprise Planning Area where local zoning authorizes future development to occur at scales, densities, and uses compatible with existing development and with general residential densities greater than 1 and less than 4.5 dwelling units per acre. Many parts of the Suburban Planning Area already have been developed, often in suburban styles of development and are predominantly within the sewer service area. Future development and redevelopment in this Planning Area should be publicly sewered, minimize adverse impacts on natural resources, and protect strategic open space.

Enterprise Planning Areas are areas where local zoning authorizes a future concentration of employment uses that attract workers from the County and multi-county region. Development in these Planning Areas should have adequate wastewater capacity and access to transit or be near these services. Typically, this area encompasses major employers or a cluster of single employers and has current or planned transit service.

Village Planning Areas are areas where local zoning authorizes a variety of future residential and nonresidential development at densities and scales in keeping with the character of a Vermont village, generally between 2 and 12 dwelling units per acre if sewered and between 0.2 and 4 units per acre if not sewered. Village Planning Areas are compact areas of mixed-use activities that maintain the character of a Vermont village. This type of Planning Area is intended to serve its local surroundings as a place where people can live, work, shop and recreate.

Rural Planning Areas are areas where regional and town plans promote the preservation of Vermont's traditional working landscape and natural area features. The Rural Planning Area also provides for low density commercial, industrial, and residential development (generally 1 dwelling unit per acre or less) that is compatible with working lands and natural areas so that these places may continue to highlight the rural character and self-sustaining natural area systems. Development in the rural planning areas is typically outside the sewer service area.

Map 3 – Existing Utilities and Facilities

The Utilities and Facilities Map shows the existing sewer service area, the water supply district, solid waste facilities, natural gas service area, and cellular towers.



2018 Chittenden County ECOS Plan

Supplement 6 – Energy Analysis,
Targets, & Methodology
Adopted 6/20/2018

For a healthy,
inclusive, and
prosperous
community



**This plan is the Regional
Plan, Metropolitan
Transportation Plan, and
Comprehensive Economic
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**This plan can be found
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TABLE 29. MUNICIPAL RENEWABLE ENERGY TARGETS

Town Name	Population	Population Share	Electricity Use (2016) kWh	Electricity Share	Average of Population and Electricity Use	Total Low Target (MWh)	Total High Target (MWh)	Existing Renewables (MWh)	Low Range New (MWh)	High Range New(MWh)
Bolton	1,236	1%	6,438,601	0%	1%	4,218	7,057	328	3,890	6,729
Buels Gore	39	0%		0%	0%	92	154	6	86	148
Burlington	42,570	27%	337,120,744	18%	22%	168,431	281,769	285,442	✓	✓
Charlotte	3,822	2%	17,731,242	1%	2%	12,607	21,090	5,059	7,548	16,031
Colchester	17,293	11%	130,883,974	7%	9%	67,204	112,427	2,086	65,119	110,341
Junction + Town	20,419	13%	812,560,922	43%	28%	211,386	353,629	43,750	167,636	309,879
Hinesburg	4,472	3%	21,863,227	1%	2%	14,975	25,051	1,457	13,517	23,594
Huntington	1,875	1%	6,006,362	0%	1%	5,644	9,442	629	5,016	8,814
Jericho	5,043	3%	19,583,562	1%	2%	15,869	26,547	1,347	14,523	25,201
Milton	10,610	7%	73,247,256	4%	5%	39,817	66,610	102,752	✓	✓
Richmond	4,115	3%	18,449,817	1%	2%	13,445	22,491	4,485	8,960	18,006
Shelburne	7,566	5%	52,476,876	3%	4%	28,443	47,582	4,648	23,795	42,934
South Burlington	18,536	12%	209,096,439	11%	11%	85,841	143,604	13,988	71,853	129,616
St. George	764	0%	2,785,411	0%	0%	2,368	3,961	312	2,056	3,649
Underhill	3,061	2%	10,831,229	1%	1%	9,420	15,759	765	8,656	14,995
Westford	2,013	1%	7,193,338	0%	1%	6,209	10,387	411	5,798	9,976
Williston*	9,054	6%	115,680,384	6%	6%	44,647	74,691	3,435	41,213	71,256
Winooski	7,223	5%	42,522,563	2%	3%	25,633	42,882	30,297	✓	12,584
County Total	159711	100%	1,884,471,945	100%	100%	756,250	1,265,134	501,196	255,054	763,938

WILLISTON, VT

2025-2033 COMPREHENSIVE PLAN

**LIVABLE
RESILIENT
EQUITABLE**



*Adopted by the Williston Selectboard
August 19, 2025*

*Transmitted by the Planning Commission
May 20, 2025*

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Map 15 – Parkland and Primitive Trails

Map 16 – Conservation Areas

Map 17 – Visual Assessment

Map 18 – Protected Open Space

APPENDICES

Appendices are adopted with the 2025-2033 Comprehensive Plan and carry the same weight and effect of chapter goals, strategies, objectives, and actions.

- A. [Taft Corners Vision Plan, May 2021](#)
- B. [Village Master Plan, 2018](#)
- C. [Dorothy Alling Memorial Library 2024-2027 Strategic Plan, October 2024](#)
- D. [Energy Plan, August 2025](#) (adopted in concert with Comprehensive Plan)

Coming soon: These planning efforts are imminent or in process and will be considered for adoption into the 2025-2033 Comprehensive Plan when they are complete:

- E. Recreation & Parks Master Plan, (RFQ as of April 2025)
- F. Williston Fire Department Strategic Plan (In process as of April 2025)

REPORTS & STUDIES

Reports and studies are referenced throughout the Town Plan or may be utilized when implementing an action item, but do not carry the programmatic work plan weight of Chapters and Appendices.

Planning & Zoning

- A. [Town of Williston Engagement Insights Report, April 2024](#)
- B. [Williston Housing Needs Assessment, April 2023](#)
- C. [Designated Growth Center, 15-Year Review, November 2022](#)

Infrastructure and Transportation

- D. [Transportation Scoping Studies](#)
- E. [Williston Multi-Modal Hub Feasibility Study, June 2023](#)
- F. [Williston Microtransit Feasibility Study, July 2023](#)

Parks & Land Management

- G. [Allen Brook Community Park Master Plan, February 2022](#)
- H. [Country Park and Conservation Area Management Plans](#)

Municipal Service Delivery

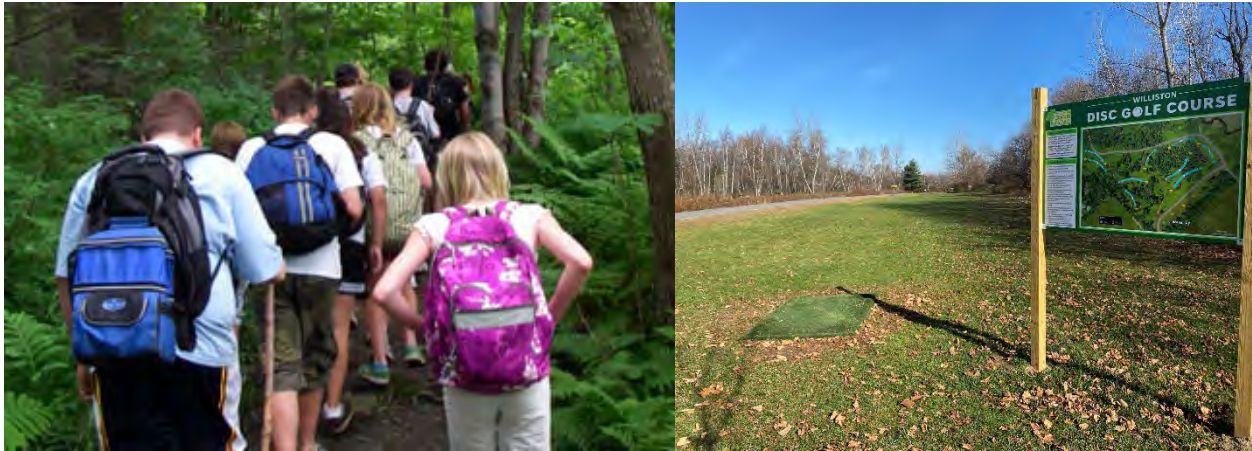
- I. [Williston Police Department Police Services Analysis Report, November 2023](#)
- J. [Scoping and Feasibility Study: Community Center and Library Spaces for the Town of Williston, October 2023](#)
- K. [Fire Service Analysis, September 2021](#)

NEIGHBORING COMMUNITIES

The neighboring municipalities, regional planning commission, and other major entities have plans that are referenced here. A discussion of how Williston relates to its neighboring communities, their plans, and regional planning efforts can be found in Chapter 15.

- A. [Chittenden County Regional Planning Commission ECOS Plans, 2018](#)
- B. [City of South Burlington](#)
- C. [City of Essex Junction](#)
- D. [Town of Essex](#)
- E. [Town of Jericho](#)
- F. [Town of Hinesburg](#)
- G. [Town of Richmond](#)
- H. [Town of Shelburne](#)
- I. [Town of St. George](#)

8 RECREATION, PROGRAMMING, PARKS & LIBRARY



Introduction

The Recreation & Parks Department stewards public spaces and provides programming to create a dynamic and inclusive environment that inspires lifelong wellness. This work fosters community engagement and enhances the quality of life for residents and visitors of all ages and abilities by promoting physical activity and social interaction.

Over the life of the last Town Plan, Recreation & Parks has grown by expanding their program offerings, adding a Recreation Program Coordinator position, opening the R.E.C. Zone facility, conducting a Recreation Needs Assessment, and adding several facilities at existing parks such as pickleball courts, a basketball court, and a climbing structure.

Recreation & Parks currently faces challenges of limited recreation space and equitable access. Field, court, and indoor space for programming is a major constraint.

Additionally, the department also strives to provide a higher level of accessibility to all members of the town. By increasing the number of parks and public spaces in Town, increasing multimodal transportation connections to recreation spaces, and developing a year-round Recreation Center, the Town can increase the accessibility of the programming it provides.

At the time of adoption for this Town Plan, Recreation & Parks is working on a Master Plan that will guide the department over the next 15 years. Concurrently, the Town continues to work on the Community Center Scoping Study¹ to address the challenges Williston is facing in providing indoor recreation programs.

The Recreation and Parks department's efforts are guided by the Recreation and Parks Committee.



Goals: In 2050, Williston is....



LIVABLE

... because all people -- residents, workers, and visitors – have access to a variety of active and passive recreation facilities. Access to nature and green spaces reduces stress, improves mood, and increases overall happiness. Williston’s parks give kids safe places to play, learn, and grow, while giving parents opportunities to connect with other families. Williston’s Rec programs offer after-school activities, mentorship, and skill-building that keep kids engaged and safe. Williston’s parks are well-connected to neighborhoods by a network of paths and sidewalks, which promotes walking, biking, and outdoor recreation. Williston’s strong park system fosters a high quality of life that attracts residents and businesses alike.



RESILIENT

...because developed parks and country parks provide opportunities for stormwater management and habitat restoration. Green spaces help with climate adaptation by reducing urban heat islands and improving air quality. Williston’s parks promote physical activity, stress relief, and mental well-being, helping people stay healthier, as well as strengthening social connections that are critical during times of need. During emergencies (like heatwaves or pandemics), parks can serve as safer outdoor spaces for socializing, aid distribution, or even medical response setups. Parks – for example, the Catamount Community Forest and Outdoor Center - attract tourism, increase nearby property values, and create jobs through maintenance, programming, and events.



EQUITABLE

...because the Recreation & Parks Department continues and expands offerings that serve people of all ages, abilities, and backgrounds. All people are welcome and included. Urban, suburban, and country parks are equally important and managed equitably. Community parks and indoor facilities are close to dense populations and accessible without a car. Natural areas and trails are equitably distributed throughout the Town.



Three Things to Know

1

THERE IS A NEED FOR ADDITIONAL DEVELOPED PARKS AND OUTDOOR RECREATION FACILITIES, BUT SPACE IS LIMITED BY WETLANDS

The Allen Brook Park Master Plan was completed in 2022, but plans cannot be fully realized due to wetland constraints. The Town has begun to take steps to pivot to a different site or sites for these needed facilities.

2

THE TOWN IS MOVING FORWARD WITH A LIBRARY EXPANSION

The Williston Library and Community Center Scoping Study was completed in 2023 and set the direction for library expansion and siting search for a community center location of approximately 7-10 acres. In the spring of 2025, the Library Trustees endorsed concepts presented by Black River Design and the Town hired CPG Enterprises to study private fundraising options for the expansion.

3

THROUGH ITS RECREATION AND PARKS DEPARTMENT AND LIBRARY COMBINED, WILLISTON PROVIDES A WIDE VARIETY OF PROGRAMMING THAT ENGAGES MANY OF ITS CITIZENS.

In fiscal year 2024, the Dorothy Alling Memorial Library conducted over 750 program sessions, with a collective attendance count of over 11,000 attendees. Williston Recreation and Parks offered more than 250 activities and had over 2,500 registrations for those activities².



Three Things Public Engagement Told Us

1

THE #1 PRIORITY FOR THE TOWN'S FACILITIES IS A NEW COMMUNITY CENTER AND EXPANDED LIBRARY

29% of respondents thought that the biggest challenge facing Williston's public parks and recreation programs was a lack of community amenities. Requests included a dog park, pool, and more playgrounds.

2

THE TOWN WILL NEED TO PLAN FOR SENIOR-SPECIFIC PROGRAMMING AND SPACES.

Survey responses highlighted the lack of ADA accessibility and the need for a senior center. Williston's median age (43.6 in 2024) is higher than the Chittenden County median of 36.7, and Vermont is an aging state.

3

PEOPLE VALUE THE OUTDOOR SPACES MAINTAINED BY THE RECREATION & PARKS DEPARTMENT.

OBJECTIVES, STRATEGIES AND ACTIONS

Objectives

- 8.A** The Town proactively manages the provision of public facilities and services to meet the demands of projected residential, commercial, and economic growth.
- 8.B** Within the Growth Center, no household is more than a 10-minute walk to a park. Within the Sewer Service Area, no household is more than a 20-minute walk to a park. Multiuse paths provide safe access from residential developments to parks.
- 8.C** The town continues to offer and expand accessible, diverse, and equitable recreation programs.
- 8.D** This town plan is a complement to the Recreation and Parks Master Plan's 15-year outlook and the Library and Community Center Scoping Study.

Strategies

- 8.1** Provide community park facilities for recreational programming and other gatherings, with the goal of equitable distribution of parks throughout the Town. Within the Growth Center, no household is more than a 10-minute walk to a park and within the Sewer Service Area, no household is more than a 20-minute walk to a park.

Actions		Responsibility	Timeframe	Cost
8.1.1	Develop new Master Plan for Parks (Community) and Recreation, and identify additional park needs to meet walking distance goals specified in Objective 8.B.	Recreation	Short Term	\$
8.1.2	Evaluate grant and funding alternatives and prioritize park scoping and development in the capital planning programs. 	Recreation Selectboard	Short Term	\$\$
8.1.3	Evaluate potential connections from all existing and future parks to the multi-use path network. Identify gaps and create an action plan to bridge the gaps.	Recreation Selectboard	Long Term	\$\$
8.1.4	Maintain Recreation Program Scholarship Fund. Report on scholarship fund donations, utilization, and adapt utilization of the fund to meet community needs.	Recreation Selectboard	Medium Term	--
8.1.5	Evaluate and fund additions to existing outdoor facilities that foster activity and exercise such as outdoor workout stations, shade structures, and seating along the recreation paths.	Recreation Selectboard	Medium Term	\$\$

8.1.6	Fund and develop a dog park.	Recreation Selectboard	Short Term	\$
8.2	Expand indoor recreation and program capacity, in alignment with national standards for adequate facility space.			
8.2.1	Develop the site and design work for a community center, pool, and outdoor recreation spaces as called for in the Library and Community Center Scoping Study. 	Recreation Selectboard	Medium Term	\$
8.2.2	Support private landowners and businesses in repurposing or rehabilitating existing space for public or quasi-public use. See also 2.11 and 2.12. 	Recreation Selectboard	Medium Term	\$
8.3	Publicize and maintain the Official Map. 			
8.3.1	Maintain regular updates of the Official Map with new information about desired facilities, newly constructed facilities, and known constraints.	Planning Commission Selectboard	Short Term Ongoing	--
8.3.2	Develop outreach plan regarding the Official Map and inform officials and landowners on its purpose and use.	Planning	Short Term Ongoing	--
8.3.3	Maintain discussion with the Library Board of Trustees, Recreation and Parks Committee and staff in amendments of the Official Map.	Planning Recreation Library	Ongoing	--
8.4	Maintain and improve the Country Parks and Conservation Areas.			
8.4.1	Develop more robust organizational and fiscal systems for the maintenance of Country Parks.	Selectboard Town Manager	Short Term	\$
8.4.2	Develop an inventory of Country Parks and develop a framework for prioritizing repairs and expansion, factoring costs, equitable usage, and fiscal sustainability.	Planning & Conservation Commissions	Short Term	\$
8.4.3	Develop new country parks and trails, prioritizing connections to underserved and under connected residential neighborhoods and employment nodes. 	Conservation Commission Selectboard	Medium Term	\$
8.4.4	Evaluate improvements to the volunteer programs and adopt-a-trail style programs to supplement paid town and contracted labor.	Planning Recreation	Medium Term	\$
8.5	Enhance and expand community gardens; evaluate the feasibility of establishing a tree nursery.			
8.5.1	Evaluate feasibility of a town tree nursery to provide ecosystem appropriate and cost-effective plantings for street trees and private development.	Selectboard Conservation Public Works	Medium Term	\$

8.5.2	Prioritize expansion of community gardens. Establish community gardens in close proximity to homes for ease of access.	Recreation Selectboard	Medium Term	\$
8.6	Establish a linear park in the former Circumferential Highway right-of-way that runs south to north from 1-89 to Williston's northern boundary. 			
8.6.1	Evaluate process to acquire the necessary rights from the state of Vermont to develop a linear park in the CIRC right-of-way.	Selectboard	Medium Term	\$
8.6.2	Evaluate options for a linear park including connections to trail and easements in surrounding neighborhoods, which could include a scoping study and construction plan. Evaluate possible progression from primitive trail to paved multi-use path.	Planning Public Works	Medium Term	\$
8.6.3	Fund linear park construction with Circumferential Highway alternative project funding and supplement with the capital improvement program.	Selectboard	Long Term	\$
8.7	Continue improvement of the primitive trail program. Retain trail access and easements consistent with the Official Map as part of the development review process.			
8.7.1	Maintain an inventory of publicly accessible trails and trail easements.	Planning Conservation Commission	Ongoing	--
8.7.2	Evaluate desired future trails and the cost and feasibility of construction based on known constraints by creating an inventory.	Planning Conservation Commission	Short Term	\$
8.7.3	Prioritize new trails that link discontinuous segments and provide access to underserved areas.	Planning Conservation Commission	Short Term	--
8.8	Manage parkland in a sustainable and wildlife-friendly manner. 			
8.8.1	Develop a management plan that limits mowing and lawn chemicals to the minimum area necessary for sports fields, enhances gathering spaces with wildlife- friendly plantings, edible plants, stormwater gardens, and shade.	Recreation Conservation Commission	Short Term	\$
8.8.2	Support the conversion of mowed lawns to wildlife, pollinators, and edible ecosystems especially in places that reconnect fragmented habitat.	Conservation Commission	Short Term	\$
8.9	Maintain productive relationships with partner organizations			

8.9.1	Support Vermont Mountain Bike Association (VMBA) and Fellowship of the Wheel (FOTW) on the maintenance of existing and development of future mountain biking trails. Where reasonably feasible, design trails to accommodate adaptive bikes.	Conservation Commission	Short Term Ongoing	\$
8.9.2	Maintain collaboration with the Winooski Valley Park District to complete projects in Williston.	Conservation Commission	Ongoing	\$
8.9.3	Evaluate the value of returns on the investment of annual dues the town pays to the WVPD.	Selectboard	Short Term	--
8.10	Monitor, evaluate, and adjust policies and programming at Catamount Community Forest.			
8.10.1	Maintain a land management plan and ensure alignment with the Conservation Easement and other funding requirements.	Catamount Forest Committee Selectboard	Medium Term	--
8.10.2	Evaluate the long-term function of the Catamount Community Forest Management Committee now that the land is owned by the Town.	Selectboard	Short Term	--
8.10.3	Maintain collaboration with the Catamount Outdoor Family Center on facilities and programming.	Catamount Forest Committee Town Manager	Ongoing	--
8.10.4	Evaluate improvements to multi-modal access to Catamount Community Forest.	Selectboard	Medium Term	\$\$\$
8.11	Expand the library in the Village to meet the needs of the town, using the recommendations of the 2023 scoping study.			★
8.11.1	Evaluate the options presented in the scoping study. Get community input on the options proposed.	Library Trustees	Short Term	--
8.11.2	Develop architectural plans for expansion using a public process.	Library Trustee	Short Term	\$
8.11.3	Develop a funding mechanism – mixture of grants, private donations and bond. Put a bond to vote.	Selectboard	Short Term	--
8.11.4	Implement construction of the expansion.	Selectboard	Short Term	\$\$\$\$

9 UTILITIES



Introduction

The utilities sector is a foundational element of Williston's infrastructure, providing essential services that support daily life, enhance public health, and drive economic growth. These services, which include the provision of water, wastewater disposal, solid waste disposal and diversion, electricity, broadband, and others, are not only necessary for the functioning of households and businesses but also for fostering sustainability, resilience, and a high quality of life. As the town continues to grow and evolve, it becomes increasingly important to ensure that utility systems are not only reliable but also efficient, affordable, and environmentally responsible.

