

Town of Craftsbury

# Town Plan



*Elinor Osborn*

Adopted  
11-3-2025

The purpose of the Town Plan is to emphasize the continued desire for local control while exploring the area of special need that will shape the development of the town into the future. The Craftsbury Town Plan has also been intended to have a say in developments that fall under Act 250 jurisdiction; the passage of Act 181 brings sweeping change not only to Act 250 but also to regional and municipal planning efforts. This plan serves to address those changes while providing a community-driven vision for the town’s future. Maintaining a current town plan also makes the community eligible to apply for funding for important community projects.

In May of 2006, Craftsbury adopted its first Town Plan. The Plan was developed with assistance from a Municipal Planning Grant from the State of Vermont Department of Housing and Community Affairs, as well as extensive community input. The Plan was subsequently reviewed and updated in 2011 and 2016, and amended in 2020. All iterations – including this most recent one, which was also supported with a Municipal Planning Grant – relied on extensive community input.

---

## **TABLE OF CONTENTS**

---

<b>Part 1: Defining Rural Character .....</b>	<b>3</b>
Context .....	5
Public outreach process for this plan.....	5
Implications of Act 181 .....	8
Craftsbury's definition of rural character .....	9
Craftsbury's energy siting standards .....	12
<b>Part 2: Building Social Connections .....</b>	<b>18</b>
Population growth.....	20
Land use and development patterns .....	21
Craftsbury's economic conditions.....	23
Housing in Craftsbury .....	25
Childcare.....	27
Education.....	27
Community programming.....	29

Civic engagement .....	30
Health and Wellness.....	30
Part 2 Policies, goals, and strategies .....	30
<b>Part 3: Maintaining Ecological Balance .....</b>	<b>33</b>
Vermont Conservation Design and Biofinder .....	35
Local data gathering .....	37
Craftsbury's forests.....	37
Stewardship and conservation efforts .....	38
Groundwater mapping .....	39
Water quality .....	40
Invasive species.....	42
Flooding and flood resilience .....	43
Part 3 Policies, goals, and strategies .....	47
<b>Part 4: Connecting People and Places Through Services and Infrastructure .....</b>	<b>49</b>
Craftsbury's road network .....	50
Alternative forms of transportation .....	50
Craftsbury Village Master Plan .....	51
Food security .....	51
Future use of Village Properties .....	52
Broadband access.....	52
Water and wastewater .....	54
Solid Waste .....	55
Emergency services and planning.....	55
Energy Use .....	56
Part 4 Policies, goals, and strategies .....	57
<b>Priority Actions for Craftsbury.....</b>	<b>61</b>
<b>Appendix A: Craftsbury Enhanced Energy Profile .....</b>	<b>63</b>
<b>Appendix B: Craftsbury Community Survey Results .....</b>	<b>73</b>
<b>Appendix C: Community Values Mapping.....</b>	<b>80</b>
<b>Appendix D: Regional and Local Future Land Use Mapping Categories.....</b>	<b>97</b>

# 1: Defining Rural Character

The town of Craftsbury is comprised of 23,040 acres and still has a working landscape with many farms and managed forests. Residents have a strong sense of community and value each



*Elinor Osborn*

other and the beauty of the landscape in which they live. Craftsbury's visual beauty can be found in its geography and architecture. The area is strongly defined by the north-south chain of the Lowell Mountain range to the west. There are three lakes within Craftsbury's boundaries: Eligo, Little Hosmer and Big Hosmer, as well as two rivers: the Wild Branch and the Black River. There are many streams that feed into the rivers, including Seaver Branch, Whitney Brook, Cass Brook, and Whetstone Brook. The many farms in town have helped to maintain open land, offering wide vistas and rolling green fields as another source of beauty. The village of Craftsbury and Craftsbury Common are connected by the North-South Craftsbury Road. The Common, an area defined by its iconic large grassy public space surrounded by a white fence and white clapboard houses, is host to many community events and activities. The town is often represented in photographs of the Common framed by the traditional white church with a steeple at the northwest corner. There are an unusual number of 19th-century homes, barns, institutional and commercial buildings, which give the entire town of Craftsbury visual continuity and harmony.

The Craftsbury landscape is also home to a plethora of wildlife. The variety of ecosystems in the area offers habitat for creatures large and small. The extensive riverine system and associated floodplains and wetlands provides habitat, flood water retention, water cleansing and aesthetics which are highly valued by the residents. The undulating topography along with the mixture of deciduous and coniferous forests adds to the stunning views throughout town.

A long-held statewide planning goal has been to “plan development so as to maintain the historic settlement pattern of compact villages separated by rural countryside.” This goal has faced some challenges in Craftsbury. There are a number of constraints to development in traditional centers, including hydric soils in the villages and no off-site septic system. Concurrently, there is a long-term trend of living close to the land, which has led to incremental and scattered rural residential development, particularly noticeable in and around the heavily forested half of town that encompasses the Coburn Hill area and the Town Forest. This section explores the objectives, policies, and programs that will guide Craftsbury’s future.

**From the development of Craftsbury’s first plan in 2004 through every subsequent update, the potential use of land use regulations has been discussed and debated.**

In the meantime, the chosen land use strategies have been to deploy incentive-based non-regulatory measures while continuing a public dialog on land use regulation. These non-regulatory strategies include conservation easements, enrollment in the Current Use program, and village center designation. In 2009, Craftsbury received designations for Craftsbury Village and Craftsbury Common. East Craftsbury received designation in 2018.

Historically, these village center designations have provided strong incentives for reinvestment in traditional centers of development through tax credits for rehabilitation of income-producing properties, as well as priority consideration for grants that focus on planning and investment in the village areas. To date, Craftsbury Academy, Craftsbury Public House, and the Craftsbury General Store have received tax credits. Village center designation also played a role in the recent award of a Municipal Planning Grant to conduct master planning in Craftsbury Village (see Section 4), and strengthened successful block grant applications for Pete’s Greens (a loan to rebuild after the barn fire) and Craftsbury Community Care Center (a grant to improve air circulation, heating, and cooling). Maintaining a Town Plan that is approved by the regional planning commission has been the core requirement for maintaining these designations.

**This plan update relied on extensive public outreach to establish a shared vision for the future.**

Vermont’s planning statute (24 VSA Chapter 117) outlines requirements for regional and local planning. A core planning goal in statute is “to encourage citizen participation at all levels of the planning process, and to assure that decisions shall be made at the most local level possible commensurate with their impact.” The planning commission spearheaded multi-faceted outreach activities that consisted of a community survey, a hosted forest walk in Craftsbury’s Town Forest, a Community Values Mapping Session, and a land use workshop.

The outreach progress was also an opportunity to continue the weighty discussion of land use regulation. According to the most recent community survey, many people are fearful of change, and some view land use regulations as critical to managing growth and change. To some, this concern is driven by the incremental parcelization of land, often for second or vacation homes. To others, it’s the potential for poorly planned and inappropriately scaled suburban development. Gentrification, marked by socio-economically segregated neighborhoods on private cul-de-sacs, as well as increased traffic associated with new development are also a concern to some. (See Appendix B for more details on survey results.)

There is strong interest in minimizing fragmentation of large forested assets, many of which have a critical nexus with outdoor recreation and recreation trails.

Prior to developing the plan, the Craftsbury Planning Commission hosted a Community Values Mapping (CVM) Workshop. On March 20, 2024, more than 30 attendees organized into teams to identify the places people care about for a range of reasons:

- working lands
- recreation
- hunting & fishing
- historic areas
- natural areas/habitats
- scenic views
- community hubs

Attendees gathered in six groups to mark large wall-sized maps according to the above values, using color-coded pens. Each group then presented their findings. Results were digitized into GIS maps.

Areas with the greatest overlapping values – from any of the above categories – are shown in the darkest shading, and they include lands in the Coburn Hill area (such as the Town Forest); reaches along the Wild Branch to the north of Town; the Academy Woodlot; lands in the Outdoor Center; areas around Eligo; lands off Guy Lot Road, and Wild Branch.