This chapter will delve into the various utility systems that serve the town, examining their current conditions, existing challenges, and forecasting future needs. It will also discuss these utilities' role in supporting the town's goals for livability, resilience and equity. The strategies outlined here will offer a roadmap for addressing future challenges, adopting innovative solutions, and building a resilient utility network capable of supporting the town for years to come.



Goals: In 2050 Williston is...



LIVABLE

...because Williston continues to provide sewer service and high-quality, safe potable water to households, businesses and institutions within the Sewer Service Area, at an affordable cost. The town is well served by fixed and mobile broadband, and all households and businesses are able to access and afford this service.



RESILIENT

...because the town's water, sewer, stormwater and electrical infrastructure is well-maintained and has redundancies to cover outages. The Sewer Service Area remains constant and does not expand, so as not to encourage sprawl. Utilities are largely run underground to avoid outages from windstorms. Electricity is powered by renewable, local sources (solar, wind). Stormwater infrastructure is robust and adequately sized to be resilient to withstand the predicted increased frequency and intensity of storms.



EQUITABLE

...because high-speed fixed broadband is available throughout town at an affordable cost. Mobile broadband (cell service) is available throughout town with no "dead zones." The town recognizes that not everyone can be served by municipal water and sewer, and lack of suitable septic capacity and/or potable water may prevent development in much of rural Williston. That inequity results from intentional town policies and goals to conserve open space in rural Williston.

expanded solid waste facilities in Williston and ensure that that agreement is included as a condition of any solid waste certification.

Electric transmission and distribution is handled by regional utility companies VELCO, Green Mountain Power and Vermont Electric Cooperative. All lands north of I-89 are served by GMP. The majority of the land south of I-89 is served by VEC, though some lands near Meadowridge and Exit 12 are served by GMP.

VELCO transmission lines traverse Williston and have an impact on the built environment. Most notable, the transmission lines bisect the Taft Corners Growth Center including Blair Park, Finney Crossing, and Maple Tree Place. No development, aside from parking lots and low-growing trees and shrubbery, are permitted by VELCO under the transmission lines and within the VELCO-easement. Other transmission lines bisect low density rural areas and forest blocks, where vegetation is kept from growing into a forest. The VELCO Easement Corridor, among other constraints, was incorporated into the Form-Based Code Regulating Plan Map. The VELCO transmission lines and surrounding easement are in tension with Williston's land use goals for a compact, pedestrian-friendly town center at Taft Corners.

These entities, along with Vermont Gas (VGS), are overseen by the Vermont Public Utilities Commission and the town has no regulatory authority over electrical distribution and transmission. The objectives and strategies outlined below underscore this relationship and are focused on ways in which the town can exert influence through the PUC process.

OBJECTIVES, STRATEGIES AND ACTIONS

Objectives

- 9.A** The Town is served by private utilities that are robust, resilient and adequate to meet the demands of projected commercial and residential growth.
- 9.B** The town and utility companies coordinate to ensure the best outcomes for Williston. The town shares data on growth trends to inform long- range planning and decision-making processes. The town monitors and comments on utility companies' long-range plans for their compatibility with the town's goals.
- 9.C** The town maintains its water and sewer infrastructure so that it is resilient and sustainable.
- 9.D** The town has wastewater capacity that is adequate to support the estimated "build out" of commercial and residential structures and support Williston's fair share of housing in the region.
- 9.E** The town achieves universal coverage of fixed and mobile broadband service, that is accessible and affordable to all.

11 ENERGY AND CLIMATE RESILIENCE¹



Introduction

The planet is facing a climate crisis, and the impacts of climate change will increasingly become a matter of public safety and economic prosperity as extreme weather events occur with greater frequency and intensity. Looking towards the future, action must take place at all levels to cut greenhouse gas (GHG) emissions that result from the use of fossil fuels and to mitigate its impacts. To meet these challenges, towns need to design and implement plans that ensure safe, sustainable, and thriving communities in the context of a changing climate and energy landscape.

The 2025 Williston Energy Plan is a standalone document that is incorporated by reference into this Town Plan and summarized in this chapter. The Energy Plan was developed in accordance with the Vermont Department of Public Service's energy planning standards and in alignment with the goals outlined by the 2022 Vermont Comprehensive Energy Plan (CEP). The Energy Committee developed the energy plan with input from Sustainable Williston, guidance from town staff and Chittenden County Regional Planning Commission (CCRPC) staff, and oversight from the Planning Commission. The Plan provides direction for the reduction of greenhouse gas emissions by focusing attention

on five key areas: 1) transportation and land use, 2) building energy usage, 3) recycling and consumption, 4) renewable energy generation, and 5) agriculture.

Within each major focus area, the plan articulates measurable goals the town aims to achieve, outlines objectives to achieve said goals, identifies pathways that list the responsible entities, and suggests a timeline for task completion.

The energy profile for Williston (pages 7-13 of the Energy Plan) provides an estimate of current energy consumption in the heating, electricity, and transportation sectors. These estimates are provided to better understand where the town is currently with respect to Vermont's energy goals.

The Energy Plan (pages 13-20) also provides a picture of estimated future energy targets that need to be met for Williston to achieve the goal of 90% renewable energy by 2050. To achieve these targets, multiple strategies and actions are proposed.



Goals: In 2050 Williston is....



LIVABLE

...because Williston is a community powered by renewable, locally produced and owned energy, fed by local farms, housed in energy efficient homes heated without fossil fuels, transported by biking and walking, electric cars and buses, all sustained by a vibrant, local economy and social network. Everyone in Williston lives in a healthy, safe and comfortable home, and no one spends more than 6% (threshold above which is considered “energy burdened”) of their income on energy bills.



RESILIENT

Williston is primarily powered by renewable, locally produced and owned energy, it is resilient to fluctuations in global energy supply and prices. Because local farms supply a substantial part of the local food supply, the town is resilient to fluctuations in global food supply and prices. Because the town’s robust public transit system and expansive, well-connected network of paths and trails provides viable alternatives to driving a car, the roads are less congested and carbon emissions and other pollutants are greatly reduced, and the community is active and healthy.



EQUITABLE

...because the Town of Williston centers equity in the implementation of all pathways towards achieving the town’s energy and climate resiliency goals. A key guiding principle of the Vermont Climate Action Plan is to prioritize the most impacted first. Those most impacted by rising energy costs and climate change are households with high energy to income ratios, referred to as “energy burdens.” Most often this includes lower-income households, many renters and people who work in Williston at lower wage occupations but cannot afford to live in town thus relying more on car transportation. All implementation pathways prioritize those with high energy burdens, incorporate consideration of possible unintended negative impacts on this population and mitigate those impacts. Those who are most impacted by energy burden and climate change have a voice in decision making while the town plans the transition to a clean energy future and receive a share of benefits.



Three Things to Know

1

BOLD ACTION IS REQUIRED TO ADDRESS CLIMATE CHANGE IMPACTS

Including moving the town away from use of fossil fuels toward renewable energy, reducing consumption of energy and materials, and increasing conservation measures.

2

WILLISTON'S 2020 ENERGY PLAN WAS AN IMPORTANT FIRST STEP TO ADDRESS CLIMATE CHANGE

The development of 2020 Williston Energy Plan was the first time the town attempted to develop a comprehensive document putting forth goals, strategies and actions to reduce carbon emissions in alignment with those outlined by the 2016 State of Vermont Comprehensive Energy Plan (CEP).

3

WILLISTON NEEDS TO DO MORE AT A FASTER PACE TO ACHIEVE ITS STATED ENERGY AND CLIMATE GOALS.

Williston needs to begin making progress to electrify its fleet and needs to implement measures to decarbonize and increase the energy efficiency of town buildings.



Three Things Public Engagement Told Us

1

PEOPLE VALUE WILLISTON'S INVESTMENT IN RENEWABLE ENERGY.

The town owns two solar arrays that produce a combined total of 314 megawatts annually, enough energy to offset 74% of electricity used in town buildings.

2

THE TOWN SHOULD BE DOING MORE.

When asked what the town's priorities should be to address energy and climate challenges, 44% of respondents stated that the greatest town priority for Williston's energy and environment is in addressing renewable energy and energy efficiency. This includes encouraging more solar and clean energy, more available electric vehicle charging stations, and shifting away from fossil fuels.

3

THERE IS SOME SUPPORT FOR FUNDING ENERGY EFFICIENCY AND RENEWABLE ENERGY THROUGH PROPERTY TAXES.

When asked whether they would support the town's investments in energy efficiency and solar generation, even if it results in an increase in taxes, 44% agreed, 31% disagreed, and 25% were neutral.

11.9.2	Maintain hosting an annual Energy Fair that brings together vendors, partners, and EV Ambassadors to showcase EVs, electric lawn equipment, the latest heat pump technologies and other resources related to weatherization and electrification measures.	Energy Committee	Ongoing	\$
11.9.3	Develop schedule for pop-up events periodically in conjunction with town events and farmers markets to share information about energy conservation and electrification strategies.	Energy Committee	Ongoing	\$
11.9.4	Develop and distribute free Energy Saving Kits and materials to those who need them and leverage these opportunities to build trust in the community, to encourage community members to seek information and assistance from the Committee and Energy Planner on how to reduce energy burdens. Where practicable, meet people where they are.	Energy Committee	Ongoing	\$
11.9.5	Maintain organization of workshops and/or building walk-throughs highlighting demonstration projects completed by residents, businesses, the Town or the State.	Energy Committee	Ongoing	\$
11.10	Continue to implement land-use policies that embrace smart and sustainable growth.			
11.10.1	Maintain policy to pursue a land use and transportation strategy centered on mixed-use, compact development in the town's Growth Center.	Planning Commission Selectboard	Ongoing	--
11.10.2	Maintain policy to support the development of high- intensity land uses within the town's designated Growth Center to result in a compact development pattern that supports and encourages driving fewer miles, the use of transit, ride-sharing, and active forms of transportation like bicycling and walking.	Planning Commission Selectboard	Ongoing	--
11.10.3	Maintain promotion of green infrastructure practices in development standards to reduce local temperatures and shade sidewalks and building surfaces.	Planning Commission Selectboard	Ongoing	--
11.11	The town should increase its renewable energy production, and pair with battery storage.			
11.11.1	Evaluate opportunities to install new solar arrays on preferred sites – meaning rooftops and parking lot solar canopies.	Energy Committee Selectboard	Medium Term	\$\$\$

11.11.2	Evaluate opportunities to pair renewable energy generation with electrical energy storage to ensure energy is maximally utilized to the fullest potential, to increase resilience/reliability of electrical system during outages and decrease fossil fuel usage during peak periods.	Energy Committee Selectboard	Short Term	\$
11.11.3	Develop a site feasibility analysis for installing a rooftop solar array and storage at the Fire Station.	Planning Staff	Short Term	\$
11.11.4	Evaluate feasibility for rooftop solar arrays at school buildings in collaboration with CVSD.	Energy Committee	Short Term	\$
11.11.5	Fund grants, local funds and tax credits to construct new solar arrays where it is feasible.	Energy Committee Selectboard	Medium Term	\$\$\$
11.11.6	Evaluate the feasibility and cost of establishing microgrids for the Town's critical infrastructure (such as emergency shelters) so as to allow continued operations during outages and storms while reducing carbon emissions.	Energy Committee Selectboard	Medium Term	\$\$\$
11.12	Encourage and support new solar arrays and community solar in Williston.			
11.12.1	Develop outreach plan for available funding resources and/or programs for private solar installations.	Energy Committee	Short Term	--
11.12.2	Develop outreach plan regarding community solar programs for properties at which the installation of a solar array is not feasible due to site or other constraints.	Energy Committee	Short Term	--
11.13	Support the development of geothermal networks where it makes the most sense, such as in the Growth Center where there are a mix of commercial and residential uses near each other.			
11.13.1	Evaluate the feasibility of incorporating geothermal network into new development in partnership with property owners and other partners such as VGS.	Energy Committee	Short Term	--
11.13.2	Evaluate avenues of funding a geothermal network if determined feasible.	Energy Committee	Medium Term	--

13 | LAND-BASED CONSERVATION RESOURCES



Introduction

Positioned between the lowlands of the Champlain Valley and the foothills of the Green Mountains, the town of Williston has a unique physical setting whose roots trace back over millennia to ancient river deltas in Glacial Lake Vermont and to the great tectonic forces of geology that uplifted the Green Mountains and shaped the very bedrock the town stands on. Those same geological forces create the patterns we see on the landscape today. From moist floodplain forests and wetlands to dry craggy ridgelines, Williston hosts diverse plant communities and is home to abundant wildlife including bobcats, fishers, black bears and moose as well as a rich springtime chorus of amphibians and birds.

In recent times, Williston's landscape has experienced rapid, dramatic change. Residential, commercial and industrial development has not only resulted in forest fragmentation and loss of forest cover; Williston has also lost a sizeable area of productive farmland to development.

Fortunately, as it has grown from a small rural town to Vermont's 11th largest town by population¹, Williston has proactively taken steps to protect its rural landscape.

Although the center of Williston is planned as dense and mixed-use, most of the town remains rural with working landscapes, vibrant forests, and unique natural communities. While Williston is a commercial center for the region, much of its natural lands remain due to a long history of land conservation and protective land use policy.

As community values and identity have shifted over time, Williston's conservation goals have evolved. Today, Williston aims to conserve land for climate resilience, ecological value, agricultural and silvicultural working lands, scenic aesthetics, and recreation. Often, conserving a single parcel of land can result in multiple co-benefits. For example, Mud Pond Conservation Area is valued for its wetlands and unique ecosystems which support a diversity of plant and wildlife species. It is also home to approximately 1.4 miles of walking trails and a section of the Vermont Association of Snow Travelers (VAST) snowmobile trail system.

This chapter outlines long-range strategies for preserving and protecting Williston's forests, scenic viewsheds, working landscapes, and recreational/cultural/natural resources.



Goals: In 2050, Williston is....



LIVABLE

... because over 30% of the land area is protected as open space and the public has equitably distributed access to open space for non-motorized recreation such as walking, biking, skiing and snowshoeing. Local farms have diversified their operations in a sustainable way and some include managed public access. Protecting natural features like wetlands, stream buffers, forest blocks, and habitat connectors provides habitat for wildlife, improves water quality, filters stormwater runoff and reduces downstream flooding. Natural areas are deeply important to people who live in and visit Williston and contribute to their mental and physical well-being. Supporting accessible public conservation resources for recreation, outdoor education, and scientific research makes Williston livable.



RESILIENT

...because forests and wetlands sequester carbon and help mitigate climate change. Additionally, green spaces and vegetation within urban areas provide cooling effects, reducing the urban heat island effect and making the town more comfortable during extreme weather events. A diverse range of plants and animals is essential for ecosystem health and resilience. Preserving biodiversity ensures that ecosystems can adapt to changes and continue to provide vital services. Supporting local farms and community-based agriculture ensures a stable local food supply and can insulate the town from supply chain disruptions.



EQUITABLE

...because the town's trails and parks are free to use and accessible to all. Ample recreation path connections to trails and parks ensure equitable access for all members of Williston's community. The town has preserved scenic views and established natural areas close to Taft Corners, where most of the town's population lives. The green spaces within the growth center provide opportunities for quiet respite or recreation for people who live and work there.

In 2020 the Town used Geographic Information Systems (GIS) technology and scoring criteria to develop a prioritization matrix to identify and prioritize key areas for long-term protection through the use of the town's Environmental Reserve Fund. Parcels were classified as high, medium or low priority.⁵ This prioritization matrix serves as an important tool to guide decisions about funding future conservation easements or land acquisitions and should be updated periodically. The town will continue to fund acquisitions and purchase of development rights, and to work with other organizations including the Vermont Land Trust and the Vermont Housing and Conservation Board to leverage funds.

As acquiring land for conservation is becoming increasingly expensive and funding increasingly scarce, organizations such as Vermont Land Trust are directing their priorities to larger parcels in more ecologically intact landscapes. As a result, high priority parcels identified by the Williston Conservation Commission often don't meet the Vermont Land Trust's criteria for conservation, making it difficult to obtain funding and the commitment of VLT or a similar third-party easement holder. For that reason, the Conservation Commission is beginning to explore alternatives such as a Town or multi-town land trust (Action 13.1.5).

Town Owned Open Space

Map 18 shows the location of the existing protected open space. Town-owned protected open space includes:

- **Catamount Community Forest** – 393 acres of largely forested land formerly owned and operated by Jim and Lucy McCullough as an outdoor recreational hub known as the Catamount Outdoor Family Center, donated to the Town and permanently conserved in 2019 (more information in Chapter 8 – Recreation and Parks).
- Former **Jacob-Krantz** property – 29 forested acres along the Winooski River in northwest Williston donated by Peter Jacob and Lloyd Krantz in 2017.
- **Mud Pond Conservation Area** and **Mud Pond Country Park** - Mud Pond and the surrounding bog and wetlands within the upper reach of Allen Brook (264 acres).
- **Five Tree Hill County Park** – 53 forested acres accessed via trails from Sunset Hill Rd.
- Approximately half of the forested slopes of **Brownell Mountain** (107 acres).
- **Sucker Brook Hollow County Park** - former Hill property, located along the Sucker Brook off Route 2A (20 acres).
- 14-acre red maple/**blueberry swamp** on Marshall Avenue that the town acquired when it extended Marshall Avenue.
- Forested slopes of the former **Burnett property** south of I-89 (91 acres).
- **Mahan Farm Conservation Area** – 25 acres of farmland south of Route 2 across from the Fire Station.
- **Town Hall Meadow** – 24 acres of open meadow used for the generation of solar power and non-motorized recreation.
- **Allen Brook Natural Area** - former Senecal property located between the Chatham Woods and Old Stage Estates developments (14 acres).
- **Lake Iroquois Natural Area** and beach - headwater wetlands north of Lake Iroquois, about 53 acres (owned by the Lake Iroquois Recreation District, of which Williston is a member).

The areas listed above are protected for different reasons. Some areas have multiple co-benefits – such as biodiversity, water quality, agricultural or silvicultural value, and recreation – that may conflict with each other if uses are not managed appropriately. For that reason, the Town should continue to develop and update management plans for all town-owned open space lands. Besides maintaining these existing properties, the Town should develop and implement strategic plans for Town lands that are fallow or underutilized. Such plans should evaluate proposed uses in balance with their ecological, agricultural, recreational and other attributes. In evaluating locations for new Country Parks with public access, the Town should prioritize the Growth Center and other areas without existing parks (Strategy 13.3).

Chapter 8 – Recreation and Parks contains more detailed information about the recreational use of the Town’s open space lands and trails.

Other parcels are privately owned but have been permanently protected through the purchase of development rights. Many of these are actively farmed today, including Isham Farm, Boomhower, Siple Farm, Bruce Farm, Johnson Farm and Conant Farm. Some of these privately owned parcels have public access through trail easements while others do not permit public access.

Working Lands and Private Stewardship

Working landscapes are lands actively used for the production of food, fiber, earth products, sustainable forest products and outdoor recreation. They include cropland, dairies, woodlots, orchards, sugarbushes, pastures, plant nurseries, gravel mines, and fee-based recreation areas. Working landscapes are what many residents and visitors see as the classic image of Vermont. The persistence of these traditional land uses in rapidly changing Williston is a credit to the perseverance and hard work of dedicated private landowners. The policies adopted here seek to support their continued stewardship.

Farmland

Williston has lost a sizeable area of productive farmland to development, but agriculture is still an important part of the local landscape and the town will continue to work with landowners to sustain it. The town developed the LESA (Land Evaluation, Site Assessment) system on which Map 14 is based to help identify important farms in the late 1980s. The Town uses this map to assess impacts to locally important farmland in development review; however, the map is outdated and is difficult to interpret. The Town should re-evaluate the use of the LESA map as a tool to assess impacts to farmland in development review, especially since the Williston Unified Development Bylaw Chapters 27 and 31 generally require clustered development to minimize impacts to other natural resources.

Working farms the town has helped conserve through the purchase of development rights include the Lacasse Farm on South Brownell Rd, the Johnson Farm and Woodlot at the east edge of the Village, the Siple Farm on South Rd, the Isham Farm and Bruce Farm on Oak Hill Rd, the Conant Farm on North Williston Road and the Burnett Farm on Route 2 west of the Village. With the local food movement, there are many small farm operations cropping up in Williston. The town should consider supporting these small farms where possible, for example, by allowing a diverse range of land uses that support working landscapes (Action 13.4.1).

Earth Resource Extraction

Williston contains two areas where gravel extraction operations have and are continuing to occur. One gravel pit is located on land off Redmond Rd. owned by the Chittenden Solid Waste District (CSWD) and leased to Hinesburg Sand and Gravel. The other gravel pit located off of North Williston Rd is owned by Williston Sand LLC. Gravel operations have been ongoing at these locations since the year 2000 or earlier.

Williston Development Bylaw allows earth extraction and requires site plan review for proposed new operations. Potential impacts from earth resource extraction include truck traffic, stormwater runoff, impacts to wetlands, wildlife habitat and scenic viewsheds. Williston has historically relied on the State of Vermont Act 250 Land Use permitting process to establish conditions on earth extraction operations that will minimize such impacts. Conditions of Approval should include a plan for site reclamation when operations have permanently ceased.

New quarries or other mineral extraction are not expected. Quarrying and production of gravel also occurs on large development sites serving the construction projects. These are very localized and short-lived for the construction duration. At the end of construction, these areas must also be properly reclaimed. Defunct quarries or gravel mines can be recreational and environmental resources, adding interest to walking trails and providing unique wildlife habitat. Being devoid of trees and already disturbed, these sites are also preferred sites for renewable energy facilities.

Current Use Program

Rapidly increasing property taxes are one of the factors contributing to the loss of working landscapes and other open spaces. Vermont's Use Value Appraisal Program (a.k.a. Current Use) helps farm and forest landowners keep their land productive by assessing it for property tax purposes based on its use value, not its development value. This lowers the owners' property tax burden. In exchange for the use value assessment, owners keep their land in productive management and pledge not to develop it while they are enrolled in the program.⁶ While the state's Current Use Program has been effective at protecting large parcels of working lands, the minimum size requirement and the program's complexity has been an obstacle for many landowners who wish to keep active farms or woodlots. Williston should participate in discussions of Current Use and how to improve it and should periodically sponsor outreach efforts to encourage eligible landowners to participate in the program (Action 13.5.5).

Scenic Viewsheds

When driving, bicycling, or hiking through Williston one can enjoy views of rolling fields framed by a background of wooded slopes, nearby ridgelines, and distant mountains. From some points in town, you can see both the Adirondacks to the west and the Green Mountains to the east at the same time. These views are central to the sense of place the residents of Williston treasure. To help maintain that sense of place, the town undertook an evaluation of the visual character and quality of the local landscape in 1989. The results of that analysis are provided on Map 17. The accompanying report is available from the own planning office.

The Town still relies on the 1989 Visual Resource Assessment map to guide development review. This map is outdated and has been difficult to interpret. The Town should explore new visual assessment methods and technologies that developers can use to better illustrate how the proposed development will impact the landscape.

Williston's landscape has changed since the visual resource assessment was done in 1989. Development has filled some views, formerly open fields are no longer mowed, and the number of public viewpoints has grown as roads and trails are extended. A new visual resources analysis should be conducted using a combination of public participation and geographic information systems technology. Important viewsheds should be noted on the Official Map (Action 13.4.2).

OBJECTIVES, STRATEGIES AND ACTIONS

Objectives

- 13.A** By 2050, Williston has permanently protected 30% of its land area through conservation easements and acquisitions.
- 13.B** Conservation resources throughout Williston are protected for the significant benefits they provide for soil health, water quality, groundwater recharge, biological diversity, climate change resilience, and outdoor recreational opportunities.
- 13.C** There is abundant opportunity and accessibility for public use of rural lands including trails, parks and community gathering spaces in rural Williston.
- 13.D** Local food producers are well-supported, diverse, and sustainable; the local food system makes the town more resilient by using practices that steward healthy soils and clean water.
- 13.E** Wildlife populations are abundant and thriving because large habitat blocks and their linkages have been protected, and wildlife has space to move from one habitat block to another.
- 13.F** Public open spaces are welcoming and accessible to all.
- 13.G** Town-owned forests and agricultural lands are managed in a manner to strengthen local food systems, minimize harmful agricultural practices, use nature-based solutions, enhance resource and habitat conservation.

Strategies

13.1

Invest and utilize the Environmental Reserve Fund to ensure the town can achieve its land conservation goal of conserving 30% of Williston's land by 2050.



Actions		Responsibility	Timeframe	Cost
13.1.1	Fund the ERF annually—such as by maintaining the half-penny on the tax rate—at a contribution level that is proportional to reaching the 30x50 goal based upon market conditions.	Selectboard Voters	Ongoing	\$\$
13.1.2	Develop policy to manage and ethically invest the ERF funds in a manner that both grows the fund balance while ensuring liquidity to be available when a conservation opportunity arises (e.g., annual CDs).	Selectboard Town Manager Finance	Short Term	--
13.1.3	Implement updates to the methodology for ERF Prioritization List and map to ensure that the map reflects the goals of this plan, equity and inclusion, equitable distribution of public open space throughout town, the current demands of land conservation in the region, and considers potential impacts from climate change.	Conservation Commission Planning Commission	Ongoing	\$
13.1.4	Maintain policy to act efficiently to acquire land or easements when the opportunity arises.	Selectboard Town Manager Finance	Ongoing	--

13.2

Implement practices in the management of public land that support ecological integrity and ecosystem services. Encourage similar stewardship of private lands.

13.2.1	Evaluate the feasibility and benefit of a Williston or multi-town Land Trust to conserve parcels or manage conservation easements for parcels that are not prioritized by larger or regional Land Trusts.	Conservation Commission Selectboard	Medium Term	\$
13.2.2	Develop a land management policy for town-owned land to support pollinators, wildlife habitat, and regenerative agricultural practices for agricultural land leases. Evaluate and adjust land management practices on parcels such as: - Town-owned water tower parcel north of Mountain View Road (ID 09-012-081-001) - Lambert Lane Meadow (ID 15-104-160-000) - Mehan Farm Conservation Area south of Williston Road (ID 08-104-050-000)	Conservation Commission Public Works Selectboard	Ongoing	\$
13.2.3	Maintain and improve existing and new community gardens on Town property and	Conservation Commission Public Works	Short Term	\$

	collaborate with the schools on school district property.	Recreation & Parks Selectboard		
13.2.4	Evaluate and develop an invasive plant species management plan that addresses the ecosystem imbalances that the species are responding to or filling the niche of.	Conservation Commission Public Works Recreation & Parks Selectboard	Short Term	\$
13.2.5	Evaluate and establish a “Weed Warrior” program to implement the plant invasive species management plan and provide community outreach.	Selectboard Conservation	Short Term	-

13.3 Maintain and establish Country Parks with a prioritization in or near the Growth Center which currently lacks public parks.

13.3.1	Evaluate, revise, and/or develop new management plans – as applicable for each area – for the existing and proposed country parks and conservations areas, as applicable for each area in a manner that balances recreational use, conservation values, forestry and agricultural economy, invasive species management.	Conservation Commission Selectboard	Short Term	--
13.3.2	Develop a prioritization strategy and evaluate the potential for new country parks and conservation areas at properties including: - Abazimenahanik (Tree Island), south of Allen Brook School - Town-owned land between Finney Crossing, Katie Lane, and Brennan Wood north of the Allen Brook - The Burr Oak Knoll south of Cottonwood Crossing and east of Maple Tree Place - Town-owned Brownell Mountain - Town-owned Burnett Parcel - The Jacob-Krantz parcel in collaboration with the Winooski Valley Park District (WVPD)	Conservation Commission Selectboard	Medium Term	\$

13.4 Work with partners, neighboring communities and private landowners to implement programs that further climate change resilience and other town goals.

13.4.1	Maintain regular updates of data regarding natural resources, endangered, rare, and/or unique species, trail and park usage to support the evaluation strategies of this and other town plan chapters.	Conservation Commission Planning Commission	Medium Term	\$
13.4.2	Develop partnerships with neighboring communities in regard to natural resources, habitat blocks, water source and watersheds that span town boundaries.	Conservation Commission Selectboard	Medium Term	\$
13.4.3	Develop partnership with neighboring communities in regard to country parks,	Conservation Commission	Medium Term	\$

	trails, and recreational resources that span town boundaries or could connect communities.	Selectboard		
13.4.4	Develop an outreach and resolution strategy to mitigate and reduce human-wildlife conflicts and the denigration of plant and animal ecosystems	Conservation Commission	Medium Term	\$
13.4.5	Develop an outreach program for Current Use to support agricultural and forestry businesses, monitor the success of this program and advocate to the legislature for improvements that can benefit working lands in Williston.	Conservation Commission Selectboard	Medium Term	\$
13.4.6	Evaluate methods and policies through which the Town can support and encourage private landowners to manage their resources for the production of food, forest, and earth products; wildlife, scenic views; and outdoor recreation.	Conservation Commission Selectboard	Medium Term	\$
13.4.7	Maintain partnerships with organizations such as Winooski Valley Park District, Fellowship of the Wheel, and Vermont Adaptive Ski and Sports and develop new partnerships to maintain and develop parks and trails, including developing new or existing trails for ADA accessibility.	Conservation Commission Selectboard	Short Term	\$
13.4.8	Develop an outreach program between the town, private landowners, other municipalities, land trusts, and land-based organizations such as trail clubs to assist with land management and conservation in support of good stewardship.	Conservation Commission Planning	Short Term	\$

16

RESIDENTIAL, MIXED USE AND INDUSTRIAL LAND USES



Introduction

This chapter is about land use in the denser residential, commercial, and industrial zoning districts of Williston. All of the areas addressed in this chapter are either north of interstate 89 or adjacent to Exit 12, and most are south of Mountain View Road as well. Williston's residential, mixed use, and industrial areas include a Village Center, a Growth Center, a suburban residential area, multiple small commercial "gateway" areas, and two industrial areas. Most of the new residential subdivisions and commercial development in Williston happen here.

Williston will be its most resilient when its various parts are in harmony, complementing but not clashing with one another. The development standards contained within Williston's land use regulations will acknowledge inevitable change and ensure that industrial areas built 50 years ago can remain relevant 50 years from now, that open

spaces thousands of years old will be open for thousands more, that businesses small and large can adapt to shifting market realities, and that everybody who needs a home can find one in Williston.

Where things are denser, Williston has more development standards and restrictions on land use that are specific to each zoning district, reflecting the reality of more diverse land use in the densely developed parts of town. This chapter calls for Actions that will help Williston's zoning to continue working well where it works well today while resolving conflicts between it and the overall Vision of the Town Plan.

The Actions called for at the end of this chapter address land use conflicts with recommended improvements in development standards and call for the Town to explore opportunities to add flexibility to its zoning.



Goals: In 2050, Williston is....



LIVABLE

...because there are many types of residential areas and housing developments to meet various incomes, housing lifestyle needs, and stages of the life cycle. People have access to shops, businesses, and employment opportunities with short drives, public transit or the option to walk or bike.



RESILIENT

...because Williston's land use standards for commercial and industrial development allow the economy to shift with market trends, but without compromising on the goal for compact, walkable Smart Growth patterns. The zoning district design standards prioritize architectural quality and pedestrian-oriented scale and discourage sprawl and auto-oriented developments.



EQUITABLE

...because all zoning districts are held to high standards but within reason and context for their intended uses and geographic context for architectural design, natural conservation, landscaping, and pedestrian design.



Three Things to Know

1

RESIDENTIAL AREAS AND NEIGHBORHOODS ARE, FOR THE MOST PART, BUFFERED FROM INCOMPATIBLE INDUSTRIAL AND HEAVY COMMERCIAL AREAS

The Interstate highway, other major roads, and waterways primarily separate and buffer residential neighborhoods from incompatible, higher intensity uses. There are still a few places in town where heavy commercial and industrial uses abut residential neighborhoods.

2

THE GROWTH CENTER IS PLANNED FOR, AND WILL EXPERIENCE, THE MOST DEVELOPMENT

In 2022, Williston adopted a Form-Based Code that covers most of the Taft Corners Growth Center (Southwest Quadrant near Home Depot and Gardener's Supply is excluded). These forward-thinking standards set Williston up for a design-conscious, pedestrian-focused Town Center that is also a fiscally resilient land use pattern. Prior to the adoption of Form Based Code, more than 70% of new dwellings in Williston have been built within the Growth Center. Under Form Based Code, the Growth Center is expected to receive a greater percentage of new dwellings.

3

WILLISTON HAS DESIGN STANDARDS FOR ITS VILLAGE AND TAFT CORNERS CENTERS AS WELL AS INDUSTRIAL AND COMMERCIAL AREAS, BUT HAS LIMITED DESIGN STANDARDS FOR RESIDENTIAL AREAS BEYOND OPEN SPACE DESIGN

Industrial and mixed-use design standards have demanded pedestrian-oriented designs, a variety of colors and materials, and more architectural detailing and windows especially amongst the newer 'big box' stores and commercial development. On the other hand, design standards for the residential zoning districts are limited to the provision of open space, sidewalks and paths, a variety of housing types, clustered homes, and good neighborhood design and neighborhood space – all criteria under the Town's growth management system.

Since 2016, Williston has also changed its zoning to encourage the provision of more affordable homes in new residential projects by requiring the inclusion of some perpetually affordable homes in most new residential developments. This is discussed in greater depth in Chapter 6: Homes and Smart Growth.

External Factors Affecting Williston's Land Use Planning since 2016

Changes in state law limiting the authority of municipalities have also occurred since the adoption of the last Town Plan, altering the “tools in the toolbox” available to Williston when it regulates land use.¹ Generally, the ability for Vermont municipalities to require low residential densities and restrict multifamily dwellings has been curtailed by a series of amendments to State statutes that allow them to implement zoning. As of the drafting of this plan, municipalities must allow duplex homes everywhere that single-unit dwellings are allowed, must allow four-plex homes everywhere single-unit dwellings are allowed and water and sewer service is available, and must allow a residential density of at least five dwellings per acre wherever residential uses are allowed and water and sewer service is available. For the purposes of density, a multiunit building up to 4 dwelling units is treated the same as a single unit dwelling. In several cases, these statewide preemptions have had the effect of increasing allowed residential densities and permitted development types beyond the limits Williston had previously established in its zoning.

Land Use Trends in Williston

Since the adoption of the 2016 Town Plan, the Planning Commission has interacted with landowners and neighbors in various land use areas as they encountered challenges posed by the existing zoning. In some parts of town, legacy land use patterns mean that sometimes industrial and residential properties are next to each other or even mixed in together. Longstanding businesses on busy corners are sometimes located in zoning districts that only allow residential uses, imposing nonconforming status on them and severely limiting their ability to evolve over time. The nature of some businesses has changed with the advent of online shopping or direct-to consumer service delivery, meaning that some uses that would have been thought of as "downtown" uses 30 years ago now make more sense in an industrial park. The need for outpatient medical services has expanded beyond the typical doctor's office or hospital to a more "office park" configuration.