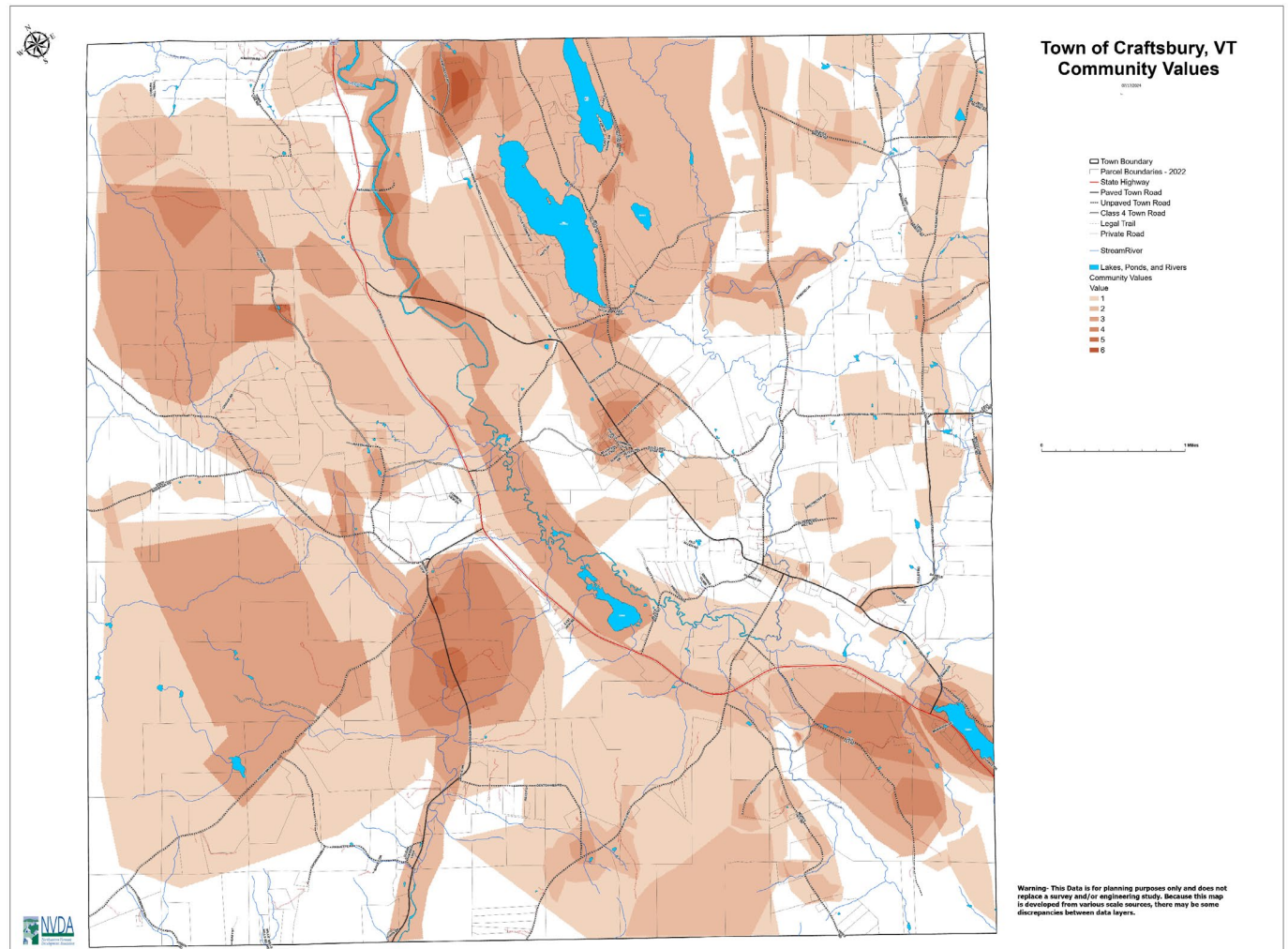
### Context and findings

The process is not precise, nor is it legal or binding. However, this robust public engagement process was a helpful way to ground-truth commonly held beliefs about Craftsbury's rural character:

- There is a significant overlap of lands valued for their scenic beauty with working lands and recreation resources. Craftsbury residents strongly value access to year-round outdoor recreation, particularly in scenic areas that speak to Craftsbury's rural traditions. All three categories had the greatest overlap in the eastern/northeast portions of towns.
- Craftsbury's working lands are practically ubiquitous. Some groups commented that it was too difficult to map all the working lands, so they stopped trying to do so and focused on other value categories. This sentiment is also reflected in our plan's land use map, which identifies extensive assets for farming and forestry throughout the town.
- Scenic views included two different perspectives. *Viewpoints* (places from where a view can be seen) included the iconic Craftsbury Common. *Viewsheds* (the entire land area that can be seen from a viewpoint) included the middle of Little Hosmer, Creek Road, and Morey Hill Road. In the mapping exercise, some participants made the effort to identify the difference, but these categories are combined for the analysis.
- Community hubs understandably included the three villages, the libraries, churches, the Genny and the C Village Store, but also Mill Village. Open lands and popular green spaces such as the Common, walking trails, the Outdoor Center, and the Academy Woodlot were also identified as hubs for providing social and community value as gathering spaces.
- Natural areas and habitats as mapped by participants, tended to overlap the highest priority interior forest blocks (identified by the Agency of Natural Resources in Biofinder) in the western

portion of the community. These areas, which are more likely to support higher levels of biodiversity, also overlap with lands that are valued for hunting and fishing.

More details about the Community Values Mapping Session can be found in Appendix C.



## Legislative changes will change the way we draw up our planning maps.

In absence of local land use regulations, the Craftsbury Town Plan has also been intended to have a say in developments that fall under Act 250 jurisdiction. After years of study and unsuccessful attempts to reach a legislative consensus, Act 181 (H.687) became law in 2024. An act related to community resilience and biodiversity protection through land use, the legislation brings sweeping changes not only to Act 250, but to regional and municipal planning efforts, and local designations, such as Craftsbury's village center designations. What follows is a very high-level summary of some of the changes:

- **Regional plans will have consistent future land use maps containing at least 10 new regional land use categories:** Downtowns and village centers (which include Craftsbury's village centers); planned growth areas\*; village areas (larger than designated village centers)\*; transition or infill areas; resource-based recreation areas; enterprise areas, hamlets; rural-general; rural-agriculture and forestry; and rural-conservation overlay (critically important natural resources). The maps are still in development and must be adopted by December 31, 2026. They will require approval from the newly reformed Natural Resources Board, now called the Land Use Review Board (LURB). (\*Land use categories with an asterisk require zoning and subdivision bylaws.)
- **The regional plans and maps will have greater significance for municipalities.** Downtowns and village centers, planned growth areas, and village areas may be eligible for recognition under the new Act 250 Tier 1 designation, which will have long-term exemptions from Act 250. Zoning and subdivision regulations are required for Tier 1 status. All other areas will see expanded jurisdiction under Act 250. Tier 2 lands, which will likely encompass the majority of lands in Craftsbury, will have new jurisdictional triggers, such as the creation of 800 feet or more of private roadway, or commercial, industrial, or residential uses at or above 2,500 feet. Tier 3 lands will encompass environmentally sensitive areas and will be determined via rule-making by the newly formed Land Use Review Board. These areas are likely to include irreplaceable natural habitats, highest priority conservation blocks, and endangered species.
- **Act 250 will also have new considerations for forest blocks and habitat connectors.** Criterion 8C will discourage undue adverse impacts on forest blocks and connecting habitats in Tier 2 and Tier 3 lands. If a project results in an undue adverse impact, a permit would only be granted if effects are avoided, minimized, or mitigated in accordance with rules adopted by the Board. Rulemaking to address minimum forest block size, administration, and mitigation of impacts must be in place by June 15, 2026.
- **The regional plans and map will determine state-designated "centers."** Previously, Craftsbury's village center designations had to be approved every eight years by a state board. Now there is no approval process. The designation as a "center" is automatic. All prior designated downtown and village centers will be recognized by the regional future land use map, unless the municipality opts out. Craftsbury's village centers will all become "centers."

The center designation is a stepped process, with Step 1 a low-barrier entry point, with availability for tax credits. Upon approval of the regional future land use map, Craftsbury Village, Craftsbury Common, and East Craftsbury will receive a Step 2 status, which includes additional grant funding opportunities, priority considerations for funding and technical assistance, AND the ability to lower speed limits less than 25 MPH. The latter could benefit efforts at traffic calming in Craftsbury Village. (See Chapter 4 for more information.)

Although the regional future land use maps are still in development, we have worked with the regional planning commission to develop a new land use map for our town plan that we believe will align with the new regional maps, as well as the input we received from the Community Values Mapping session. We also expanded the village center boundaries to reflect historic development patterns, and possibly extend tax credit benefits to additional property owners. **An explanation of the land use categories, and how we adapted them for this plan is in Appendix D.**

### **Appreciation for Craftsbury’s rural character is what unites us.**

The changes to Act 250 passed this year may place pressure on communities like Craftsbury to consider land use regulations in the next few years. The most common reason cited for local land use regulations is to protect “rural character” – an elusive term that can mean different things from one community to the next. In many communities it’s defined in a negative sense: Screen or prohibit uses that you don’t want to see, hear, or smell. It’s also defined in terms of spatial isolation through large lot rural residential development separated by vast open spaces.

We believe that we can define rural character in an affirmative way by identifying assets and attributes we want to sustain and nurture. Our community excels in keeping things simple yet significant. Long-time residents and newcomers are united in their love for Craftsbury’s rural character. What do we want Craftsbury to be like in the future?



*Elinor Osborn*

What follows is our community’s attempt to define rural character in an affirmative, concrete way. We intend for these definitions to help shape future land use policies:

**We respect access to recreation and the private property owners who make it possible.** Recreation came up frequently in the Community Values mapping session. People appreciate being able to hike, fish, kayak, cycle, hunt, ski, and snowmobile. Historically, much of our recreation has occurred on privately-owned land. Craftsbury's emerging trail network also relies on access and cooperation from private property owners. Future development should not impede access to recreation. While posting land is a property owner's right, it jeopardizes an important local tradition. If recreation on private land is going to be part of our future, we can proactively discourage posting by showing respect for our neighbors. Always seek permission and take personal responsibility.

**Hunting and fishing are time-honored traditions.** Not everyone likes to hunt and fish, but it is part of our history and future. Again, this is a practice that can only continue by showing respect for neighbors and by behaving responsibly. Always seek permission. While general posting is problematic, posting hunter safety zones can ensure that this tradition continues safely.

**Our historic buildings and structures are our shared legacy.** Participants spent much time in the Community Values Mapping workshop to identify important sites and resources. Protecting, promoting, and even enhancing our historic assets can allow us to grow and adapt without losing our unique sense of place. Adaptive reuse of existing historic buildings can create new housing and economic opportunities while minimizing construction waste. Historic structures in our villages deserve special consideration, care, and respect as they define a unique sense of place. This plan encourages the preservation and revitalization of historic structures and supports the use of public funds when a preservation project promotes community vibrancy and helps to retain the vital village environment.

**Our villages should remain vibrant and include a healthy mix of residential, commercial and community uses.** Even for people who don't live in the villages, the opportunity for interaction they offer is an important part of their daily lives. This plan supports programs that incentivize reinvestment in village properties, as well as infrastructure investments (such as the recommendations of the Village Master Plan) to keep our villages thriving and socially relevant.

**Our roads shall accommodate multimodal transportation.** Although Craftsbury's residents are highly reliant on automobiles, drivers must coexist with walkers, cyclists, and horseback riders. Our dirt roads are not opportunities to drive with reckless impunity. In most contexts 35 mph is probably a reasonable speed, but areas in the village must be conducive to even lower speeds. While residents and visitors alike must remain aware of speed limits, signage has limited effectiveness in discouraging speeding. Research has shown that most people drive at whatever speeds they feel comfortable. Wide roads, shoulders, and turns simply encourage more speeding. "Complete Streets" principles and road investments, such as the elimination of the center line through the Village and the addition of fog lines, can create a sense of uncertainty for drivers, forcing them to slow down.

**Equity and affordability are core values of our community.** Craftsbury doesn't have posh neighborhoods or gated communities. This plan promotes development patterns where everyone, upcoming and future generations, and of every income background, can continue to belong. We can achieve this by encouraging a variety of housing types, especially in and near traditional centers of development that can accommodate infill development and adaptive reuse. Future affordable housing and age-restricted housing shall be sited to minimize reliance on automobiles as much as possible.

**Future housing opportunities must fit the character of the community.** This plan supports density that is consistent with scale, building bulk, and dimensional standards of its surrounding environment. New housing development must be intentionally sited to preserve important viewsheds. Clustering can and should encourage smart growth patterns that preserve working lands and critical viewsheds. New development must respect water quality as well as state septic regulations. Some form of oversight, such as site plan review may be needed to ensure this.

**Craftsbury has an abundance of working lands, and its rich history of farming and forestry defines its rural character.** Our vast network of working lands provides numerous benefits to our community in the form of numerous forms of recreation as well as natural habitat. These uses produce noises and smells that we must accept and embrace as part of our rural character. Current and future land use policies must uphold the right of farmers and forestland owners to maintain and adapt their practices in a changing and often challenging economy. Adaptive measures may include accessory retail, on-farm processing, and value-added production. Craftsbury is and will continue to be an attractive place to live. We must balance our future housing needs with the need to keep working lands accessible, affordable, and viable.

**Craftsbury has a strong ethic of stewardship and conservation.** There are more than 10,000 acres with forest management plans, and more than 2,800 acres of lands with conservation easements with the Vermont Land Trust. This plan supports ongoing efforts to conserve working lands. Research indicates that on average, tax bills are lower in the towns with the most conserved land. This is not because the land has been conserved; it is because these towns tend to be more rural and therefore demand fewer municipal services<sup>1</sup>. We also recognize that conserving lands for the next generation of farmers and foresters will not guarantee that those lands will be *affordable* to them. Conservation lands with an Option to Purchase at Agricultural Value – a legal tool that has been used since the early 2000s – is particularly effective in ensuring that working lands remain working lands.

**Current and future land use policies shall support multigenerational development.** Craftsbury has several families who have been able to subdivide their land for the next generation. As we continue to discuss and evaluate future land use policies, consideration must be given to multigenerational development, which depends on the ability to subdivide small parcels of land from larger ones. Traditional rural residential zoning with large minimum lot sizes will impede this aspect of Craftsbury's rural character.

**Throughout the years, people in Craftsbury have strived for a diverse economy.** Unlike many towns in rural Northern Vermont, Craftsbury has not become a bedroom community. This is largely attributed to the enterprising nature of our residents, many of whom are self-employed. The ability to carry on self-employment activities at one's home or property is an economic necessity for Craftsbury, and these enterprises cannot reasonably be expected to be concealed, as they often entail outside storage or equipment. However, large scale commercial and industrial development of an acre or more shall be sited in a manner that is consistent with our energy siting standards. Such development shall avoid hazard areas such as floodplains and steep slopes, conservation areas where there will be an adverse

---

<sup>1</sup> Vermont Land Trust, 2009: [Land Conservation and Property Taxes in Vermont](#), by Deb Brighton, Tax Policy Consultant

impact on surface waters, primary agricultural land as mapped by the USDA Natural Resource Conservation Service for the state and significant wildlife habitat areas. Impacts to forestland should be minimized by using existing roads. Industrial uses requiring daily trucks and tractor trailers shall not degrade our local roads, or be sited on Class 3 roads or at gateways to our villages. Similar to our energy siting standards, industrial uses involving three acres or more of impervious surface coverage cannot be adequately screened or mitigated to blend into our rural landscape.



*Elinor Osborn*

**We value privacy AND being part of the community.** In some very rural communities, NOT seeing your neighbors is seen as a good thing. This doesn't seem to be true for Craftsbury, which experienced an instant and organic response to counter the isolation brought on by the pandemic. While many of us value peace and quiet in a rural setting, traditional large lot rural residential development standards that impose deep setbacks and screening from neighboring properties can lead to petty differences over issues that have little to do with ecological function of the rural landscape. Land use policies shall prioritize conservation design principles and ecological function over residential-level screening and cosmetic standards.

### **Craftsbury has energy siting standards that are compatible with our community's working character.**

Energy generation and transmission systems that are linked to the electrical grid are preempted from local land use regulation by 24 V.S.A. §4413(b). They are instead regulated by the Vermont Public Utility Commission (PUC) under 30 V.S.A. §248. These include net-metered distributed energy installations, as well as commercial, utility-scale generation, transmission, and distribution facilities.

Until recently, the PUC has only been obligated to give "due consideration" to the recommendations of the municipal plan when determining if a proposed project will not "unduly interfere" with the orderly development of the region. Vermont statute does not define "due consideration," nor does it indicate who shall determine what constitutes "due consideration."

Act 174 of 2016 established a new set of energy planning standards. If these standards are met, regional and municipal plans may carry greater weight – "substantial deference" – in the Section 248 process.

Unlike “due consideration,” “substantial deference” is codified in statute to mean: “...that a land conservation measure or specific policy shall be applied in accordance with its 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.”

The Craftsbury plan has been revised to continue to receive substantial deference under Act 174. It is important to note, however, that substantial deference does not carry the weight of zoning. Projects that fall under the jurisdiction of Section 248 are still exempt from local zoning and permitting. (More information about Craftsbury’s energy use and development considerations are in Chapter 4 and Appendix B.)