Other recent trends include:

- Continued residential focus on the Growth Center, with more than 70% of new dwellings in Williston built within its boundaries. The majority of units have been developed in multifamily configuration.² This trend is expected to continue with permitted projects under construction (such as Cottonwood Crossing and the Annex) as well as new buildings designed and permitted under Form-Based Code.
- The Park and Ride and new State Police Barracks in Gateway Zoning District South are the first new developments in that district since a major zoning overhaul in 2009. These two projects, while state projects and partially exempt from Williston's bylaws, mostly comply with the development standards of the Williston bylaw such as lighting, landscaping, access and parking, but also reflect impractical and weak standards for hillside development.³
- The Gateway West area (centered on Williston Road and North/South Brownell Road intersection) was established in 2015. Although this zoning district was created from what was previously zoned Residential, only one parcel has significantly redeveloped since the

zoning was changed. Conflicts with air traffic noise at the nearby airport, as well as industrial uses along Commerce Street and farther west on Williston Road, are reasons to reconsider the density, design, and use of this highly trafficked area near some of Williston's more affordable and older neighborhoods.

- Continued diversification of uses and adaptive reuse of sites and buildings in industrial parts of Williston. There is very little undeveloped land remaining in the Industrial West area at this point, but ample opportunities for infill, adaptive reuse, and redevelopment.
- A change in ownership from International Business Machines (IBM) to Global Foundries on parcels in the Industrial East Zoning District, with Chittenden Solid Waste District (CSWD) building or expanding several new waste management facilities in their portion of the area (Materials Recovery Facility, Transfer Station, Metals recycling, Compost Facility).
- With the approval of the Summer Field subdivision on a 30-acre parcel and the Glaser Specific Plan Subdivision on a 96-acre parcel, very few parcels of significant size or development capability remain in Williston's suburban residential area between I-89 and Mountain View Road.
- A very slow rate of growth and change in Williston's rural areas. Very few new houses, no large new subdivisions. Since October 2005, Williston has required subdivisions in the Agricultural/Rural Residential Zoning District to set aside 75% land area as open space. By land area, there is more acreage of protected open space than total land area within the Growth Center.

These trends will help shape the work of the Planning Commission to address bylaw changes and evaluations called for in the Objectives, Strategies and Actions that follow.

OBJECTIVES, STRATEGIES AND ACTIONS

Objectives

- 16.A** The Town will monitor and evaluate the performance of its land use regulations in commercial, industrial, and mixed-use Zoning Districts.
- 16.B** Maintain the viability of industrial and heavy commercial areas in Williston as markets and demands change and buildings and sites age.
- 16.C** Evaluate the future of the Residential Zoning District for enhanced design review and existing or corner commercial uses.
- 16.D** The Town will conduct a consistent, transparent, publicly accessible and efficient permit review and approval process.

17 **RURAL LAND USE & SUBDIVISION DESIGN**



Introduction

Williston’s rural lands are a core element of the town’s history and continue to be a deeply valued resource that contributes to the town’s sense of place. Williston has a long history of protecting rural lands for ecological conservation, agriculture, forestry, scenic views and recreation that continues today. As Williston continues to grow, balancing development with support for working landscapes, land conservation, and recreation will become increasingly important because these open space attributes have tremendous value in creating a more livable, equitable, and resilient Williston.

Williston’s current land use regulations for residential subdivisions in the Agricultural/Rural Residential Zoning District (ARZD) require low densities and the protection of open space when lots larger than 10.5-acres are subdivided. The intent of these regulations is to balance the landowner’s development rights with other stated objectives for Williston’s rural areas. In practice, this results in predominantly single-family homes, duplexes, and accessory

dwelling units on lots designed to minimize impact to the natural resources within them. Additionally, the regulations also promote the adaptive reuse of historic barns as “wedding barns” or other event venues.

Williston’s land use regulations for the Agricultural/Rural Residential Zoning District (ARZD) have remained remarkably consistent since the Town adopted zoning and have contributed to the preservation of the predominantly rural nature of the town that the people of Williston value. Still, there are measures that could be implemented to enhance flexibility for rural landowners and support housing, while strengthening and clarifying natural resource protections.

This chapter discusses existing land use regulations and subdivision design for residential development in rural Williston and how the regulations could be modified to better support the Town’s goals. These topics overlap with many related topics such as conservation, working landscapes, and recreation and parks, which are discussed in Chapters 8 and 13.

located within conservation areas may be asked to set at least some portion of those areas aside as open space. This is required for subdivisions in the ARZD on parcels with an area of 10.5 acres or greater and encouraged in the RZD.

Approximately 1,484 acres of open space have been protected through Williston's development review requirements. 933 acres of open space has been protected by Williston's 75% open space requirement in the Agriculture/Rural Zoning District (ARZD) and an additional 551 acres of open space has been protected in all other zoning districts.

A suite of regulations in Williston Development Bylaw (WDB) Chapter 27 ensures strong protection of wetland and riparian conservation areas as well as forested upland areas. Wetlands and riparian corridors are protected from incompatible development by the town's stormwater management and watershed health regulations, and other state and federal regulations. Forested uplands are partially protected from incompatible development by the town's WDB Chapter 27 and Chapter 31 regulations.

Beginning in 2005, the Town has taken steps to identify and protect significant wildlife habitat, comprised of core habitat and wildlife corridors:

- 2005 - Several areas characterized as significant habitat were identified in *An Assessment of Wildlife Habitat in Williston, VT*¹
- 2011 - A follow-up study was completed, *An Assessment of Wildlife Habitat in Williston: Expanded Land Cover Mapping and Corridor Modeling*²
- 2014 - The definition of significant wildlife habitat area (SWHA) and associated map was incorporated in the town's Unified Development Bylaw together with appropriate habitat protection standards as an overlay district. Proposed developments that are within the mapped SWHA are required to document no undue adverse impact to the SWHA through the completion of a Habitat Disturbance Assessment.³
- 2018 - The Town updated language regarding forest fragmentation and worked with the Vermont Department of Fish and Wildlife, Community Conservation Planning staff to refine the Town's Significant Wildlife Habitat Area map, dividing the mapped areas into Tier I (highest priority), Tier II (medium priority) and Tier III (lowest priority). This was done to recognize the importance of forests, in compliance with Act 171⁴, which encourages and allows municipalities to address protection of forest blocks and habitat connectors. The revised map has not yet been integrated into the Town's regulations.
- 2023 - The Town adopted a bylaw amendment that requires Habitat Disturbance Assessments to be funded by the applicant but completed by a qualified consultant hired by the Town, whereas previously, applicants hired their own consultant to conduct the HDA.

The Strategies and Actions called for in this chapter emphasize continued protection of natural resources, continued updating of maps and data used to inform those protections, evaluating the effectiveness of current regulations and adapting as needed, and coordination with neighboring communities on the protection of natural resources.

	design standards that support affordable homes.			
17.3	Continue to protect Significant Wildlife Habitat Areas, areas containing uncommon, rare, threatened, or endangered species, unique natural communities, farmlands of local importance, scenic viewsheds, special flood hazard areas, and streams, wetlands, lakes, and ponds during the development review process.			
17.3.1	Maintain the requirement for Habitat Disturbance Assessments as a component of development review to ensure the protection of the above stated resources during the development review process.	Planning Commission Selectboard	Ongoing	--
17.3.2	Evaluate the HDA process to determine if it is adequately protecting the natural resources it seeks to protect.	Planning Commission Conservation Commission	Medium Term	--
17.3.3	Maintain the data and maps used to make decisions about the protection of natural resources.	Conservation Commission	Ongoing	--
17.3.4	Develop coordination with neighboring communities on the preservation of natural resources in the development review process.	Conservation Commission	Ongoing	--
17.4	Evaluate and amend land use regulations and other town policies to protect natural resources, support working landscapes, and respond to changing economic and environmental climates.			
17.4.1	Evaluate and revise land use regulations to allow a diverse range of uses to support working landscapes such as agriculture and on-farm businesses, fee-based recreation, hospitality, and educational activities.	Conservation Commission Planning Commission Selectboard	Medium Term	--
17.4.2	Evaluate and revise the visual resource protection standards of the WDB Chapter 27, including an update to the 1989 Visual Resource Assessment Map. Prioritize important views through Official Map.	Conservation Commission Planning Commission Selectboard	Medium Term	\$
17.4.3	Evaluate and revise the important farmland protection standards of the WDB Chapter 27, particularly the use of the LESA map.	Conservation Commission Planning Commission Selectboard	Medium Term	--
17.4.4	Implement revisions to the zoning district specific standards – particularly Chapters 31 Agricultural Rural Residential Zoning District (ARZD) and 39 Residential Zoning District (RZD)—based on the conservation area and water health standards of Chapter 27 and 29.	Conservation Commission Planning Commission Selectboard	Medium Term	\$
17.4.5	Evaluate and amend land use regulations to strengthen habitat protections, Habitat Disturbance Assessments, mitigation measures, and right-size protections for small- and infill-projects. Include past land disturbance and land use history in the	Conservation Commission Planning Commission Selectboard	Medium Term	\$



Energy Plan

September 1, 2020

Adopted by the Selectboard:

*Jeff Fehrs, Ted Kenney, Joy Limoge (Vice Chair),
Terry Macaig (Chair), Gordon St. Hilaire*

September 11, 2024

Updated Plan Respectfully Submitted by the Williston Energy Committee

*Kevin Batson, Maria Gingras, Matthew Wood, Dar Gibson, Kevin Thorley, Eric
Hillmuth, Michael Lazorchak, Reed Parker*

August 19, 2025

Adopted by the Selectboard:

*Ted Kenney (Chair), Greta D'Agostino (Vice Chair),
Jeanne Jensen, Ellie Beckett, Mike Isham*

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Vision

To create a community powered by renewable, locally produced and owned energy, fed by local farms, housed in efficient homes with an environmentally responsible transportation system, all sustained by a vibrant, local economy and social network. We believe our resources are finite; and that we are an integral part of nature. We believe that everyone has the right to live in a healthy, safe and comfortable home; no one should spend more than 6%¹ of their income on energy bills; and those who are most impacted by energy burden and climate change should have a voice in decision making and receive a share of benefits.

Introduction

While the State has set goals for 2050 through the 2022 Comprehensive Energy Plan (CEP), the August 2018 report of the International Panel on Climate Change (IPCC) states that **we must switch from fossil fuels to renewable, non-carbon-based energy sources, effectively reaching net zero by 2050 to limit global temperature increase to 1.5 degrees; a change which is projected to cause catastrophic risks to human systems.**² Bold action at the local level is required to address these challenges, including moving the town away from use of fossil fuels toward renewable energy, reducing consumption of energy and materials, and increasing conservation measures to minimize Williston's impact on climate change. In addition to environmental concerns caused by severe weather events (floods, heatwaves, storms), climate change has significant negative impacts on public health and safety, food security, transportation and mobility, and political and economic stability. Therefore, addressing climate change requires our collective attention and resources on a similar scale, at the very least, to other Town public safety priorities.

This plan has several functions:

- It is a stand-alone document and a supplement to the 2025-2033 Williston Comprehensive Plan.
- It is a plan to help Vermont achieve the goals of the state Comprehensive Energy Plan (CEP) at the local level.
- It is a plan to obtain a “determination of energy compliance” from the Chittenden County Regional Planning Commission (CCRPC) that will assure the plan will receive “substantial deference” when siting renewable energy projects within the town.

This plan was developed according to the Vermont Department of Public Service’s energy planning standards. The energy planning standards focus on a long-term horizon. The Town of Williston will consider accelerating the pace of change needed to implement the pathways outlined in this plan. The

¹ This is the threshold above which a household is considered “energy burdened.” From Efficiency Vermont Energy Burden Report. Accessed at [Vermont's 2023 Energy Burden Report | Efficiency Vermont](#)

² Global Warming of 1.5° C. Intergovernmental Panel on Climate Change, 2018. Accessed 4-10-2025 at <https://www.ipcc.ch/sr15/>

plan is written based on current technologies, with the flexibility to adapt to future technological advances.

The authors of this plan recognize that progress will only be achieved through the leadership, innovation and actions of residents, businesses, partners and government entities. The role of local government is not only to educate and inform, but also lead through example and bring the many stakeholders together. The major areas addressed in this plan, since they create the bulk of the greenhouse gas (GHG) emissions and the energy budget, are:

- 1) Transportation
- 2) Building Energy Usage
- 3) Building Energy Education
- 4) Land Use
- 5) Recycling and Consumption
- 6) Renewable Energy Generation
- 7) Agriculture

The sections of this plan are organized into:

- Goals that tell us what we are aiming for.

ACT 174 AND SUBSTANTIAL DEFERENCE

In 2016, Act 174 established a process for “enhanced energy planning,” which encourages municipalities to write plans that are “energy compliant.” This plan meets the standards for energy planning established by Act 174 and outlined in 24 V.S.A. §4352. Therefore, the policies of this plan will receive substantial deference in §248 proceedings. The Public Utility Commission shall apply the land conservation measures or specific policies in accordance with their terms unless there is a clear and convincing demonstration that other factors affecting the general good of the State outweigh the application of the measure or policy. This is a higher standard of review than “due consideration,” which the municipal plan’s policies would otherwise receive.

- Local Objectives that indicate the areas we will address to get to our *goals*.
- Pathways that identify the task, the responsible entity, and a time frame to accomplish each local objective.

State Goals

The 2022 State of Vermont Comprehensive Energy Plan (CEP) and Vermont Statute set ambitious statewide energy goals:

- To reduce greenhouse gas emissions, with a 26% reduction from 2005 levels by 2025, a 40% reduction below 1990 levels (8.59 MMTCO₂e)³ by 2030, and 80% reduction below 1990 levels by 2050 (10 V.S.A. § 578).⁴
- To reduce total energy consumption per capita by 15% by 2025 and by more than 33% by 2050.
- To meet 25% of remaining energy needs from renewable sources by 2025, 40% by 2035, and 90% by 2050.
 - In the transportation sector, to meet 10% of energy needs from renewable energy by 2025, and 45% by 2040.
 - In the thermal sector, to meet 30% of energy needs from renewable energy by 2025, and 70% by 2042.
 - In the electric sector, to meet 100% of energy needs from carbon-free resources by 2032, with at least 75% from renewable energy

Going forward, Vermont is expecting to rely more on electricity as an energy source. This includes shifting most light duty vehicles to electric vehicles and transforming the way buildings are heated. Even though more electricity is being used, electric appliances such as heat pumps and electric vehicles are more energy efficient than fossil fuel counterparts, resulting in a reduction in total per capita energy use. Building and retrofitting structures from an energy efficiency perspective while generating and using more renewable energy is also a critical step. The Community Energy Profile section of this plan provides quantitative details of Williston’s current energy profile, and the magnitude of change needed to make these transformations.

Finally, the 2022 Vermont Comprehensive Energy Plan emphasizes a shift from previous planning efforts in approaching the transition towards a clean energy future through the lens of equity and justice. Doing so will help ensure that we meet the needs of all Vermont’s citizens, communities, and businesses/institutions — particularly those that have historically been marginalized or underserved and will be most impacted by this transition.

The energy transition opens the door, not just to meet renewable energy and climate objectives, but to do so in a way that better serves all Vermonters, uplifts those who have not had access or ability to participate previously, addresses and repairs the root causes of existing inequities, and in the process builds a more inclusive energy system for Vermont.

-Vermont Comprehensive Energy Plan⁵

³ Vermont Greenhouse Gas Emissions Inventory Update (1990-2015), June 2018

⁴ Vermont Department of Public Service. 2022 Vermont Comprehensive Energy Plan Executive Summary. Accessed August 13, 2024, at [2022VermontComprehensiveEnergyPlan_ExecutiveSummary.pdf](https://publicservice.vermont.gov/sites/dps/files/documents/2022VermontComprehensiveEnergyPlan_ExecutiveSummary.pdf)

⁵ Vermont Department of Public Service. 2022 Vermont Comprehensive Energy Plan Executive Summary. Accessed August 13, 2024, at https://publicservice.vermont.gov/sites/dps/files/documents/2022VermontComprehensiveEnergyPlan_Executive%20Summary.pdf

Local Objectives

Meeting the State goals at the local level will require ambitious action to transform the way Williston uses and produces energy. This transformation will enhance the health and vigor of the Town's local economy and long-term affordability for residents. To do so, Williston will increase public awareness of energy issues, assess local energy use, and identify opportunities for conservation, energy source conversion, and renewable energy generation.

Between 2025 and 2050 Williston intends to:

1. Reduce total energy consumption per capita by 15% by 2025 and by more than 33% by 2050.
2. Reduce greenhouse gas emissions, with a 26% reduction from 2005 levels by 2025, 40% reduction below 1990 levels by 2030, and a 80% reduction below 1990 levels by 2050.
3. Double the amount of renewable energy generation sited in Williston from 2015 levels.
4. Reduce energy used to heat, cool and power buildings by individuals, organizations, and the Town of Williston.
5. Weatherize 40% of homes and at least 50% of commercial and industrial establishments
6. Increase the share of light-duty electric vehicles registered in Williston to 52% by 2035 and 98% by 2050.
7. Increase the share of light-duty electric vehicles in the municipal fleet to 10% by 2030 and 100% by 2040.
8. Fuel 96% of heavy-duty municipal vehicles with renewable resources and work with the school district to fuel school vehicles with renewable sources.
9. Equip 95% of homes with cold-climate heat pumps (CCHP) or technically equivalent devices as a primary heat source by 2050.
10. Educate Williston citizens, town government, Champlain Valley School District (CVSD) and private businesses about the economic and environmental value of transitioning from a fossil-fuel vehicle society.
11. Act to decrease transportation energy demand by promoting electric vehicles, increasing the awareness of and supporting the use of public transit, walking/biking infrastructure, carsharing, and ridesharing.
12. Continue a land-use policy that embraces smart and sustainable growth.
13. Reduce our waste stream by reducing consumption, expanding the sharing economy and fixer-spaces, and recycling 80% of our materials thereby reducing energy needed to produce these materials.
14. Increase the use of regenerative practices in landscaping, agriculture and conservation land management methods.

Details of changes that must occur within Williston to meet these goals are described in the following sections. Meeting these goals will require a great deal of work in the short term. The following paragraph describes assumptions that can be made on the energy efficiency of the current housing stock based on the age of the housing and the year when the Vermont Residential Energy Code became effective. Assumptions for the commercial stock cannot be made.

The 1997 Vermont Residential Building Energy code became effective in 1998. According to the CCRPC's housing data 2,674 housing units were built in Williston before or during 1997 and 1,698 units have been built after 1997. Therefore, about 39% of homes were likely built according to a minimum energy standard (the energy code effective at the time of construction). Amendments to the energy code are made periodically. This is not intended to mean that Williston has met its weatherization goal. Rather it is background information to assist the town with understanding how to prioritize efforts to promote weatherization strategies for the housing stock that predates the energy code. Additionally, energy modeling has indicated that Williston needs to weatherize 41% of housing. This energy plan is intended to put the town on track towards meeting the vital goals stated above.

Energy Compliance

In 2016, Act 174 established a process for “enhanced energy planning,” which encourages municipalities to write plans that are “energy compliant.” This plan is written to meet the standards for energy planning established by Act 174 and outlined in 24 V.S.A. §4352. After the plan is adopted by the town Selectboard, the town will seek an affirmative determination of energy compliance for this plan from the CCRPC. A plan with an affirmative determination gains “substantial deference” in Public Utility Commission (PUC) proceedings. Substantial deference means the plan's policies will be used to determine if a proposed energy project meets the orderly development criteria in the Section 248 process unless other factors affecting the general good of the State outweighs this plan.

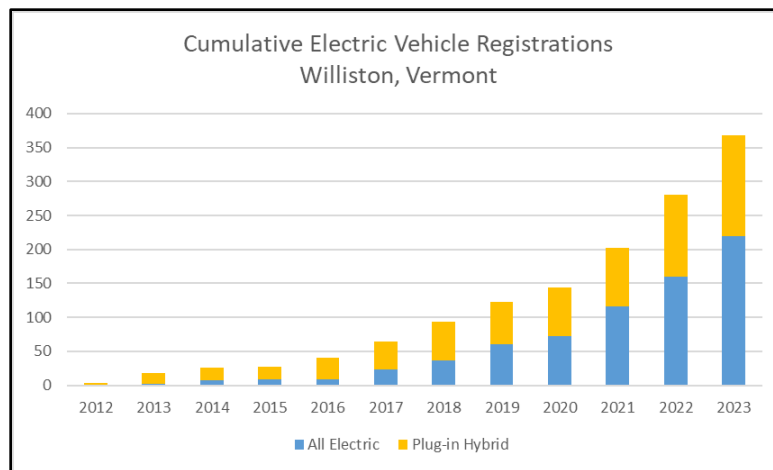
Community Energy Profile

Where we are today: Estimates of Current Energy Consumption

The energy profile for Williston provides an estimate of current energy consumption in the heating, electricity, and transportation sectors. These estimates are intended to be a baseline starting point to assist the town with understanding where they are in respect to Vermont's energy goals. Where possible, data estimates on actual consumption are included. Where such data is not available, data substitutes are used. For example, consumption data for non-utility gas in Williston is extrapolated from Williston's proportionate share of Vermont's total consumption.

Heating

Williston consists of government and community buildings, homes, commercial/industrial buildings, farms, and other agricultural uses. According to the U.S. Census Bureau American Community Survey, about 93% of homes are heated with fossil fuels, with natural gas being the fuel type that about 62% of homes rely upon. Second to natural gas is fuel oil/kerosene at 20%. Propane is also utilized in Williston



Renewable Energy Generation

Renewable energy generation in Williston is produced by 454 solar sites, 2 small net-metered wind sites, one small biomass site and a hydro dam. The energy generation produced by the hydro dam on the Winooski River is shared with Essex Junction, according to guidance from the Department of Public Service which states that generation be counted based on its physical location.

Table 7. Existing Renewable Energy Generation (2023)

	Sites	Power (MW)	Energy (MWh)
Solar	454	11.82	16,819
Wind	2	0.012	28
Hydro	1	4.03	17,630
Biomass	1	0.09	552
Total	458	15.9	35,029

Source: Vermont Department of Public Service, Generations Scenarios Tool, Distributed Generation Survey + data as of 1/31/2023. *Williston receives half of the power generated by No. 19 Dam.

Where we are going: Estimated Future Energy Targets

The data included in this section illustrates one path that Williston could take to meet the energy goals described earlier in this plan. The path to meet these goals is discussed in terms of targets. The targets are intended to be a demonstration of one possible scenario to reach 90% renewable energy by 2050.

To meet the goals, Williston must:

- Plan for a major shift away from fossil fuels to renewable sources of energy in the transportation, heating, agricultural, and industrial sectors.
- Improve efficiencies in transportation, heating, and other electricity consumption.
- Increase renewable energy generation sited in Williston.

However, the actual path may change. Actions will likely evolve between now and 2050 as new and improved technologies become available.

The targets in this section provide checkpoints for future energy use across all sectors (transportation, heating, and electricity). The estimates also include renewable energy generation targets. Williston's targets represent the amount of renewable energy generation the community will site to meet the amount required. Please note that these data are a starting point for considering a renewable energy future. This information will provide the framework for a discussion about changes that will need to occur within Williston to ensure energy goals are met.

Projected future energy use targets are drawn from the Vermont Public Service Department's energy analysis. PSD worked with the Stockholm Environment Institute (SEI) to employ the [Low Emissions Analysis Platform](#) (LEAP). The LEAP analysis is not prescriptive but is instead an indicative analysis designed to show the estimated magnitude and timing of needed changes and the relative importance of major economic sectors to meet Vermont's energy and climate goals.

Using LEAP, SEI modeled sector specific approaches that would enable Vermont to meet its energy and climate goals. The sectors that were modeled include but are not limited to electricity generation, transportation, and buildings. The model accounts for the replacement or stock turnover of technologies through 2050 and identifies the pace of technology adoption needed to reach Vermont's emission reduction requirements. Within each sector, specific technologies are identified to reduce emissions from end uses, but the list of technologies is not exhaustive. For example, throughout the modeled years air- and ground-source heat pumps have been increasingly deployed to replace heating and cooling needs previously met by fossil fuel-fired heating and cooling systems. Wherever possible, the model incorporates Vermont-specific sectoral data to better evaluate more granular impacts of policy interventions in the state. For more information on the LEAP model, including its underlying assumptions, please refer to Vermont's 2022 Comprehensive Energy Plan found here: <https://publicservice.vermont.gov/about-us/plans-and-reports/departments-state-plans/2022-plan>.

To achieve these targets, a concerted effort in Williston is needed to engage all stakeholders to conserve energy and transition to renewable sources. The Energy Committee has recommended multiple projects in each area. Despite the initial investment, completing the projects will lead to energy savings and an improved quality of life for all residents in Williston through financial savings, improved air quality, health, and reduced greenhouse gas emissions.

Heating Targets for the Commercial and Residential Sectors

Thermal targets for Williston in 2050 estimate a reduction in total commercial thermal energy use (see Table 8 below) This will primarily be achieved through weatherization and the use of more efficient heating technologies such as cold climate heat pumps (CCHP). These targets also estimate that renewable sources of heat will become more common. By 2050, 35% of businesses are projected to be using heat pumps and 11% of businesses to be using wood heating.

Thermal energy use in Williston homes is projected to decrease (see Table 9 below). Residential buildings will use less energy for space heating due to an increase in the percent of buildings that are weatherized, and by increased efficiencies in heating technology. To achieve the projected energy savings, 41% of

Table 11. Projected Transportation Energy Demand for Light-Duty Vehicles (LDVs) 2025-2050

		2025	2035	2050
1	Number of total light-duty vehicles*	6,693	8,527	12,262
2	Number of area battery electric and plug-in hybrids LDV (passenger cars and light trucks)	363	3,806	8,250
3	Non-Electric Light Duty Energy Demand (gas, diesel, ethanol, CNG, biodiesel) (MMBtu)	392,114	186,005	24,833
4	Electricity Demand for Light Duty (passenger cars and light trucks) Transportation (MMBtu)	6,155	64,514	121,858
5	Light Duty Electric and Hybrid Electric Vehicles (% of Vehicle Fleet)	6%	52%	98%
6	Biofuel share of biofuel-blended LDV transportation energy consumed	8%	10%	10%

Source: LEAP Model

*Growth rate for LDV is based on 10-year average annual change of new homes built between 2012-2022, annual rate is 2.45%

In addition to switching to electric vehicles, Williston can reduce the energy used in the transportation sector through Transportation Demand Management (TDM) strategies. TDM strategies are low-cost programs that focus on decreasing use of Single Occupancy Vehicles (SOVs) and increasing the use of other modes of transportation. Williston already has some transit and bike path infrastructure. Improvements could be made to increase the frequency of transit service and availability of bike lanes and bike paths to better enable residents to use these modes more regularly. Low-cost pilot projects could also be helpful in locating separated bike lanes. Open Street Programs, such as Burlington's Open Streets Program may educate and motivate residents to bike more. TDM has great potential for saving energy as automobiles are identified as the predominant mode of transportation for Williston residents. Reducing single occupancy rides for local trips and replacing the former 1V bus route with a micro-bus system that engages all of Williston's neighborhoods should be an energy-reducing strategy.

Renewable Energy Generation Targets and Generation Potential

The 2018 Chittenden County ECOS Plan estimates the regional and municipal roles in advancing the State goal. The ECOS Plan sets high and low regional renewable energy targets. The Chittenden County targets are 756,250 MWh (Megawatt hours) of energy to meet the low target, and 1,265,134 MWh to meet the high target.

Regionally, this means an additional 255,054 MW of generation capacity to meet the low target, or 763,938 MW to meet the high target. The ECOS Plan allocates the total amount of renewable energy to each municipality based on each municipality's share of the region's population and electricity consumption, and nets out existing renewable energy generation. Williston's generation target for 2050 is an additional 10,904 MWh on the low end and 40,948 MWh on the high end.

Table 12. New Renewable Electricity Generation Targets

	2032	2040	2050
Incremental Generation Targets – Any Technology (MWh)	2,147	10,271	14,028
Total Targets (MWh)	35,890	44,014	47,771

Sources: LEAP Model and CCRPC Modeling

The generation target is technology neutral, meaning Williston can use any form of renewable generation (wind, solar, biomass, hydroelectric, etc.) to meet its goals. For example, if the targets were met with current solar technology only, meeting the target would require 192 acres to 292 acres of land dedicated to solar (See Figure 2). For more information on the methodology to estimate generation targets see the [ECOS Plan Supplement 6](#).

Table 13. Land Available for Wind and Solar Generation

	Prime Potential	Base Potential	Total Energy Potential (MWh)
Solar	653	3,018 acres	724,887
Solar Rooftop		207 acres	
Wind	1,467 acres	6,739 acres	

Source: CCRPC and the Department of Public Service, Vermont Center for Geographic Information

The amount of wind and solar generation potential is estimated in Table 13. This illustrates Williston’s ability to meet the targets described above. Energy generation is represented by the total acreage required for prime solar, base solar, or wind. This table demonstrates that there are sufficient land area absent constraints and of high energy potential to meet Williston’s renewable energy generation targets.

Prime solar or prime wind are areas where models show the appropriate conditions for electricity generation, and where there are no constraints.

Base solar or base wind are areas where models show the appropriate conditions for electricity generation, but where there are possible constraints.

These constraints must be considered and may reduce the development potential of a site. The siting policies in this plan indicate that “development will be located to avoid state and local known constraints that have been field verified, and to minimize impacts to state and local possible constraints that have been field verified”. Please see Table 14 for the list of constraints. Williston’s reported land available for existing and potential wind and solar generation are based on models of the elevation, slope, and aspect of land, or the modeled wind speed, in a municipality. These models include existing impervious surfaces. Therefore, land-based generation potential may be overestimated in more developed areas.

Table 14. State/Local Known and Possible Constraints

State Known Constraints	State Possible Constraints	Local Known Constraints	Local Possible Constraints
FEMA Floodways DEC River Corridors National Wilderness Areas State-significant Natural Communities and Rare, Threatened, and Endangered Species Class 1 and 2 wetlands (VSWI and advisory layers)	Agricultural Soils Hydric Soils Vernal Pools (unconfirmed) Act 250 Ag. Soil Mitigation Areas FEMA Special Flood Hazard Areas VT Conservation Design Highest Priority Forest Blocks (Forest Blocks – Connectivity, Forest Blocks – Interior, Forest Blocks - Physical Land Division), Highest Priority Surface Water and Riparian Area Protected Lands (State fee lands and private conservation lands) Deer Wintering Areas	Watershed Protection Buffers Slopes 30% or greater	Slopes 15% -30% Conservation Areas/ Natural Communities Primary Viewshed Areas

5. Land Use

Local Objectives

1. All new construction meets the most stringent energy efficiency standards as codified in State Statute.
2. Continue a land-use policy that embraces Smart Growth principles.

Pathways

- 5.1 Establish incentives in all zoning districts such as setback relief or other means, for installing parking lot solar canopies.

Lead Entity: Planning Commission

Timeframe: Short term

- 5.2 Encourage site planning for energy conservation and renewable energy generation by maximizing southern exposure for living spaces and solar generation, protecting solar access to south facing walls and roofs, and providing windbreaks.

Lead Entity: Energy Committee

Timeframe: Medium Term

- 5.3 Continue to pursue a land use and transportation strategy centered on mixed-use, compact development in the town's Growth Center. Continue to support the development of high-intensity land uses within the town's designated Growth Center to result in a compact development pattern that supports and encourages driving fewer miles, the use of transit, ride-sharing, and active forms of transportation like bicycling and walking.

Lead Entity: Planning Commission

Timeframe: Long Term

- 5.4 Reevaluate allowed uses and lot dimensional standards in the Village Zoning District (VZD) to ensure they allow for energy efficient building forms and site designs, provide housing opportunities in attractive, efficient building forms that equitably serves existing and future residents of Williston.

Lead Entity: Planning Commission

Timeframe: Medium Term

- 5.6 Reevaluate allowed uses and residential density in the Agricultural Residential Zoning District (ARZD) and Residential Zoning District (RZD) with the goal of making sure that development standards maximize energy efficiency and conservation of land and resources, enable a lifestyle without the expense of owning and operating a personal vehicle, and minimize expenditures on building energy consumption.

Lead Entity: Planning Commission
Timeframe: Medium Term

- 5.7 Promote green infrastructure practices to reduce local temperatures and shade sidewalks and building surfaces.

Lead Entity: Conservation Commission
Timeframe: Short term

- 5.8 Promote working and natural landscapes in the Agricultural Residential Zoning District (ARZD) that sequester and store carbon, e.g., by working with land trusts and landowners of farm and forest tracts to conserve key parcels of land.

Lead Entity: Conservation Commission
Time Frame: Short Term/Ongoing

- 5.9 The Energy Committee shall review proposed bylaw amendments for compliance with the energy plan and draft proposed bylaw amendments as directed by the Planning Commission.

6. Renewable Energy

Local Objectives

1. Double the amount of renewable energy generation sited in Williston.

Pathways

- 6.1 Conduct a Solarize campaign with objective to help individual households (especially low-income) overcome the financial and logistical barriers to installing solar power through financing and rebates; leveraging community organizing power and collective purchasing programs; obtaining technical assistance and project management from local solar providers, and utilizing the resources and models of the Department of Energy.

Lead Entity: Energy Planner & Energy Committee
Timeframe: Short to medium term

- 6.2 The Town of Williston shall continue to lead the community by increasing its renewable energy production and battery storage portfolio of municipal buildings.

Lead Entity: Town Administration
Timeframe: Long Term

- 6.3 Seek opportunities to encourage Utility-Scale Renewable Energy Projects. Farm methane plants, solar orchards, and ridgeline wind farms are examples of large-scale renewable energy projects that will likely have a significant impact on regional energy production in the years to come. The Town of Williston will support these utility-scale technologies as clean energy sources continue to develop.

Permitting these projects should consider the renewable energy benefits along with environmental and aesthetic impacts as discussed in the following section.

Lead Entity: Town Administration

Timeframe: Medium Term

- 6.4 Seek opportunities to pair renewable energy generation with electrical energy storage to ensure energy is utilized to the fullest potential, to increase resilience/reliability of electrical system during outages and decrease fossil fuel usage during peak periods. Renewable energy generation projects that can accommodate energy storage are strongly encouraged.

Lead Entity: Planning Commission

Timeframe: Ongoing

- 6.5 Participate in the Public Utility Commission's Section 248 process by utilizing the siting policies identified later in this plan to review whether an energy project meets the orderly development criterion [30 V.S.A. § 248(b)(1)]. The town will be given substantial deference in the Public Utility Commission's permitting process for ground mounted solar projects greater than 15kW and for facilities using other technologies (not including hydroelectric facilities) of 50 kW or more.

Lead Entity: Energy Committee, Department of Planning/Zoning

Timeframe: Ongoing.

7. Consumption and Recycling

Local Objective:

1. Reduce our waste stream by reducing consumption, supporting the sharing economy and fixer-spaces, and recycling and composting 100% of our materials thereby reducing energy needed to produce these materials.

Pathways

- 7.1 Coordinate with the Chittenden Solid Waste District (CSWD) to educate the public on the proper sorting and waste reduction techniques. Raise awareness about single use versus long-lasting quality products and fully utilize Community Clean-up Funds each year.

Lead Entity: Energy Committee

Timeframe: Ongoing

- 7.2 Municipal events will take advantage of the full capability of CSWD as it changes, and focus on using compostable or reusable containers, plates, cups and cutlery. Support the school district's efforts to do the same.

Responsible Entity: Town and School District Administration

- 8.2 Establish a policy for regenerative agricultural practices that must be adhered to on any Town owned property that is subject to a land lease agreement. Such practices should include employing minimal-till or no-till practices; the utilization of cover crops during non-production seasons to prevent erosion, build healthier soil, and help sequester carbon; growing a diverse range of crops and utilizing crop rotational practices and companion cropping to maximize plant diversity; and the requirement to use only organic fertilizers and/or on-farm nutrient sources. The grazing of livestock on town land will employ holistic grazing practices including rotational grazing and/or silvopasture when possible.

Lead entity: Town Administration

Timeframe: Short term

- 8.3 Create and expand community gardens on Town and School owned property near residential areas. Benefits include providing food to supply the school kitchens, farm to school programs, community food education, reducing food-energy miles, increasing food security and saving money.

Lead entity: Town and School District Administration

Timeframe: Short term

- 8.4 Establish development standards for land clearing, including organic material removal, when it is a component of site development. Standards will have the objective of maximizing carbon capture and storage and minimizing carbon emissions. Require reporting on the amount of organic material removed, and methods and distance of transport.

Lead Entity: Planning Commission

Timeframe: Medium term

- 8.5 On town owned parcels, only mow when absolutely necessary to maintain recreation or agricultural function, or to manage invasive plants. Mowing for non-recreational uses should be evaluated with a focus on reducing environmental impact.

Lead Entity: Town Administration

Timeframe: Short-term/Ongoing

Renewable Energy Generation Siting

The siting policies identified in this section will provide structure and guidance for increased renewable energy generation capacity in Williston. Once the energy plan is adopted, the town will seek a “determination of energy compliance” from the Chittenden County Regional Planning Commission and will be given substantial deference from the Public Utility Commission.

Municipalities can have input over the siting of renewable generation in two ways: by defining preferred sites, where they wish to strongly encourage renewable energy development, and by defining constraints, where they wish to place restrictions on development, including renewable energy.

Preferred Sites

Renewable energy generation is strongly encouraged on preferred sites before undeveloped areas such as agricultural or forested land. Energy developers and preferred site property owners are encouraged to work together. Vermont's Net Metering Rules (Rule 5.100, effective 7/1/2017) defines preferred sites for renewable energy development (any renewable technology besides hydroelectric). Net metering on preferred sites can be larger (up to 500 kW instead of 150 kW) and being on a preferred site confers financial benefits in the net metering rates. See the latest Vermont Public Utility Commission (PUC) Rule Pertaining to Construction and Operation of Net-Metering Systems for details on the financial and scale benefits of preferred sites. Ground mounted systems up to 15kW and rooftop solar systems up to 500kW go through a registration process rather than the full Public Utility Commission process. However, all other preferred sites do not have an expedited review process and must meet the same requirements as any other system. Preferred sites as defined under the PUC rule include:

- On a pre-existing structure
- Parking lot canopies over permitted paved areas
- Previously developed land
- Brownfields
- Landfills
- Gravel pits
- Superfund sites
- On the same parcel as a customer taking 50% or more of the output
- Town-designated sites

Town-designated preferred sites will be identified in a duly adopted municipal plan or through a joint letter of support by the town planning commission, town legislative body and regional planning commission.