The purpose of municipal energy policies is to promote the development of renewable energy resources and energy facilities in the Town, while limiting the adverse impacts of such development on public health, safety and welfare, the Town's historic and planned pattern of development, environmentally sensitive areas, and our most highly valued natural, cultural, and scenic resources -- consistent with related development, resource protection, and land conservation policies in this plan. Additionally, all new facilities and proposed system upgrades must be consistent with the Vermont Comprehensive Energy Plan, the Vermont Long-Range Transmission Plan, and the utilities’ Integrated Resource Plans (IRPs). These policies are to be considered in undertaking municipal energy projects and programs and in the review of new or upgraded energy facilities and systems by the Town and the PUC under 30 V.S.A. § 248.

## General Siting Standards

1. In-place upgrades of existing facilities, including existing transmission lines, distribution lines, and substations as needed to serve the town and region. To the extent physically and functionally feasible, existing utility systems, including transmission lines, distribution lines, and substations, should be upgraded or expanded on site or within existing utility corridors before new facilities or corridors are considered.
2. Energy facility development must benefit the Town of Craftsbury and its adjacent communities (residents and businesses). The benefit must be in direct relation and proportion to the documented impacts of the proposed development on community facilities, services, economy and resources.
3. The region has recently experienced a sharp increase in the number of renewable energy applications which will worsen already congested transmission, particularly in the Sheffield- Highgate Export Interface (SHEI), where several existing generators are frequently curtailed by the ISO. While the Town of Craftsbury encourages appropriately scaled renewable energy development, we have a commitment to ensure that such development is sustainable and feasible, and does not merely substitute one renewable resource with another. The Town of Craftsbury therefore supports energy development that will not exacerbate curtailment at issue within the SHEI. It is unlikely that any single solution will solve congestion within the SHEI and, as such, it is anticipated that incremental progress will be achieved as partial solutions are implemented. In the meantime, the Town of Craftsbury will support projects that are consistent with the land use and conservation measures in this plan.

Additionally, we will expect project developers to work with utilities and other stakeholders to explore innovative strategies that shift generation away from the hours when generation exceeds

load within the SHEI area or otherwise avoids exacerbating congestion on the grid. An example of such a project would pair a battery with a solar facility to control when the project's power is exported to the grid.

4. The height, setbacks, and access of renewable energy projects must be carefully considered with the goal to minimize impact to the viewshed and neighboring landowners.
5. Siting should involve the Agency of Natural Resources at the start of the project to avoid problems with wetlands and protected and threatened species. Siting must avoid hazard areas such as floodplains and steep slopes, conservation areas where there will be an adverse impact on surface waters, primary agricultural land as mapped by the USDA Natural Resource Conservation Service for the state and significant wildlife habitat areas. Impacts to forestland should be minimized by using existing roads and locating along existing tree lines to avoid forest fragmentation.
6. All facility certificates shall specify conditions for system decommissioning, including required sureties (bonds) for facility removal and site restoration to a safe, useful, and environmentally stable condition. All materials and structures, including foundations, pads, and accessory structures, must be removed from the site and safely disposed of in accordance with regulations and best practices current at the time of decommissioning.

## Wind Generation Siting Standards

Craftsbury has limited potential for wind energy development, and the municipality lacks areas with elevations sufficient to support utility scale wind development (100KW or greater). Moreover, the Town of Craftsbury supports the policy of the NVDA's regional plan, which states that upland areas of 2,000 ft or more, headwaters, forest coverage of site class 1, 2, or 3, priority forest habitat blocks, and state natural areas and fragile areas are unsuitable for utility-scale energy development. The Town has consistently objected to and testified against such development in Lowell. Expansion of such development, or new development on adjacent ridgelines will exacerbate an already profoundly negative impact on the natural profile of the mountain, which forms an iconic backdrop visible from many points in Craftsbury. Because no locations in Craftsbury have suitable wind resource, infrastructure availability, or areas free from significant environmental constraints, no utility-scale wind energy facilities should be located in town. Smaller scale wind projects, including residential-scale turbines (generally less than 10 kW) may be appropriate as long as noise from the turbines does not adversely affect neighboring residential properties.

## Solar Siting Standards

1. The Town of Craftsbury encourages solar energy development, of any scale, on building rooftops.
2. The Town strongly supports the development of small-scale (150 kW capacity or less) electricity generation from solar energy at homes, businesses, schools, and other institutions, as well as community solar projects, which may benefit people who might not otherwise be able to participate in a clean energy project. (For purposes of this plan, "community solar projects" are group net metered installations between 15 kW and 150kW in capacity, with shares in the facility sold to the site owner, neighbors, community members, nonprofits organizations, and local businesses.)

3. The Town strongly supports the integration of on-farm solar generation into active agricultural uses that can help farms reduce expense, generate extra income, and remain viable. The town supports siting solar on existing farm structures, or in a manner that supports grazing, the establishment of pollinator crops, or the creation of buffers between organic and non-organic production areas.

*For all new ground-mounted solar facilities with a capacity of 15 kW or greater:*

1. All new solar facilities must be evaluated for consistency with community and regional development objectives and shall avoid undue adverse impacts to significant cultural, natural, scenic, and aesthetic resources identified in the Craftsbury Town Plan. When evaluating the impacts of a proposed solar facility under the criteria set forth in this Town Plan, the cumulative impact of existing solar facilities, approved pending solar facilities, and the proposed solar facility itself shall be considered. It is explicitly understood that a proposed solar facility which by itself may not have an adverse impact, may be deemed to have an adverse impact when considered in light of the cumulative impacts of the proposed solar facility and existing and pending facilities.
2. All new solar facilities shall be sited in locations that do not adversely impact the community's traditional and planned patterns of growth, of compact (village) centers surrounded by a rural countryside, including working farms and forest land. Solar facilities shall, therefore, not be sited in locations that adversely impact scenic views, roads, or other scenic areas identified in this plan, nor shall solar facilities be sited in locations that adversely impact any: views across open fields, especially when those fields form an important foreground; prominent ridgelines or hillsides that can be seen from many public vantage points and thus form a natural backdrop for many landscapes; historic buildings and districts and gateways to historic districts; and, scenes that include important contrasting elements such as water.
3. The impact on prime and statewide agricultural soils currently in production shall be minimized.
4. The impact on productive forested lands -- either enrolled in Current Use or with a site class of 1, 2, or 3 -- shall be minimized.
5. All new solar facilities shall be sited and screened so that visual impacts of such facilities, including but not limited to, solar panels, transformers, utility poles, fencing, etc., are mitigated as viewed from public streets and thoroughfares, scenic viewpoints, and/or adjacent properties. Screening shall provide a year-round visual screen and shall occur on property owned or controlled by the owner and/or operator of the solar facility. A diversity of materials shall be used to create a diverse, naturalized screen rather than a large expanse of uninterrupted, uniform material. Materials may include: trees and shrubs indigenous to the area, and berms, or a combination thereof, to achieve the objective of screening the site. All screening shall be maintained to optimize screening at all times by the owner and/or operator of the solar facility until the solar facility is decommissioned and removed. Plantings that die or become diseased shall be replaced within six months of dying or becoming diseased.

## Preferred Areas

The following areas are specifically identified as preferred areas for solar facilities, as they are most likely to meet the siting and screening requirements:

- Roof-mounted systems;

- Systems located in proximity to existing commercial or industrial buildings;
- Proximity to existing hedgerows or other topographical features that naturally screen the entire proposed array;
- Former brownfields;
- Facilities that are sited in disturbed areas, such as gravel pits, closed landfills, or former quarries;
- Working farms, where more than 50% of the energy generated by the solar development is used by the farm.

### Prohibited (Exclusion) Areas:

In addition to those areas that do not meet the siting and screening requirements set forth above, development of solar generating facilities shall be excluded from (prohibited within), and shall not be supported by the Town, in the following locations:

- Floodways shown on Flood Insurance Rate Maps (FIRMs);
- Fluvial erosion hazard areas (river corridors);
- Class I or II wetlands;
- A location that would significantly diminish the economic viability or potential economic viability of the town's working landscape, including productive forest land and primary agricultural soils (as defined in Act 250 and as mapped by the U.S. Natural Resource Conservation Service);
- Rare, threatened, or endangered species habitat or communities as mapped or identified through site investigation, and core habitat areas, migratory routes and travel corridors;
- Significant Ridgelines: Ridgelines are defined as the line formed by the meeting of the tops of sloping surfaces of land. Significant ridgelines are ridgelines which, in general, are highly visible and dominate the landscape;
- Steep slopes (>25%);
- Surface waters and riparian buffer areas (except for stream crossings);
- Topography that causes a facility to be prominently visible against the skyline from public and private vantage points such as roads, homes, and neighborhoods.
- Solar energy installations, trackers and roof mounts, should be sited in such a way to prevent adverse impacts to historical or cultural resources, including state or federal designated historic districts, sites and structures, and locally significant cultural resources identified in the Craftsbury Town plan. Prohibited impacts to historical and cultural resources include:
  - Removal or demolition;
  - Physical or structural damage,
  - Significant visual intrusion, or threat to the use;
  - Significant intrusion in a rural historic district or historic landscape with a high degree of integrity;
  - Significant visual intrusion into a hillside that serves as a backdrop to a historic site or structure;
  - Creation of a focal point that would disrupt or distract from elements of a historic landscape;
  - Impairment of a vista or viewshed from a historic resource that is a significant component of its historic character and history of use;
  - Visually overwhelming a historic setting, such as by being dramatically out of scale;

- Isolating a historic resource from its historic setting, or introducing incongruous or incompatible uses, or new visual, audible or atmospheric elements.

### Mass and Scale:

Except for projects located on preferred sites, solar facilities larger than three acres, individually or cumulatively, cannot be adequately screened or mitigated to blend into the municipality's landscape and are, therefore, explicitly prohibited.

### For all new solar facilities with a capacity of 150 kW or greater:

Only sites identified as Preferred solar sites on the Solar Resource Map or Preferred Areas as identified above may be developed for solar generation facilities with a capacity of more than 150 kW. All siting and screening requirements as identified above must be met.

## 2: Building Social Connections

Craftsbury's population growth has been robust over the past decade, outpacing growth in Orleans County and Vermont. The 2020 Census puts us at 1,343 people, representing a double-digit increase over 2010. This is not a surprise to anyone familiar with Craftsbury. Our town draws on the very best of both village and rural traditions, making our town attractive to long-term residents and newcomers alike. The town's bustling centers are surrounded by expanses of farm and forest lands to support numerous opportunities for social interaction as well as rural privacy. Residents have a strong sense of

community -- and they value each other just as much as they value the beauty of their rural landscape. We are a community of neighbors who care about those who live next door – as well as those who live across town.

**Vision for the future:** As we prepare for continued growth, we recognize all the good things we can achieve as a small rural place that wouldn't be possible



*Elinor Osborn*

elsewhere. Craftsbury strives to be an inclusive community where people of all backgrounds and identities feel welcome and at home. We will support a multi-generational community that's safe for our most vulnerable, from the very young to the very old. We will maintain our active working landscape and encourage a vibrant local economy that supports it. Our community will offer a range of housing options that allows young people to remain here and elders to age in place. Finally, we will retain and enhance our commitment to civic life, where residents engage in respectful dialog and are well practiced in those skills.

## Existing Conditions

### There are new faces in town.

The past three decennial Census counts indicate fairly robust growth for Craftsbury that consistently outpaces county growth rates. The town's population grew by more than 6% from 2000 to 2010, and by more than 11% from 2010 to 2020. Additionally, there is a drop in Craftsbury's median age, which runs counter to the wider trend of an aging demographic. The most recent Census shows an increase in most age categories, with the biggest increases among people in their 30s and early 60s. This growth is primarily due to *in-migration*, since Vermont Department of Health data show a *natural population decrease* (where deaths in town outpace births) for more than a decade. Despite the in-migration, the number of individuals 19 and younger has stayed roughly the same. Craftsbury households with children in 2020 accounted for just under 20% of all households, down from more than 30% in 2000.

<b>Total Population</b>					
	2000	2010	% Change	2020	% Change
Craftsbury	1136	1206	6.20%	1343	11.40%
Orleans	26277	27231	3.60%	27393	0.60%
<b>Median Age</b>					
	2000	2010	%change	2020	%change
Craftsbury	41.4	44.1	6.50%	42.9	-2.70%
Orleans	39.3	43.7	11.20%	46.3	5.90%
	Craftsbury Households	With children			
2020	553	109	19.7%		
2010	502	121	24.1%		
2000	425	132	31.1%		

Source: US Decennial Census

Results from the Craftsbury Actions and Objectives Survey indicate that there is a general awareness of this recent growth – as well as the critical challenges it brings in terms of welcoming newcomers with diverse backgrounds. Several respondents indicated that inclusion and openness were essential to bringing people together. “We need to be able to cope with differing opinions and perspectives in a healthy way...so important issues are not forced under the surface of conversation and we don't devolve into different camps,” wrote one respondent.

Craftsbury's unique culture of neighbors helping neighbors, especially in times of need, was seen as a shared value that could keep the community strong and cohesive. “I feel the level of support, caring and volunteering for and by Craftsbury residents ...is a very important and unique characteristic of our community,” wrote another respondent. “That should be clearly communicated to others as they join the community and encourage them to plug into the many resources and opportunities to meet and serve others in Craftsbury and surrounding areas.”

## **New development patterns are incremental and scattered.**

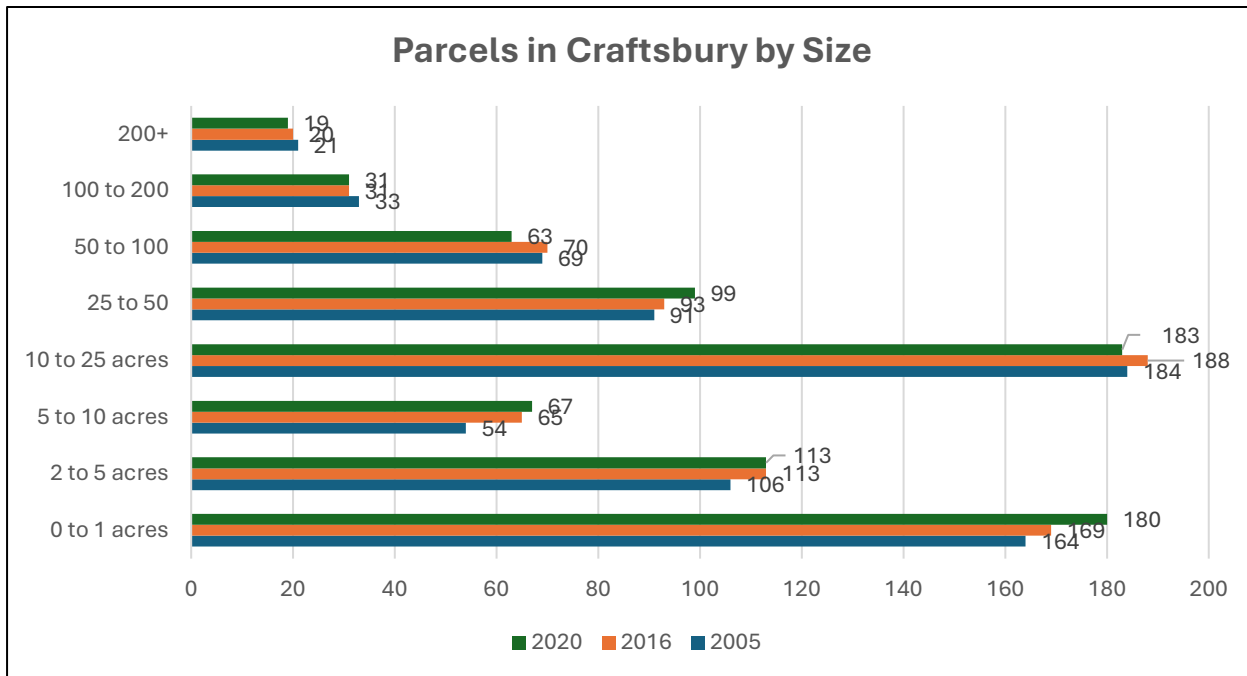
A long-held statewide planning goal has been to “plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.” In theory, Craftsbury’s plan supports this goal. Craftsbury has three vibrant village centers, all of which mix residential uses with commercial, civic, and community uses:

- Craftsbury Village: Home to the Town Hall, the Elementary School, as well as two retail stores, a post office, auto repair business, tattoo parlor, two farm stands, and a year-round CSA;
- Craftsbury Common: Surrounding the iconic Common is Craftsbury Academy, Sterling College, the United Church of Craftsbury (which also hosts a food shelf), and the Craftsbury Public Library;
- East Craftsbury: Site of Craftsbury Community Care Center, a 24-bed level-3 residential care home, a real estate office, the Presbyterian church; the John Woodruff Simpson Memorial Library, and Craftsbury Saplings.

Residential development outside of the three Designated Village Centers is largely scattered; however, there are historic and discernible residential clusters in Collinsville and Mill Village, which could be considered hamlets. These areas are not planned for significant growth, and, as with the rest of the community, they are not served by public water or wastewater.