State and Local Constraints

Some areas are not appropriate for any type of development, including renewable energy generation facilities. The State of Vermont has defined certain resources as known and possible constraints, which are protected by the ECOS Regional Plan and state agency review during the Public Utility Commission review process. The Town of Williston has added additional constraints based on local policy, as discussed in the siting policy section of this plan.

Known constraints are areas in which development, including renewable energy generation, is not appropriate. Known constraints are listed below and are shown on Map 23:

- State
 - Federal Emergency Management Agency (FEMA) Floodways
 - Department of Environmental Conservation (DEC) River Corridors

- o National Wilderness Areas
 - o State-significant Natural Communities
 - o Rare, Threatened, and Endangered Species
 - o Vernal Pools (confirmed and unconfirmed)
 - o Class 1 and 2 wetlands (VSWI and advisory layers)
- Local
 - o Slopes 30% or greater
 - o Watershed Protection Buffers

Possible constraints are areas in which the effects of development, including renewable energy generation, may need to be mitigated. Possible constraints are listed below and are shown on Maps 24a-c:

- State
 - o Agricultural Soils and Hydric Soils
 - o Act 250 Agricultural Soil Mitigation Areas
 - o FEMA Special Flood Hazard Areas
 - o Vermont Conservation Design Highest Priority Forest Blocks (Connectivity Blocks, Interior Blocks, Physical Landscape Diversity Blocks)
 - o Highest Priority Wildlife Crossings
 - o Protected Lands (State fee lands and private conservation lands)
 - o Deer Wintering Areas
- Local
 - o Slopes 15-30%
 - o Vermont Conservation Design Priority Forest Blocks (Connectivity Blocks, Interior Blocks, Surface water and Riparian Blocks)
 - o Scenic Viewshed outside of the growth center (as described in the Town Plan and shown on Map XX)
 - o Conservation Areas (See Map 18 of the Comprehensive Plan: Natural Communities, Wildlife Travel Corridor, Wildlife Core Habitat)

Siting Policies

The policies in this section are the land conservation measures to be applied in the Section 248 decision making process with respect to the PUC's review of a petition for an electric generation facility.

1. The Town of Williston will use these siting policies while reviewing all Section 248 applications. The Town will also use these siting policies to determine support for designating a municipal preferred site when a site does not meet the criteria to be a State-designated preferred site. Municipally-identified preferred sites shall meet the intent of the following siting policies. Field verification of known or possible constraints is required.
2. Large scale solar facilities and wind turbines should be located to preserve the scenic quality of the viewsheds identified in Chapter 13 of the Comprehensive Plan. The Planning Commission and Selectboard will review viewshed relevance to a proposed renewable energy generation project on a case-by-case basis. Measures to preserve the scenic quality include, but are not limited to, selecting and siting equipment which keeps the project from being the dominant feature of a viewshed. The project should be positioned in such a way so that it blends into the site. This can be achieved by following state setback requirements and using the natural topography to break the mass of the project.
3. Development, including energy generation, distribution, storage, transmission facilities and fencing, should be carefully located and designed to avoid habitat fragmentation and impacts that would demonstrably reduce the ecological function on a parcel in conservation areas/wildlife travel corridors/wildlife core habitat.
4. Watershed protection buffers shall remain undeveloped with the exception of consolidating existing utility infrastructure (See Table 1 in the 2016-2024 Comprehensive Plan for specific buffer distances).
5. Locate energy generation proximate to existing distribution and transmission infrastructure with adequate capacity and near areas with high electric load (See [Green Mountain Power's Solar Map](#)). Larger projects that want to connect to constrained infrastructure or where there is a lack of adequate infrastructure may be costlier and have a bigger impact on the town.
6. Locate small, distributed wind energy system consisting of a single turbine producing up to 100 kW outside the designated village center or designated growth center. Wind energy systems must be consistent with set back and noise rules in effect by the State of Vermont Public Utility Commission. The intent is to maintain the historic character for properties with frontage on Williston Road, while allowing wind/ground-mounted solar elsewhere in the Village (such as the Central School or behind Town Hall).
7. Locate ground-mounted solar larger than 15 kW AC and wind turbines with a hub height larger than 30 meters (98 ft.) outside of the Designated Village Center.

8. Locate utility lines serving new developments underground and site transmission lines, substations, and similar support facilities within existing utility corridors and be placed underground except where the presence of bedrock or other environmental constraints makes underground installation prohibitively expensive. Careful siting and screening will be required for above ground utility lines. Impacts to constraints identified in the constraints section should be minimized according to applicable policies in this section and in the comprehensive plan.
9. Renewable energy generation projects that can accommodate energy storage are strongly encouraged.

Conclusion

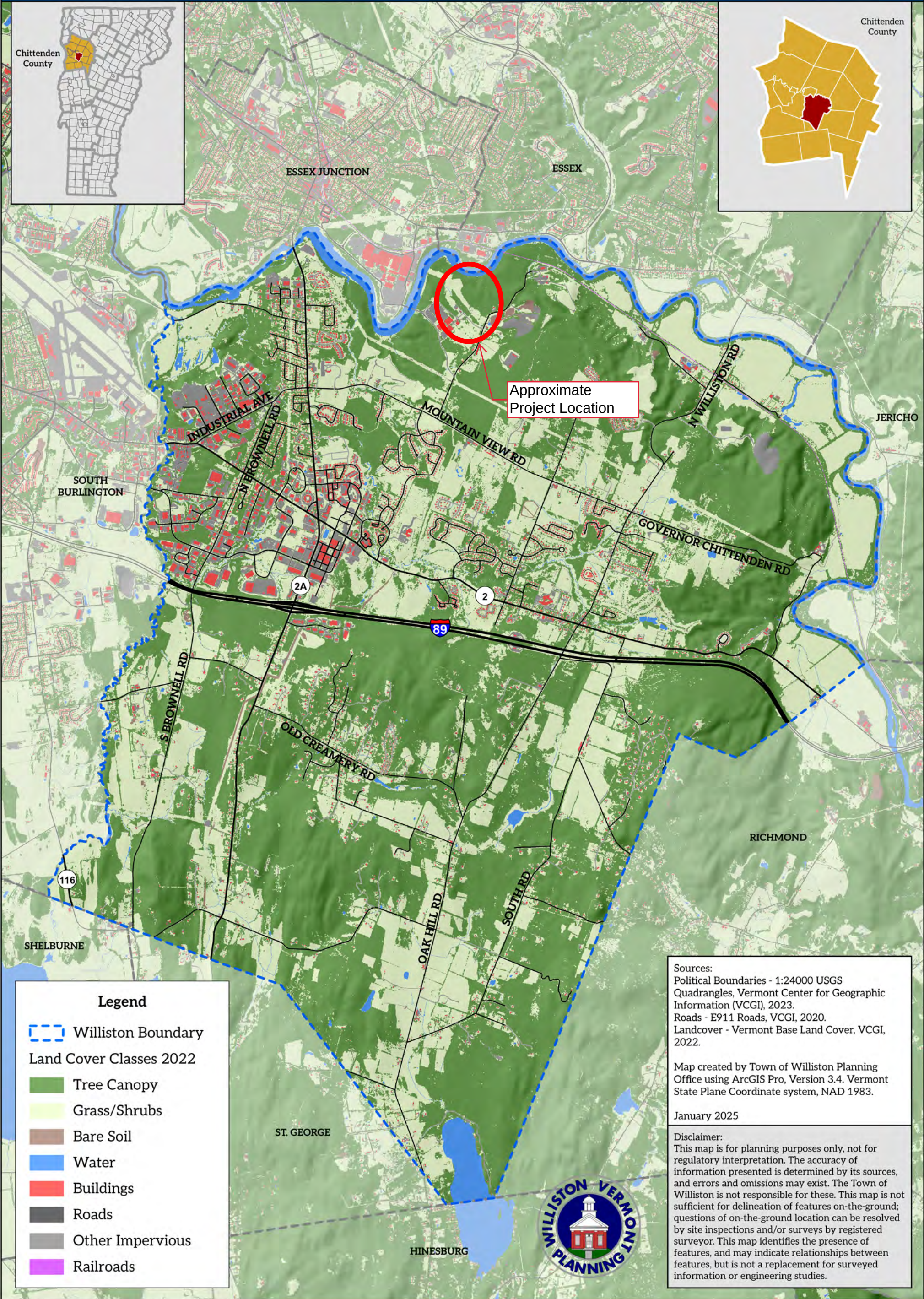
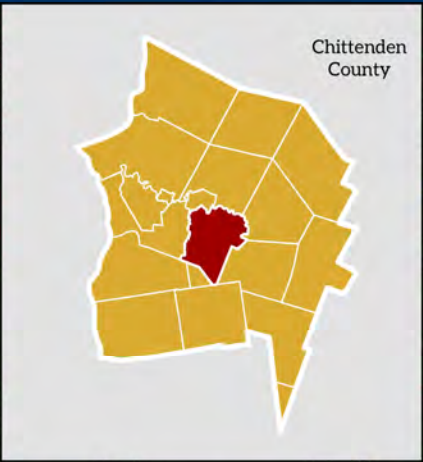
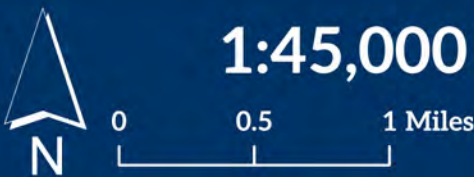
Future generations will look back at the actions or inactions that are taken in regard to this plan. The time for action is now.

Maps

- Map 21 Preferred Sites
- Map 22 Existing Generation
- Map 23 Known Constraints
- Map 24a State Possible Constraints
- Map 24b Local Possible Constraints
- Map 24c Forest Blocks Possible Constraints
- Map 25 Solar Base & Prime Generation Areas
- Map 26 Wind Base & Prime Generation Areas

WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 1 - CURRENT LAND COVER



Legend

Williston Boundary

Land Cover Classes 2022

Tree Canopy

Grass/Shrubs

Bare Soil

Water

Buildings

Roads

Other Impervious

Railroads

Sources:
Political Boundaries - 1:24000 USGS
Quadrangles, Vermont Center for Geographic
Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Landcover - Vermont Base Land Cover, VCGI,
2022.

Map created by Town of Williston Planning
Office using ArcGIS Pro, Version 3.4. Vermont
State Plane Coordinate system, NAD 1983.

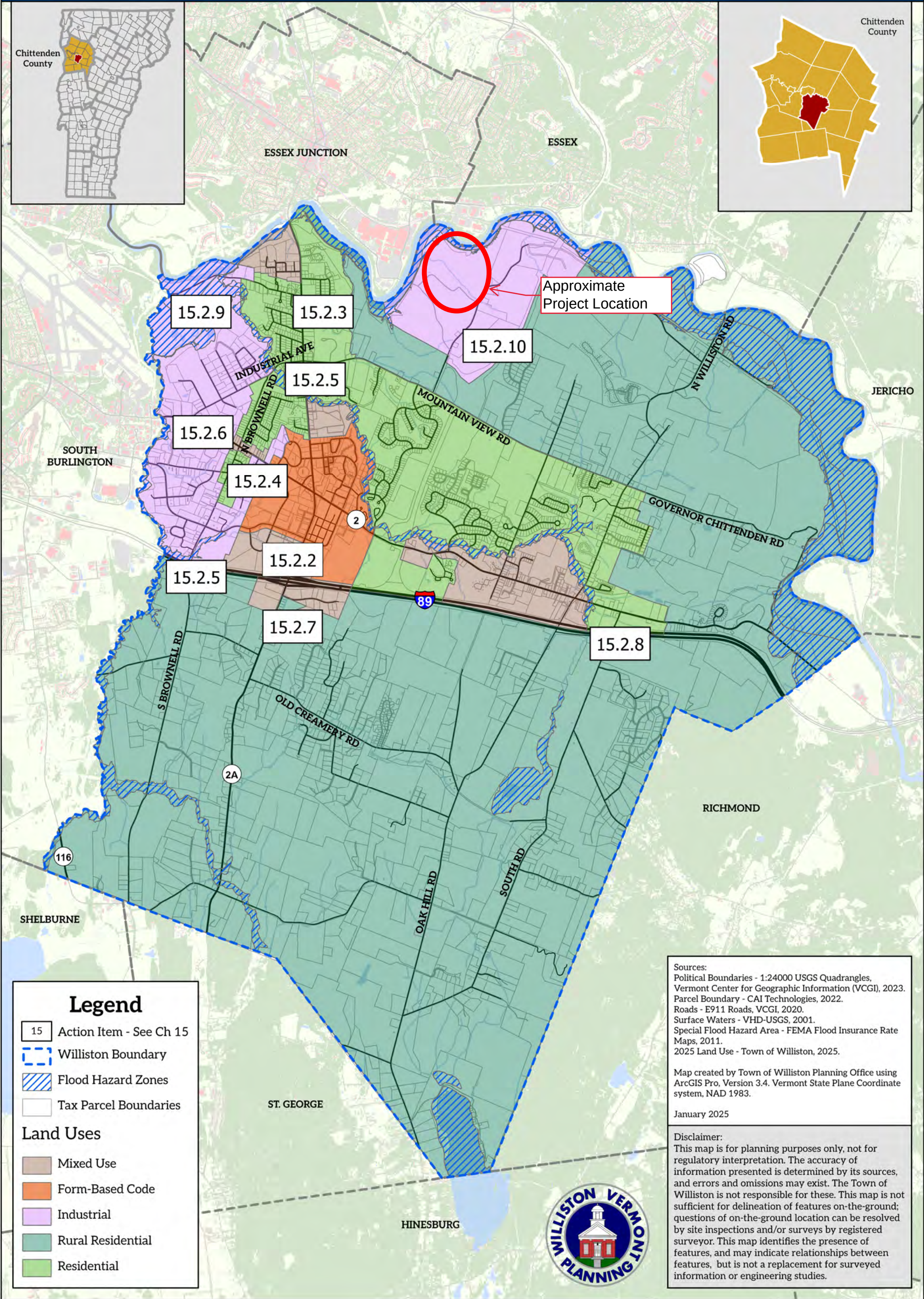
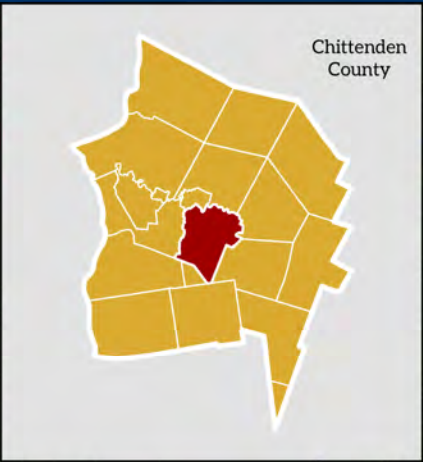
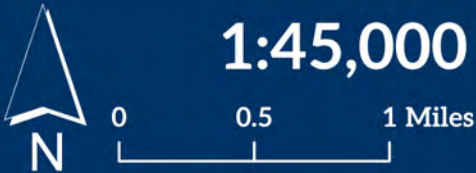
January 2025

Disclaimer:
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information presented is determined by its sources,
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Williston is not responsible for these. This map is not
sufficient for delineation of features on-the-ground;
questions of on-the-ground location can be resolved
by site inspections and/or surveys by registered
surveyor. This map identifies the presence of
features, and may indicate relationships between
features, but is not a replacement for surveyed
information or engineering studies.



WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 2 - FUTURE LAND USE



Legend

- 15 Action Item - See Ch 15
- Williston Boundary
- Flood Hazard Zones
- Tax Parcel Boundaries

Land Uses

- Mixed Use
- Form-Based Code
- Industrial
- Rural Residential
- Residential

Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Parcel Boundary - CAI Technologies, 2022.
Roads - E911 Roads, VCGI, 2020.
Surface Waters - VHD-USGS, 2001.
Special Flood Hazard Area - FEMA Flood Insurance Rate Maps, 2011.
2025 Land Use - Town of Williston, 2025.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

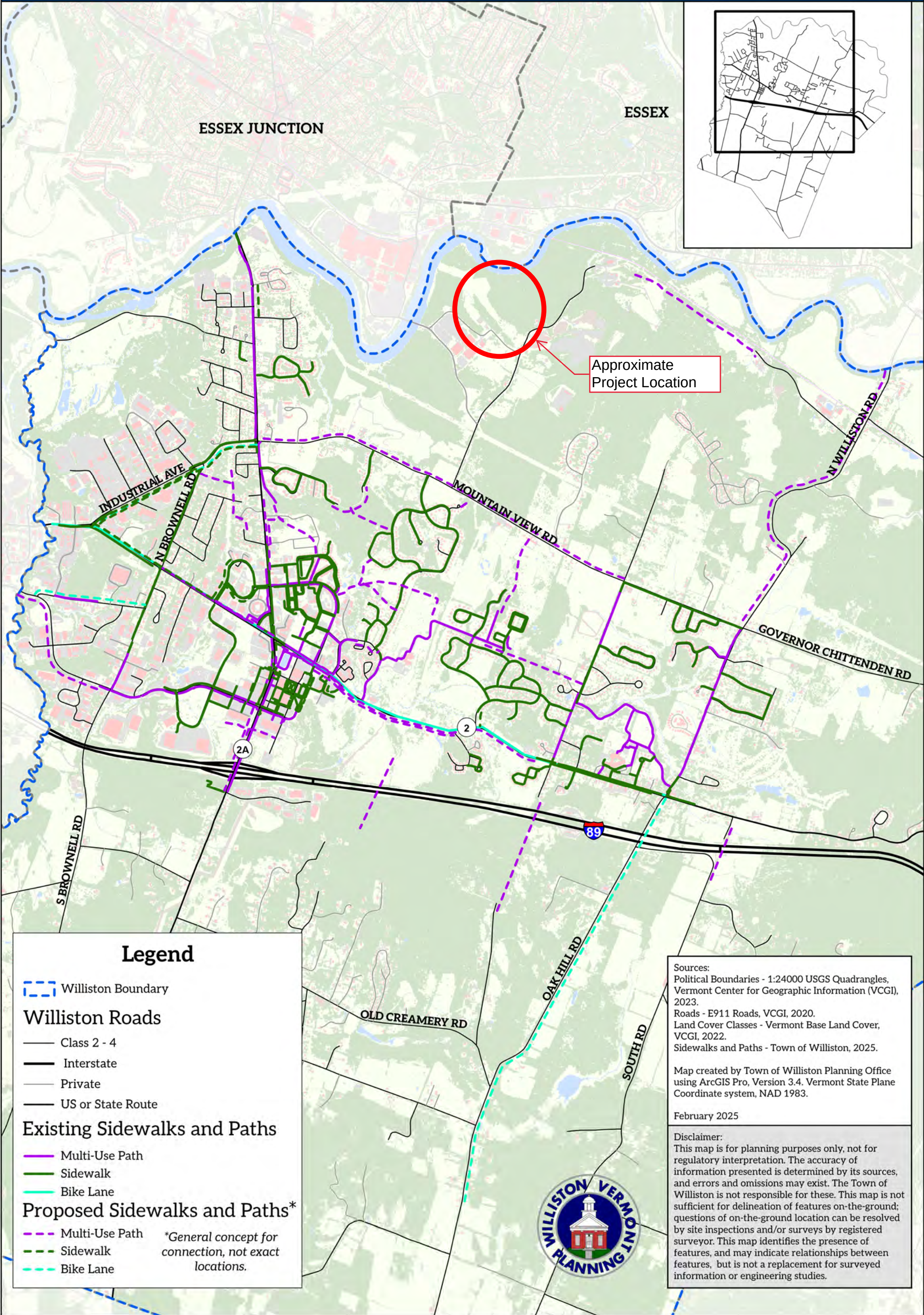
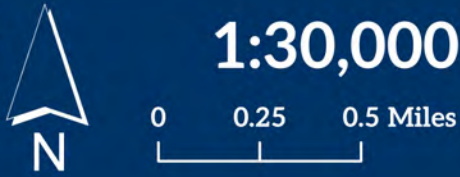
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WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 9- SIDEWALKS AND PATHS



Approximate
Project Location

Legend

Williston Boundary

Williston Roads

- Class 2 - 4
- Interstate
- Private
- US or State Route

Existing Sidewalks and Paths

- Multi-Use Path
- Sidewalk
- Bike Lane

Proposed Sidewalks and Paths*

- Multi-Use Path
- Sidewalk
- Bike Lane

*General concept for connection, not exact locations.

Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Land Cover Classes - Vermont Base Land Cover, VCGI, 2022.
Sidewalks and Paths - Town of Williston, 2025.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

February 2025

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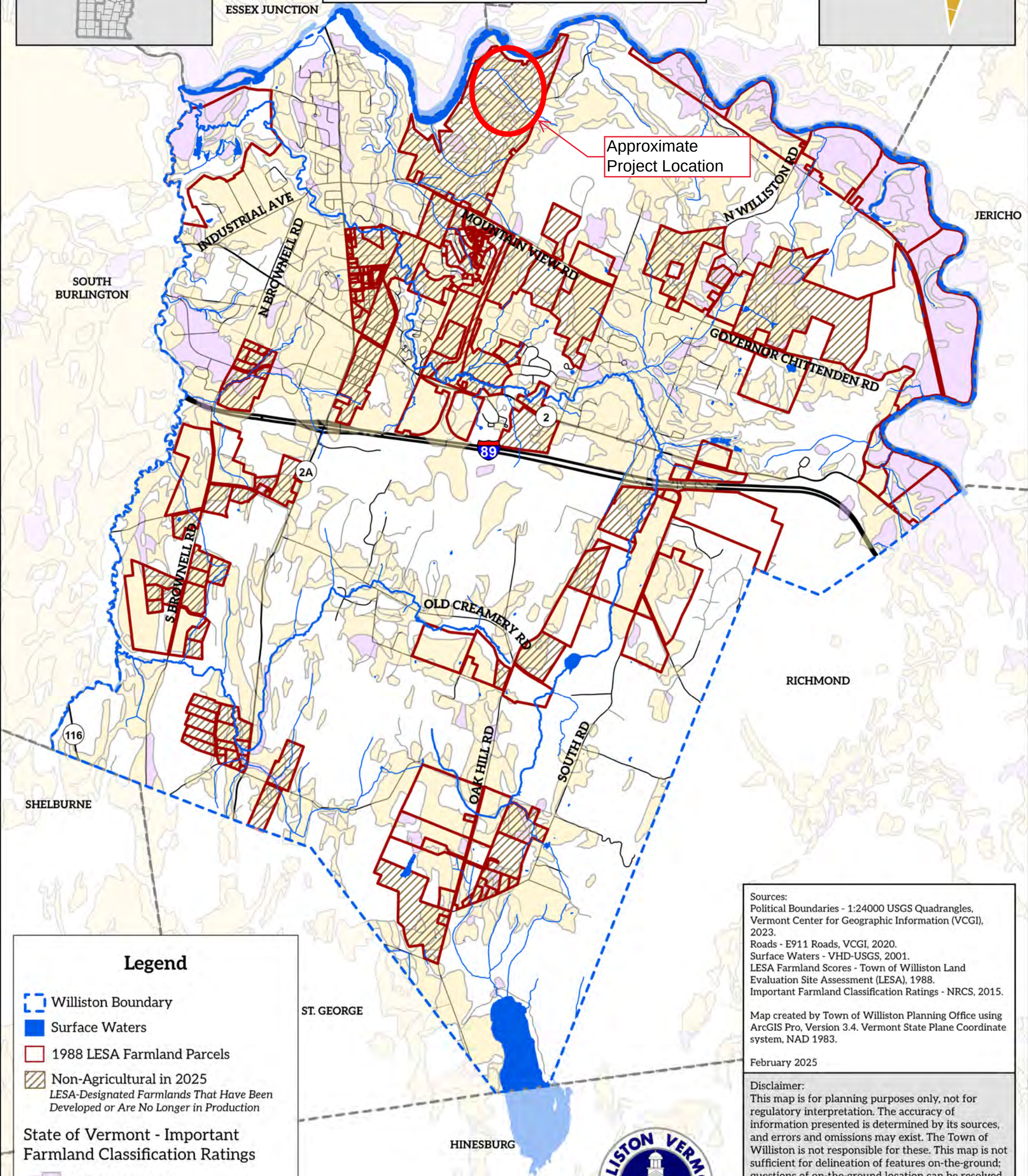


WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 14- LESA FARMLAND



Farmlands of Local Importance were classified with the Land Evaluation/Site Assessment (LESA) system in 1988. The LESA system is a framework for combining multiple factors into an integrated assessment of the importance of a particular site for continued agricultural use. Such factors as soil quality, agricultural productivity, development pressure, and measures of other public values are combined into a single score that allows the Town to identify and protect important agricultural land and plan growth accordingly (WDB 27.8.1).



Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Surface Waters - VHD-USGS, 2001.
LESA Farmland Scores - Town of Williston Land Evaluation Site Assessment (LESA), 1988.
Important Farmland Classification Ratings - NRCS, 2015.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

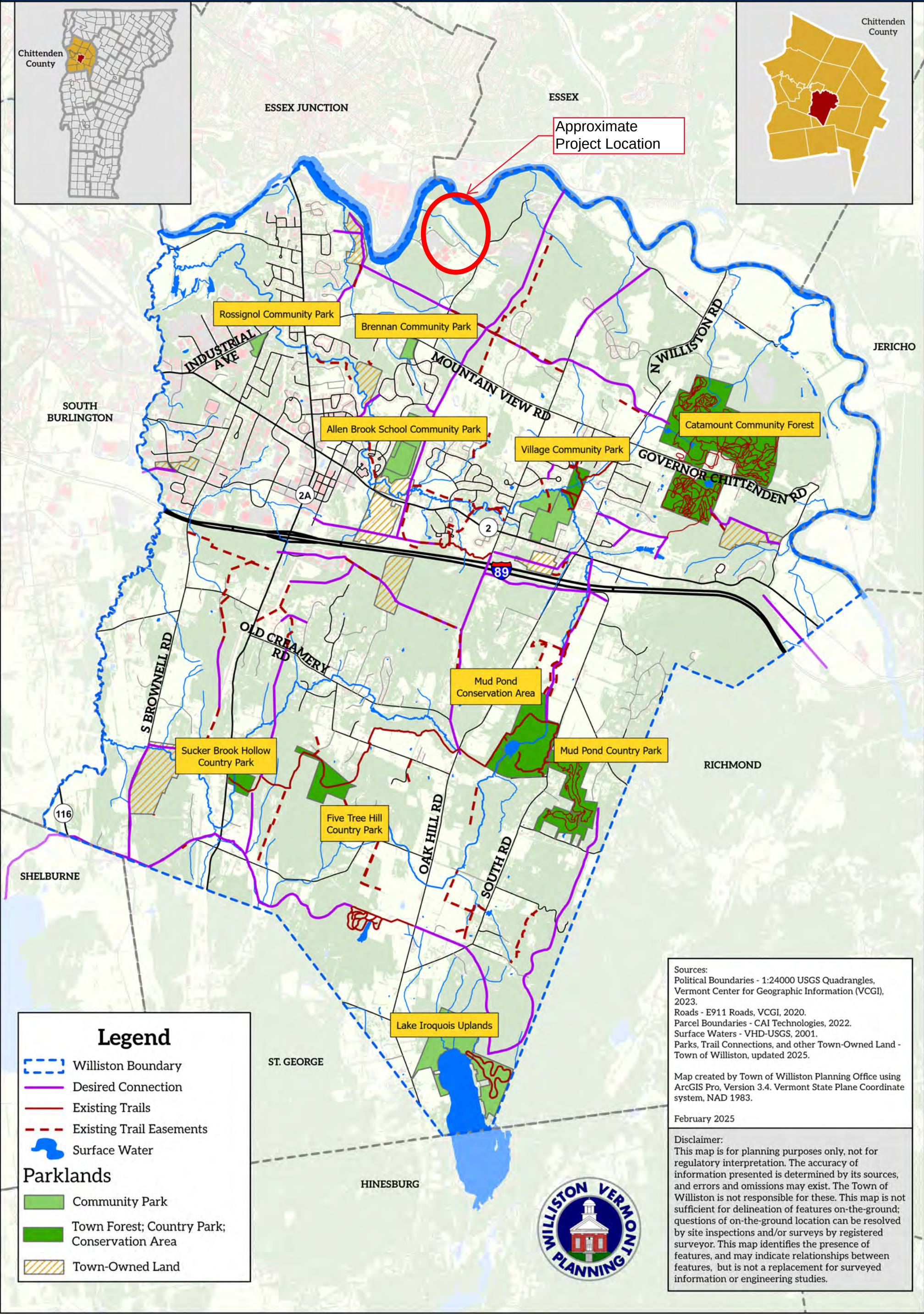
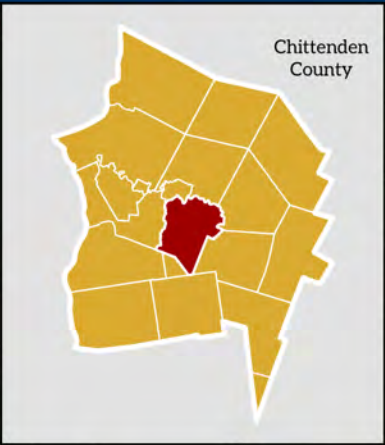
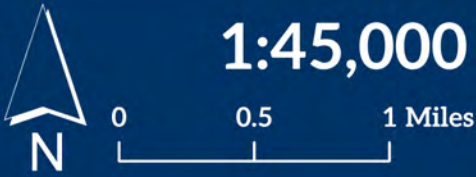
February 2025

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WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 15- PARKLAND AND PRIMITIVE TRAILS



Legend

Williston Boundary

Desired Connection**Parklands**

Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Parcel Boundaries - CAI Technologies, 2022.
Surface Waters - VHD-USGS, 2001.
Parks, Trail Connections, and other Town-Owned Land - Town of Williston, updated 2025.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

February 2025

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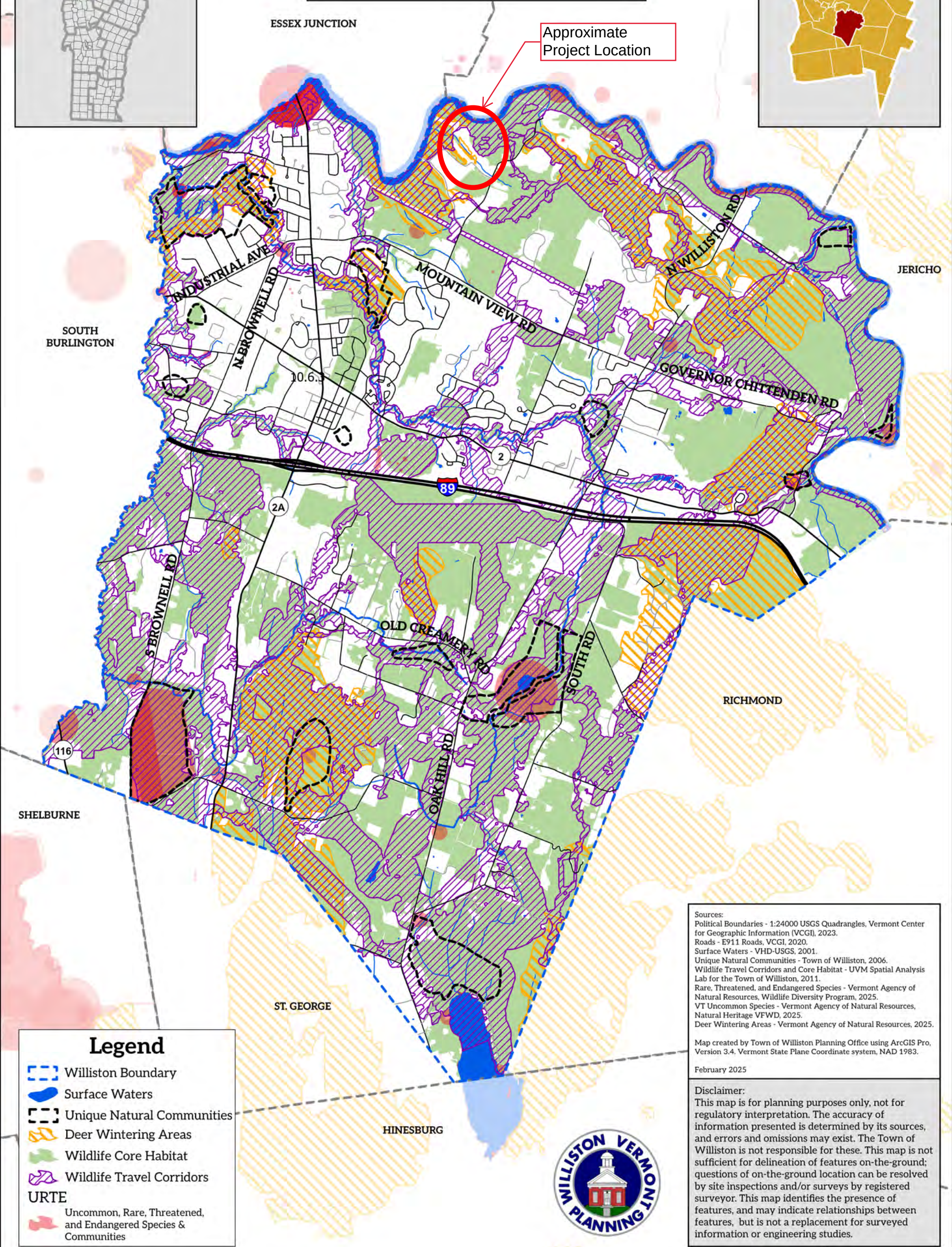
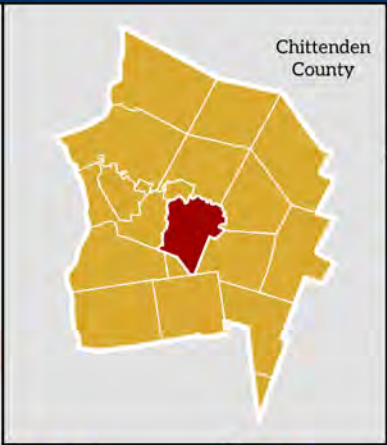


WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 16- CONSERVATION AREAS



See Chapter 27 of the Williston Unified Development Bylaw for more explanation of the established standards that protect and preserve significant natural areas.

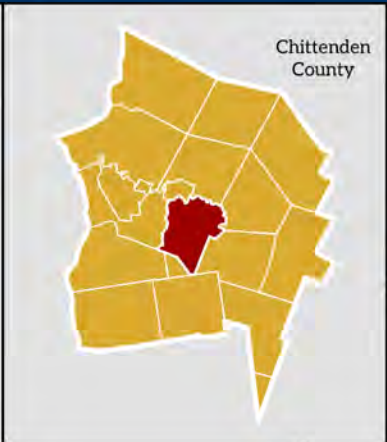


WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 17- VISUAL ASSESSMENT



Williston's scenic viewshed includes the open fields and meadows, wooded slopes and ridgelines, and scenic viewpoints that make up the visual character of the town. Each viewshed category is described in Chapter 27 of the Williston Unified Development Bylaw. These categories are further broken down into designations, which were created in 1989. Places where different components overlap are judged to be more significant (WDB 27.9.1).