This overall development pattern of three vibrant villages anchoring a larger rural area dominated by agriculture and forestry as well as low-density rural development is highly desired by the community. Of the community’s roughly 26,000 acres (36 square miles), about 20% of the land is open/agricultural fields, and about 75% forested. All three villages have Village Center Designation and have received financial benefits for maintaining that designation. (See Section 1, page 2).

Nevertheless, areas outside of the villages have experienced parcelization over the years. The community added 33 privately owned parcels from 2005 to 2020. Subdivisions occurred primarily in larger parcels of 50 acres or more, leading to an overall drop in the number of those parcels by 8%. Parcels 10 acres or smaller increased over the same period, with the biggest increase in parcels between 5 and 10 acres increasing by more than 25%.



Craftsbury's overall development patterns appear to be compatible with those of its neighboring communities. The town's boundaries with its neighbors are low-density, largely rural agriculture and forestry lands, along with some rural conservation and a few scattered areas of rural general. In general, Orleans County is seeing a loss of woodland acreage and an overall increase in residential acreage, although that rate of change in Craftsbury is outpaced by its neighboring communities.

**Acreage in Parcels by Type, 2005-2020**

	Woodland Acreage			Residential Acreage			Farm Acreage			Other		
	2005	2020	Change	2005	2020	Change	2005	2020	Change	2005	2020	Change
Craftsbury	3926	3296	-16.0%	10366	11562	11.5%	4953	4335	-12.5%	4587	4267	-7.0%
Albany	3855	3073	-20.3%	13257	15656	18.1%	2055	3032	47.5%	4450	2564	-42.4%
Glover	2774	2799	0.9%	13313	14101	5.9%	3509	3214	-8.4%	3318	3147	-5.2%
Lowell	13962	13647	-2.3%	12998	15028	15.6%	3966	2184	-44.9%	3602	2801	-22.2%
Greensboro	0	130	--	12031	13628	13.3%	2209	2475	12.0%	9422	7348	-22.0%
Wolcott	7685	6756	-12.1%	12596	13244	5.1%	630	0	-100.0%	1499	2692	79.6%
Eden	79655	18387	-76.9%	10998	12612	14.7%	614	471	-23.3%	1439	1218	-15.4%
Orleans County	78907	54152	-31.4%	186464	216535	16.1%	72501	62737	-13.5%	96143	100588	4.6%
Stowe	1738	1651	-5.0%	14947	15690	5.0%	1709	1724	0.9%	11089	8956	-19.2%
Morristown	735	0	-100.0%	16572	17175	3.6%	3028	2819	-6.9%	5845	6116	4.6%

Source: VNRC, Vermont Parcelization Database

Many survey respondents compared Craftsbury with Morristown and Stowe in terms of recent development trends. While the pace of residential growth in Craftsbury appears to have outpaced both communities over the past two years, it's important to remember that both communities already have higher levels of acreage in residential use. Nevertheless, several Craftsbury survey respondents voiced concern about recent development trends in town and potential impacts on rural character. Although respondents indicated strong support for nearly all objectives in the Craftsbury Actions and Objectives Survey, **protecting the viability of Craftsbury's working landscapes was the most important goal.** To many respondents, this goal was linked to successfully managing growth. "Why were we all attracted to this town," asked one respondent. "It was rural and quiet. Let's keep it that way."

Multiple respondents urged the town to consider some form of development oversight, and some respondents even used the term "zoning," although they acknowledged that the subject remains a contentious issue. "It doesn't have to be onerous, but the free market/anything goes approach as more and more money comes to town will destroy the essential character that everyone loves so much." Those who favored more discussion on land use regulations wanted to "keep it simple by encouraging new development and smaller lots closer to the villages."

In reality, there are complications and conflicts with smart-growth, village-centric development goals. Hydric soils in and around the villages, not to mention the lack of off-site wastewater systems, push new development out into the more rural areas. Multi-generational development also occurs in Craftsbury, and long-term residents with large land holdings may subdivide their properties for their children. There are also concerns about traffic and limited parking and circulation in the villages. Ongoing exploration of land use regulations must be accompanied by long-term pursuit of creative solutions that involve adaptive reuse of existing structures and village-scale wastewater innovations. (Wastewater is discussed in greater detail in Section 4.)

### **Craftsbury has a vibrant local economy.**

Craftsbury is a short driving distance of multiple employment hubs – Hardwick, Morrisville/Stowe, and Newport Derby – and slightly more than half its residents regularly commute out of town for work. However, with so much employment activity in town, Craftsbury is not a bedroom community. The Vermont Department of Taxes reports that retail receipts for all of Craftsbury increased by 3.8% in 2023 over the previous year, while Orleans County reported an 18% drop over the same period.

Most recent Census data based on W2 forms shows that primary *covered* employment activity (i.e. not self-employed) is close to divided between those who commute to Craftsbury for work or live and work here (300), and Craftsbury residents who commute to other communities for work (369). Those who live in Craftsbury but work outside of the community tend to be a little older and higher-paid than those who work in Craftsbury.

## Covered<sup>2</sup> Employment Patterns in Craftsbury, Primary Jobs

	Working in Craftsbury, but living somewhere else	Living and Working in Craftsbury	Living in Craftsbury, but working elsewhere
<i>How many?</i>	274	31	369
<i>Coming from/Going to?</i>	Irasburg, Lowell, Albany, Hardwick, Barton, Glover, Wolcott, Morristown, and Greensboro.	n/a	Newport City, Morristown, Irasburg, Barton, Derby, and Stowe, Burlington, Cabot, and Jay.
<i>Age</i>	29 or younger: 23% Aged 30 to 54: 50% Ages 55 and up: 27%	29 or younger: 35.5% Aged 30 to 54: 45.2% Ages 55 and up: 19.4%	29 or younger: 23% Aged 30 to 54: 46.9% Ages 55 and up: 30.1%
<i>Earnings</i>	71.5% earn less than \$3,333 a month/ 28.5% earn more	77.4% earn less than \$3,333 a month/ 22.6% earn more	49.9% earn less than \$3,333 a month/ 50.1% earn more

Source: Census on the Map, 2021 data

Craftsbury's private covered employment in the goods-producing domain include agriculture, forestry, and construction. Covered employment in the services domain include retail, hospitality (food and accommodations), education, health care, repair services, management, childcare, and real estate. In the public sector, employment outside of local government operations includes the K-12 school system. The community's largest covered employers are Sterling College, the Craftsbury Outdoor Center, Pete's Greens, the Craftsbury k-12 schools, Craftsbury Community Care Center, the Craftsbury General Store, and the Craftsbury Village Store.

Visitor tourism is a significant year-round draw to the community and an economic engine, especially in July and August when the community hosts cultural events. There are bicycle tours, nonprofit summer camps, and two lakes. The Craftsbury Outdoor Center has both long term and overnight accommodations and four-season recreational activities. The sculling instruction in the summer and the cross-country skiing in the winter are nationally recognized programs. All of these attractions bring traffic to the small villages, where parking and safe multi-modal circulation are an ongoing challenge and concern. Craftsbury Village was recently the focus of study to improve circulation and parking. (See Section 4.)

The Census data have obvious shortcomings and do not provide a complete picture of employment activity. What's missing from the Census data, for example, is self-employment activity. Craftsbury has several entrepreneurs who are agricultural producers, contractors, professional services providers, artisans, and crafters. Many rely on the availability of reliable telecommunications to work from home.

The data also doesn't provide insight on people who come to Craftsbury for work: Would they live here...if they could? However, local employers in the area have been vocal about their need for long-

<sup>2</sup> "Covered employment, by definition, does not include self-employed.

term housing for their employees, including the Craftsbury General Store, Pete's Greens, Sterling College, and Jasper Hill Farm (in neighboring Greensboro).<sup>3</sup>



*Elinor Osborn1*

### **Craftsbury's housing market is tight.**

Vermont is experiencing a housing crisis, and Craftsbury has not been immune to it. Very few houses come onto the market, and when they do, they move quickly and at a higher price, regardless of their overall condition. According to the Vermont Department of Taxes (2022), the median price of a primary home in Craftsbury is \$247,250, which is 80% of the median price statewide, but 15% higher than the county median.

Survey respondents ranked housing initiatives highly, both for young families eager to move to town and for existing residents who wished to age in place. "It is nearly impossible for young locals to buy a home that they can start and raise a family in, given the disparity between housing costs and local pay. ...There is a serious shortage of decent affordable rental units for young adults entering the workforce and early in their careers," wrote one respondent. "Ensuring those who have lived here a long time can stay here... and not get priced out by high end houses or seasonal homes are things to address now," wrote another.

---

<sup>3</sup> [https://www.vtcng.com/news\\_and\\_citizen/news/local\\_news/greensboro-craftsbury-grapple-with-housing/article\\_a9b429d2-3499-11ef-b2c5-271d4e5ce8a6.html](https://www.vtcng.com/news_and_citizen/news/local_news/greensboro-craftsbury-grapple-with-housing/article_a9b429d2-3499-11ef-b2c5-271d4e5ce8a6.html)

Housing is considered “affordable” if a household spends no more than 30% of their income to live there. About 15% of owner-occupied households in Craftsbury are considered “cost burdened,” with 5% paying between 30% and 50% of their income on housing, and another 10% who pay upwards of 50%. Ironically, this rate of cost burden is much lower than Orleans County and the state. However, this lower rate may be because 63% of Craftsbury homeowners don’t have a mortgage, which suggests that homeowners in Craftsbury tend to stay put. Nearly 30% of Craftsbury homeowners have been in their homes since 1989 or earlier, compared to about 20% county and statewide.

The predominant form of rental housing in Craftsbury are single-family free-standing structures, with roughly a dozen rentals in multi-unit structures. Craftsbury renters are more likely to be cost-burdened than homeowners, with 4% of households paying between 30% and 50% of their income on housing, and another 17% who pay upwards of 50%. As with owner-occupied households, the rate of cost-burdened renter households is actually lower than county or statewide rates, even though gross median rents tend to be higher than county rents. However, this discrepancy may be indicative of the overall lack of rental units in Craftsbury. Short-term rentals (STRs) are very popular in Craftsbury. Most recent AirDNA<sup>4</sup> data (February 2024) shows that there are 33 homes listed as STRs, yielding an average of \$234 a day and \$2,874 a month.

### **Accessory dwelling units may help alleviate the rental unit crunch.**

An Accessory Dwelling Unit (ADU) is a smaller, independent dwelling unit that is located on the same lot as an existing single-family home. Vermont statute has long provided legal protections to homeowners who wish to add an ADU to their home and generate an extra source of income. The recently established Vermont Housing Improvement Program offers grants of up to \$50,000 that can help offset the cost of creating an ADU and meeting the Vermont Rental Housing Health Code guidelines. Making Craftsbury residents more aware of this program might help to create more long-term rental opportunities.

### **A community land trust can pursue creative solutions to Craftsbury’s housing shortage.**

Craftsbury’s appeal for outdoor visitor tourism has created some concerns that we will continue to lose year-round housing opportunities to seasonal housing and short-term rentals. The newly created Headwaters Community Trust is a community land trust (CLT) that seeks to give decision-making, voice, and power to residents in determining local housing solutions that are appropriate for the community. The service area of the Headwaters Community Trust is the headwaters region of the Black, Barton, and Lamoille Rivers, comprising the four communities of Albany, Craftsbury, Glover, and Greensboro. Their stated purposes are:

- To provide affordable homeownership opportunities for low- and moderate-income people, while preserving the quality and affordability of property in perpetuity.
- To promote community economic vitality and access to housing and land through the development, rehabilitation, and maintenance of property.

---

<sup>4</sup> AirDNA tracks the performance of short term rental properties, such as Air BnB, and VRBO. Craftsbury’s AirDNA data is aggregated on [www.housingdata.org](http://www.housingdata.org)

- To protect the natural environment and to promote the ecologically sound use of land and natural resources for the long-term health and safety of the communities.
- To lessen the burdens of government by entering into agreements to preserve the accessibility of housing and land made affordable through government subsidies or government policies.

As a CLT, Headwaters will be able to acquire and own land permanently for the common good -- or buy or build homes using a one-time public or private investment. Acquisitions and investments would need to be strategically sited to avoid isolation. Lands and structures close to settled villages would be ideal, although many villages in the Headwaters service areas remain hampered by the lack of wastewater service. Possibilities include home ownership with affordability covenants for resale or rentals. Investments could include adaptive reuse or new construction. Currently, the Headwaters Community Trust is consulting with the Preservation Trust of Vermont to build the organization's capacity. As the board is formed, Headwaters will look to the Town for official representation on its board to ensure local control.

### **Affordable Childcare is in high demand.**

Of the 550+ Craftsbury residents in the workforce, more than 230 are from households with school-age children. More than 30 are from households with children under the age of six, with all parents working. Some parents may find daycare in private homes or with relatives, but finding and keeping daycare can be a challenge. Founded in 2017, Craftsbury Saplings is dedicated to providing child care and high-quality early education to the community. Saplings currently serves 19 children daily and more than 30 families annually from various towns in Northern Vermont. Saplings is a non-profit community children's center that provides early education to children 15 months to 5 years. They are open year-round from 7:30 am to 4:30 pm.

There is a long wait list to get into Saplings. Fortunately, the center has embarked on an ambitious facility expansion that will more than double the service capacity. The construction phase will commence 2025-2026, and was recently supported by a \$1 million Catalyst Grant from the Northern Border Regional Commission.

### **Craftsbury's education system is a critical part of supporting and building community.**

Craftsbury's education system is unique in its breadth and scope. It is home to a preK-12 school, and Sterling College, a four-year institution.

Craftsbury Schools serve around 200 students in grades PreK-12 on two campuses. Craftsbury Saplings provides publicly funded preschool education in partnership with OSSU and the Craftsbury School. The PreK-2nd graders meet at North Craftsbury Road in Craftsbury Village, and the 3rd-12th graders meet on the "Academy campus" at Craftsbury Common. Craftsbury Academy, which serves students in grades 9-12, is one of the oldest continuous high schools in the state of Vermont, established originally as a private academy in 1829 and converted to a public high school around 1920.

Craftsbury students benefit from strong educational partnerships with the Center for an Agricultural Economy, Craftsbury Outdoor Center, Craftsbury Historical Society, DREAM Mentoring, Four Winds Institute, Green Mountain Farm to School, Hireability Vermont, Rural Arts Collaborative, and Sterling

College. Students can attend the Green Mountain Technical and Career Center in Hyde Park and are able to take two college courses for free while attending high school. Senior students can even take their senior year at an in-state college to defray the costs of a college education.

Craftsbury Schools are part of the Orleans Southwest Supervisory Union (OSSU), serving school age children in the towns of Craftsbury, Greensboro, Hardwick, Stannard, Wolcott and Woodbury. The OSSU program, WonderKids, offers free afterschool and summer enrichment through science, art, mindfulness, and movement for grades K-6. Outdoor adventure camp takes place on the Sterling College campus from July through August.

The Craftsbury Academy Woodlot allows Craftsbury students to engage in outdoor learning a short distance from our school. Students and staff use this location for ecology studies, and other place-based science opportunities. The Woodlot has a 10-year management plan, developed in 2019 by Jared Nunnery, the County Forester, who has an office on the Sterling campus. This report includes information collected by students of Craftsbury Elementary School as well as community members during the 2019 Craftsbury Academy Woodlot Bioblitz.

The management plan is focused on the following goals:

- Provide educational opportunities to Craftsbury Students and the broader Craftsbury community. The woodlot should be managed to provide demonstration of exemplary practices of land stewardship, as well as natural areas to observe and learn about natural processes.
- Building on the first goal, this land should serve as a place of doing, a place for students to get their hands dirty and learn from the natural world, within the natural world, and be a part of any management actions within the woodlot.
- Document current wildlife habitat and wildlife use of the land and monitor and maintain these important areas.
- Provide recreational opportunities (both dispersed such as hunting, and concentrated use on developed trails) for use by students and town residents.

The management plan will need to be updated in 2029.

On the other end of the educational spectrum, Sterling College offers three full semesters of instruction annually—truly a year-round academic institution. One of only seven federally funded work-learning programs in the country, students are attracted to its offerings in sustainable agriculture, ecology, outdoor education and leadership, environmental humanities, diverse internship opportunities, and field study programs. The students offer mentoring in the Craftsbury schools and have organized programs of service to a variety of area businesses and nonprofit organizations.

The college offers a free Community Dinner (donations accepted!) regularly through the semesters. More than one hundred residents (both from Craftsbury and surrounding towns) have enjoyed these Friday night dinners. The meals are designed and prepared by students studying sustainable food systems, utilizing food grown on campus from both the livestock farm as well as the gardens. Sterling College also offers Community Supported Agriculture (CSA) shares throughout the summer and early fall.

Other educational programming extended to the local school system include Sterling student-led rock climbing activities at the Sterling Climbing Wall. There have been occasional farm visits for younger students to the livestock farm.

The Sterling College facilities are available for public meetings.