ESSEX JUNCTION

Approximate Project Location

JERICO

SOUTH BURLINGTON

RICHMOND

SHELBURNE

ST. GEORGE

HINESBURG

Legend

- Williston Boundary
- Focal Point
- Public Vantage Point
- Visual Assessment**
- Primary Foreground
- Primary Middleground
- Primary Background/Horizon
- Secondary Foreground
- Secondary Middleground
- Secondary Background/Horizon

Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Visual Assessment Data - UVM Spatial Analysis Lab, 1989.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

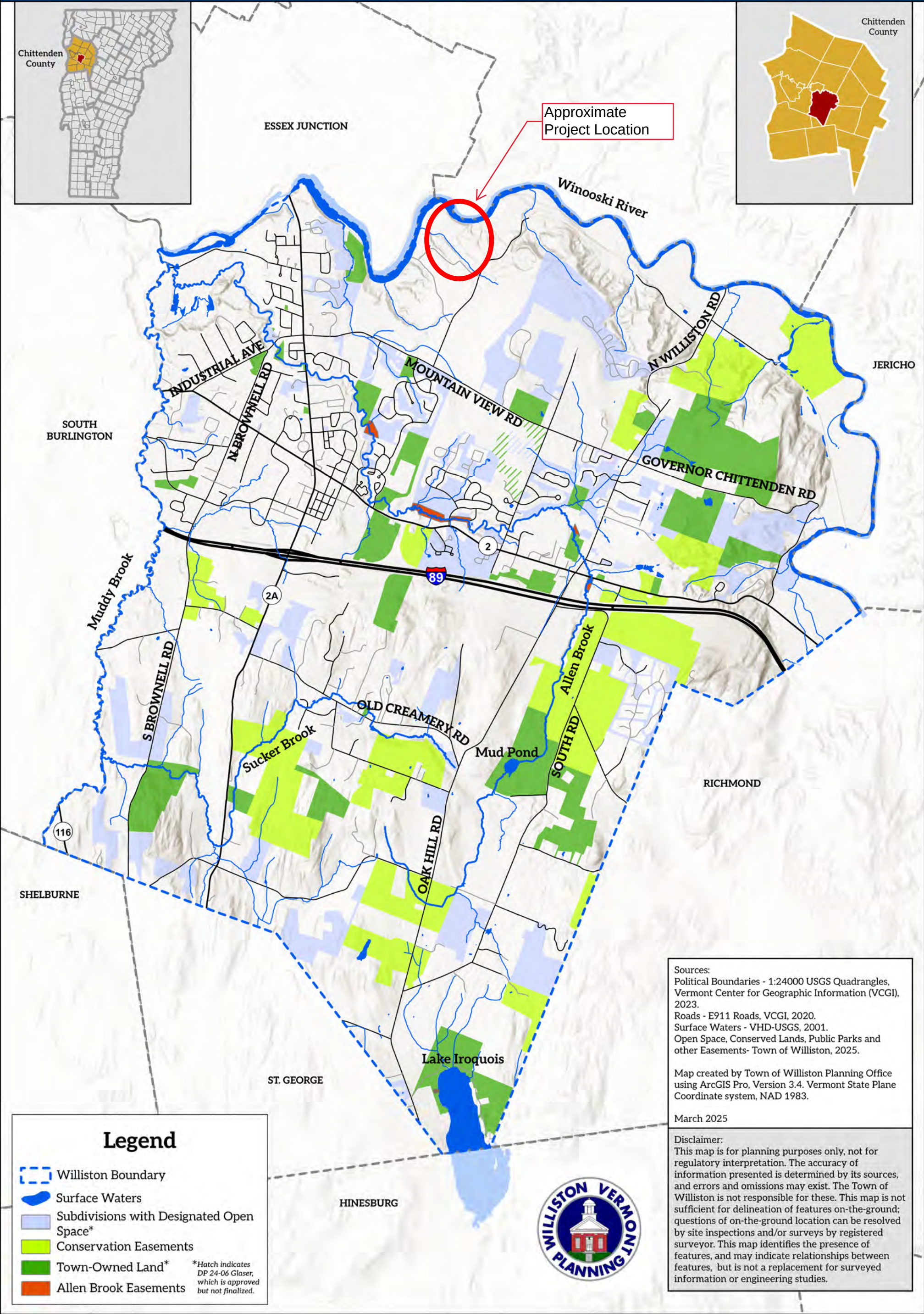
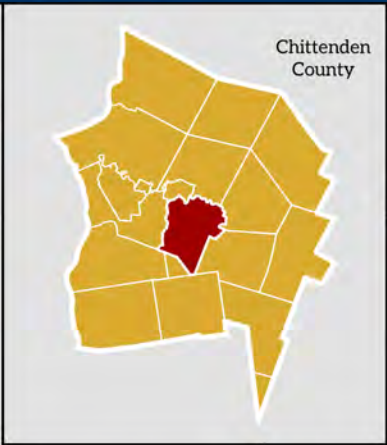
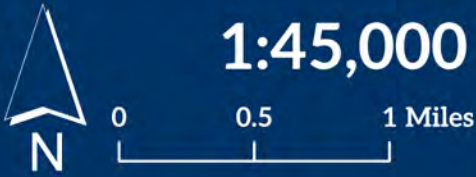
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WILLISTON 2025-2033 COMPREHENSIVE PLAN

MAP 18- PROTECTED OPEN SPACE



Legend

- Williston Boundary
- Surface Waters
- Subdivisions with Designated Open Space*
- Conservation Easements
- Town-Owned Land*
- Allen Brook Easements

*Hatch indicates DP 24-06 Glaser, which is approved but not finalized.

Sources:
Political Boundaries - 1:24000 USGS Quadrangles, Vermont Center for Geographic Information (VCGI), 2023.
Roads - E911 Roads, VCGI, 2020.
Surface Waters - VHD-USGS, 2001.
Open Space, Conserved Lands, Public Parks and other Easements- Town of Williston, 2025.

Map created by Town of Williston Planning Office using ArcGIS Pro, Version 3.4. Vermont State Plane Coordinate system, NAD 1983.

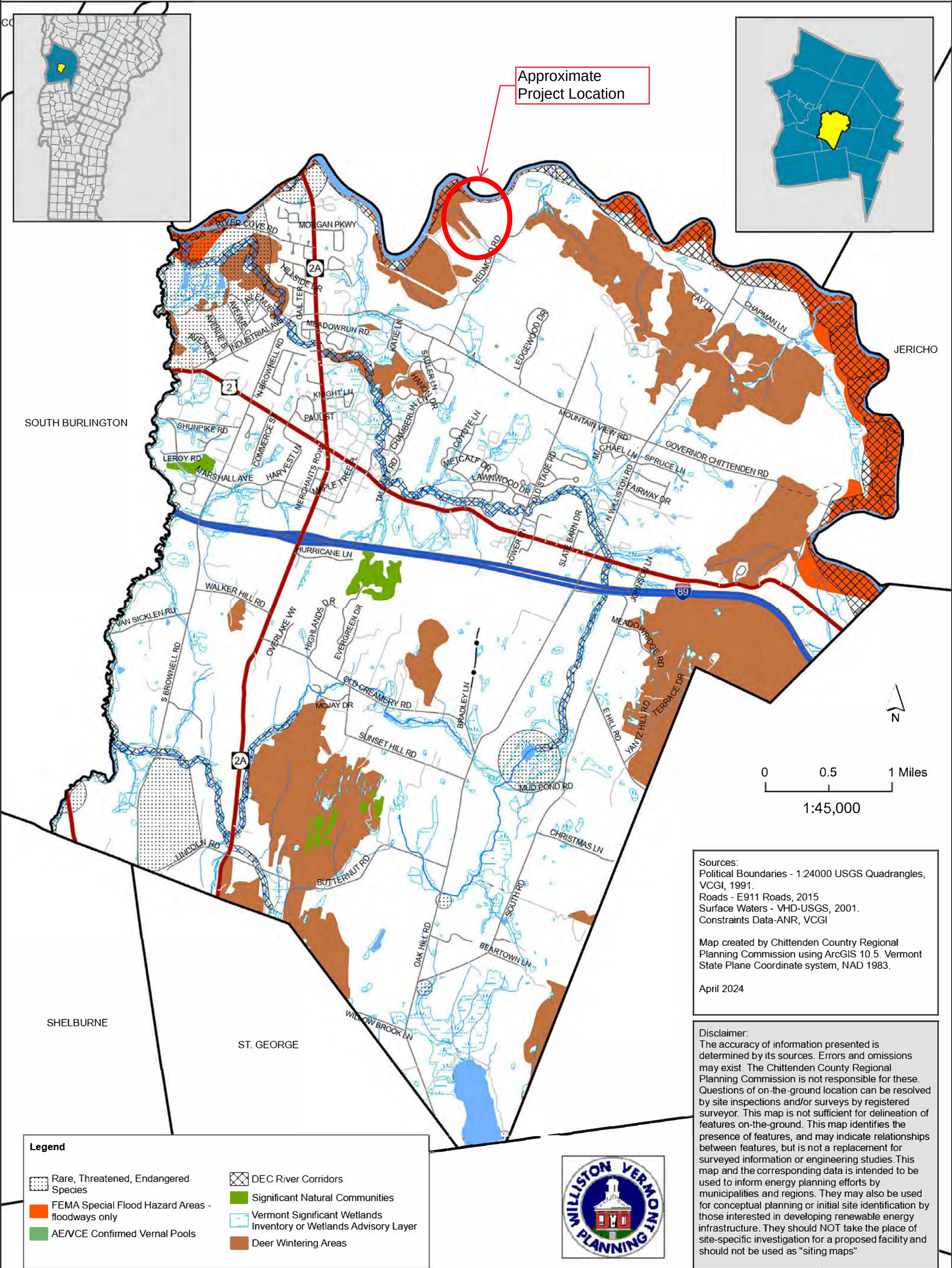
March 2025

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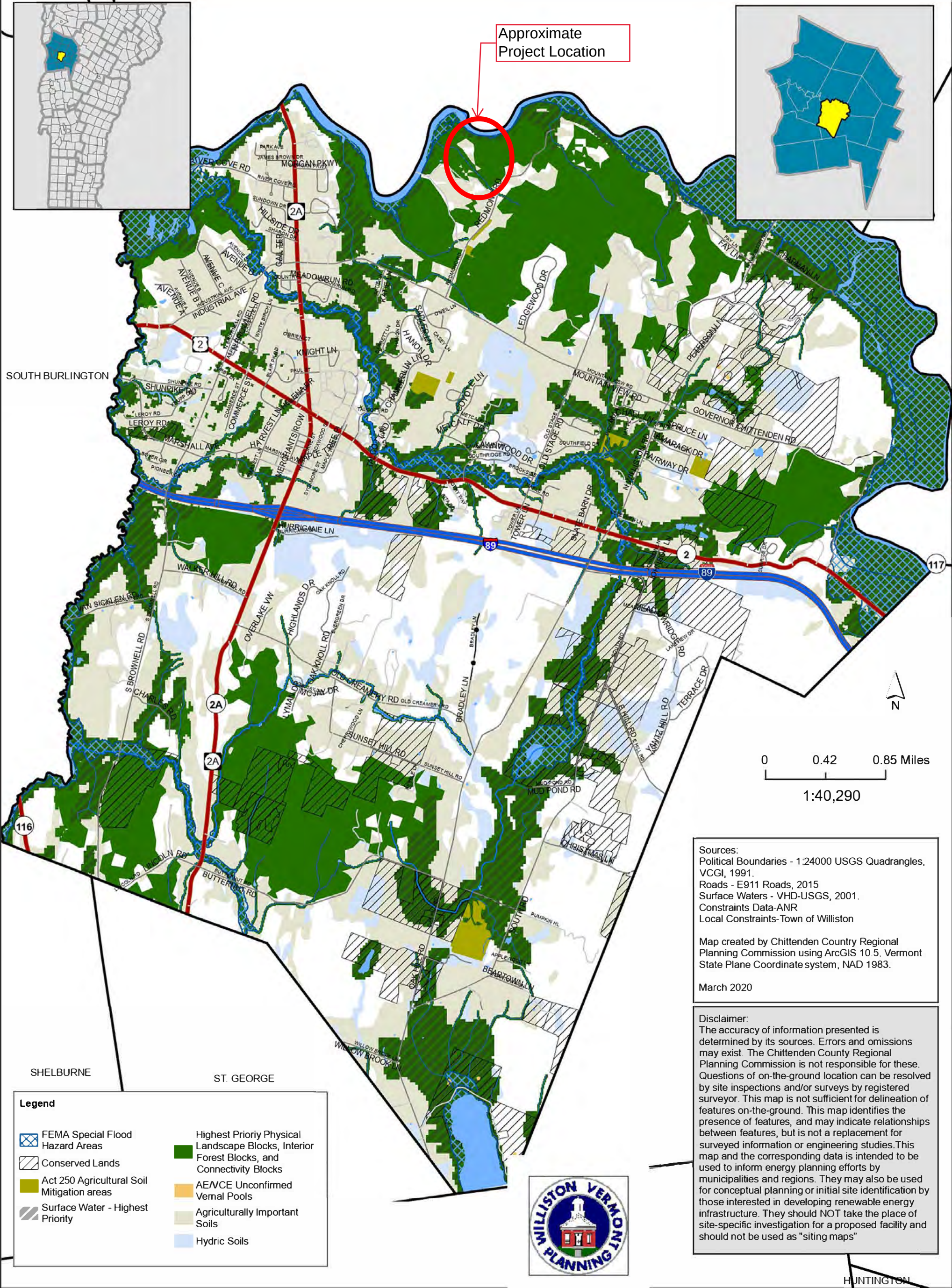


Williston 2025-2033 Comprehensive Plan

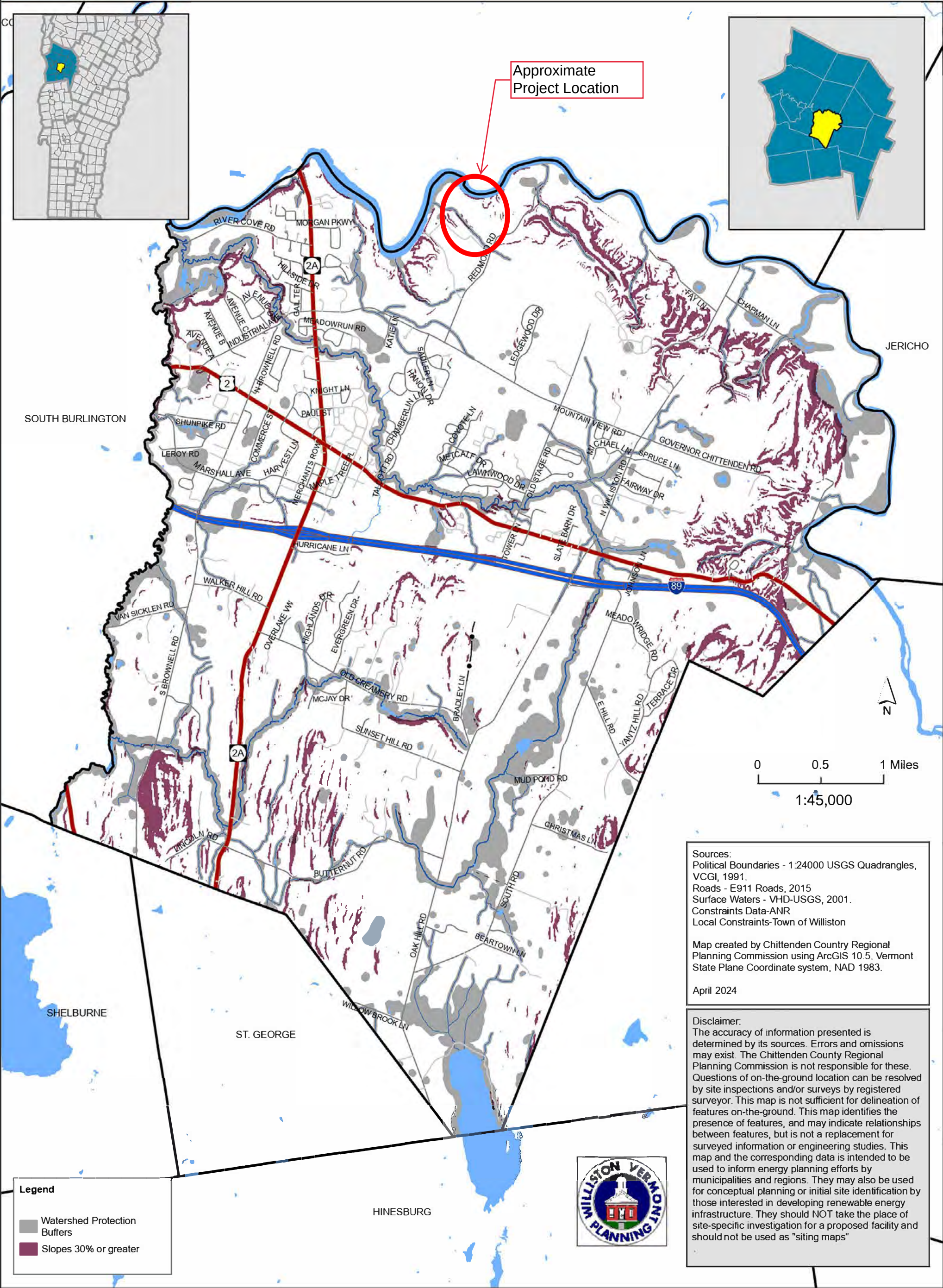
Map 19a - State Known Constraints



Williston 2025-2033 Comprehensive Plan Map 19b - State Possible Constraints

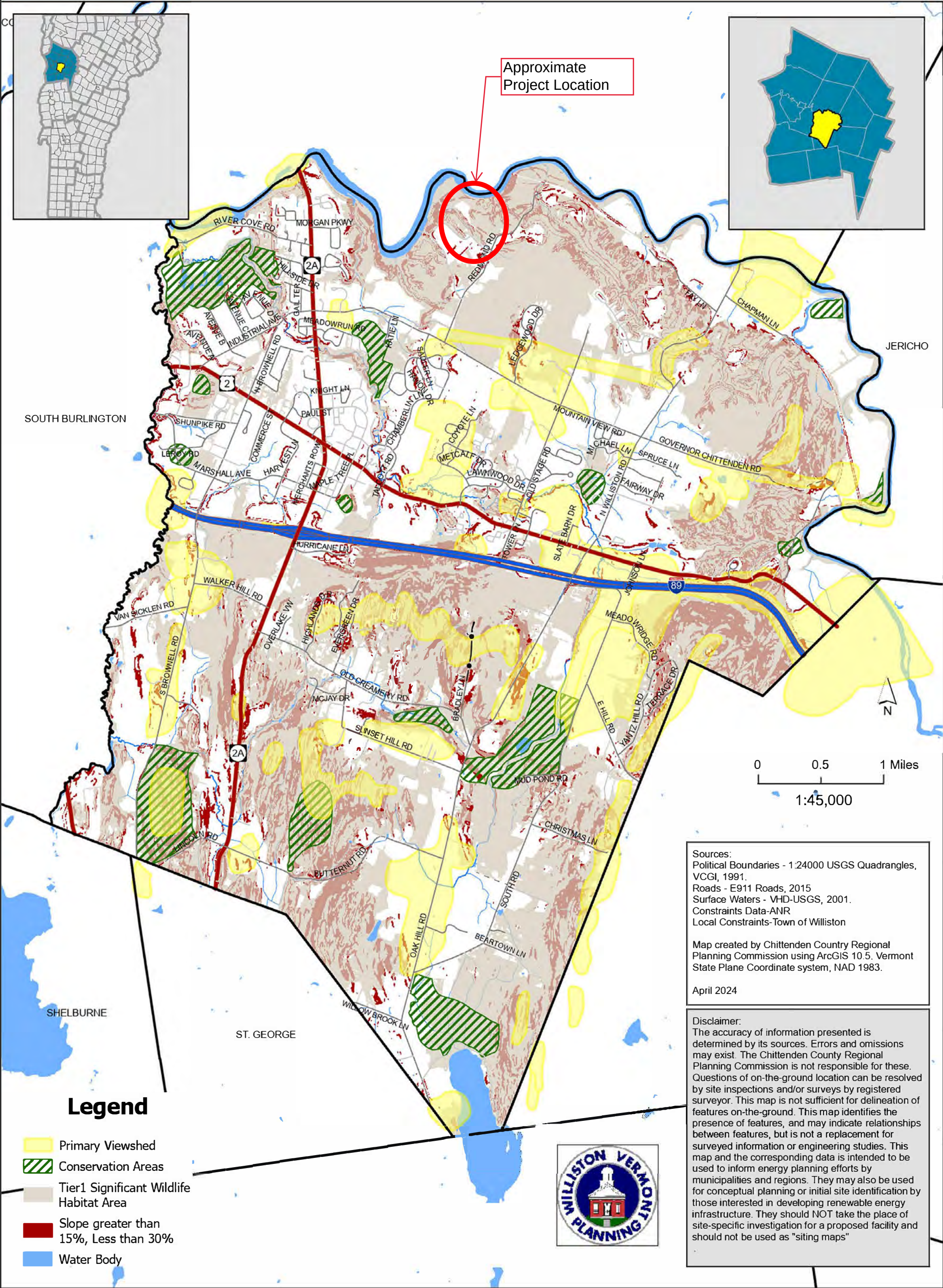


Williston 2025-2033 Comprehensive Plan Map 19c - Local Known Constraints



Williston 2025-2033 Comprehensive Plan

Map 19d - Local Possible Constraints



Williston 2025-2033 Comprehensive Plan

Map 20a - Potential Solar Energy Resource Areas