The public remains highly engaged in education system decision making – even among people who no longer have children in the school system. When the potential for eliminating PreK was explored, a community-wide conversation ensued. Residents see the direct link between the health and vitality of the school system and the community's overall vibrancy. Rising taxes and complexity of the funding formula may eventually outweigh the social connection aspect, so it's important for the Craftsbury Schools to maintain a high level of visibility in the broader community through special programming and through the use of classroom space for additional organization events. Residents want to maintain a similar dynamic role between Sterling College and the wider community.

### **Community programming, community spaces add to the diverse array of life enrichment opportunities.**

Craftsbury offers a broad array of community programming for new and old residents to gather and celebrate. People love these well-attended annual events, which include the Barn Dance in East Craftsbury, Sunday Music on the Common, Craftsbury Village Block Park, Antiques and Uniques on the Common, and Old Home Day.

The Craftsbury Historical Society collects and preserves local and regional artifacts. The public can access their collections in the Babcock House Museum, which is ADA compliant. The public facility includes a meeting room, exhibit space, office/kitchenette, rest room, and spacious storage in the basement. The Society's most recent accomplishment includes the compilation of Craftsbury Stories, digitized recordings from 50 residents.

The sustained success of Craftsbury's community programming relies heavily on active and engaged teams of committed volunteers, as well as effective channels to promote them. The Town of Craftsbury maintains and regularly updates a well-organized and user-friendly website, which also maintains a web page for newcomers.

Residents love and support Craftsbury's three libraries, which regularly feature programming and enrichment events: John Woodruff Simpson Library in East Craftsbury, Sterling College's Brown Library, and the Craftsbury Public Library on Craftsbury Common. The Craftsbury Public Library is one of six libraries in the state to be given a Star Library Rating by the Vermont Library Association. This library has become a default coworking space in town, offering 24/7 wireless access, and has invested in computer, printer, copier, scanner and fax upgrades to address community needs. The Simpson Library is poised to launch a capital campaign to improve accessibility and usability of its space. The Craftsbury Community Care Center also provides enrichment and programming. That facility recently completed an extensive upgrade to heating, cooling, and ventilation systems, as well as its kitchen. The project was funded by the Vermont Community Development Program and USDA Rural Development.

Other gathering and programming spaces include the Town Hall, which could be improved upon through renovations that improve accessibility and overall function. Survey respondents also felt that the Craftsbury Inn had room to live up to this potential.

## **Craftsbury is working to strengthen civic engagement.**

As with nearly all Vermont communities, Craftsbury's Town Meeting Day traditions run deep. On the first Tuesday of March, citizens gather to participate in this unique form of direct democracy to debate and vote on warned articles. The floor meetings can last a few hours...or they can go on all day, depending what the articles are.

The pandemic was a massively disruptive force in local governance. All public meetings went virtual, and at Town Meeting Day 2021 and 2022, mail-in ballots took the place of voting from the floor. As with most communities, mail-in ballots increased participation, but no one benefitted from the face-to-face discussion that typically accompanies the floor voting.

In the fall of 2022, the Town of Craftsbury signed on to a pilot project to strengthen and modernize local democracy. "Freedom and Unity," a local task force, began meeting monthly in May 2023 to identify actions to support local democracy throughout the year. Based on their findings and feedback, the task force formed working groups to support the following needs:

- Civic Education: Build knowledge and enthusiasm for civic participation in Craftsbury
- Community Month: Host activities to strengthen and celebrate community in Craftsbury.
- Town "Operator's Manual:" Create a how-to for participating in local democracy. A friendly, accessible guide to Craftsbury, including town committee and community groups.
- Re-Imagining Board & Leadership Opportunities: Study and suggest improvements for cultivating leadership across Craftsbury's many public boards and committees.

## **Craftsbury has an ongoing commitment to wellness.**

Craftsbury is committed to the mental and physical wellbeing of its residents, a value upheld by several active community groups. The Craftsbury Mental Health Resource Group provides hope for persons and families struggling with mental health issues, and seeks to increase access and support for those navigating mental health resources. For over 30 years, the Craftsbury Recreation Committee has provided recreational opportunities and enriching activities at little or no cost. The Craftsbury Neighbor to Neighbor Initiative, created at the start of the COVID-19 pandemic, is now a town task force offering support during times of need. The Craftsbury Trails Committee promotes the town's extensive network of public trails and scenic roads, encouraging outdoor activity and connection to the natural landscape. Together, all of these groups reflect Craftsbury's enduring commitment to wellness being part of daily life.

## **Policies, Goals, and Strategies**

**Policies:**       **Craftsbury residents value working lands. Protecting the ongoing viability of working lands is a priority that should be considered in any development review decision, including the consideration of off-site mitigation for renewable energy projects.**

**Craftsbury supports economic development that aligns with our definitions of rural character. (See section 1.)**

**Goals:**           **Create a community that is welcoming to all people.**

**Enhance Craftsbury's spirit of volunteerism.**

- Strategies:** Continue to maintain the Town of Craftsbury website as an information tool for all residents and newcomers. (Ongoing action)
- Continue to support the Freedom & Unity task Committee. (Ongoing action.)
- Host a volunteer appreciation day, where all committees and groups celebrate and collaborate.
- Goals:** **Maintain and protect Craftsbury town character by encouraging and directing growth, using local regulatory and incentive-based tools.**
- Facilitate a broadly inclusive discussion of how land use and regulation work to protect natural resources, the working landscape and community character while addressing a range of community needs ranging from home-based occupations and business development to renewable energy development.**
- Strategies:** Update the brochure on land use and permitting requirements. Make hard copies available at the Town Office, and electronic versions available on the Town Website.
- Maintain Village Center Designations and educate the public on its benefits.
- Establish an ad hoc committee to research and present options for local development oversight to the selectboard. *(This is a priority action. See Part 5 for details.)*
- Launch investigations into wastewater planning for Craftsbury Village, including, but not limited to funding through the Clean Water State Revolving Fund. *(This is a priority action. See Part 5 for details.)*
- Goal:** **Keep Craftsbury's open landscape working and beautiful. Preserve the economic viability and ecological function of agriculture and forestlands in Craftsbury.**
- Strategy:** Support programming and workshops held by the Conservation Commission.
- Goals:** **Promote local agriculture, local businesses, and the sale of local goods.**
- Foster creation of local jobs by building on the strong educational, agricultural, and outdoor recreation anchors in the community.**
- Formalize networks between established businesses.**
- Use creative, community-based approaches to create housing for residents at all income levels.**
- Support Craftsbury's population with specific needs, such as the Craftsbury Community Care Center and Saplings.**
- Expand the availability of the Common, school, and public spaces for cultural activities.**
- Facilitate stronger communication and coordination among community groups and pursue grants to support each other.**

**Continue to support the local libraries' effort to meet the information needs of the community as well as to have adult basic educational programs and early education opportunities available to all.**

**Support efforts to expand the functionality of the Town Hall as a community space.**

- Strategies:
- Support grant funding opportunities to reinvest in facilities and programming.
  - Appoint a part-time Community Development Coordinator who can work with local businesses and organizations and assist with grant writing and administration. *(This is a priority action. See Part 5 for details.)*
  - Appoint a local official to serve on the board of the emerging Headwaters Community Land Trust. *(This is a priority action. See Part 5 for details.)*

### 3: Maintaining Ecological Balance

Craftsbury is home to an abundance of natural resources. Located in the northern Vermont Piedmont biophysical region, Craftsbury is an area of rich soils combined with a cool climate, which supports mixed forests, cedar swamps, wetlands and other interesting natural communities. Craftsbury's natural heritage includes productive forests, clean waters, core and connective wildlife habitat, rare species, significant natural communities, and a working landscape that provides opportunities for enjoying nature, hunting, fishing, recreation, and working the land. To sustain our natural heritage and protect the biodiversity of Craftsbury for present and future generations, it is important to conserve these natural resources which play a critical ecological role and are part of the fabric of our town. Today, as we face the uncertain yet numerous perils of climate change, it is essential that we use our landscape sustainably. Our actions today can ensure the future of our natural



*Elinor Osborn*

heritage by maintaining excellent water quality, keeping wildlife habitat intact, and minimizing damage from future floods.

*Vision for the future:* Craftsbury will maintain and protect its beautiful and open landscapes. Farmers and forest landowners will retain their critical roles in active stewardship. Our views and watersheds will be protected, and our lakes will remain open for recreation and protected from aquatic invasives. Our forests will retain their high level of ecological function, allowing for maximum carbon sequestration and movement of wildlife throughout the Northeast Kingdom and beyond. We will strive to protect and strengthen the ecological function of our natural flood management assets, which include floodplains, wetlands, riverbanks and corridors, and upland forested areas that reduce flood flows to lower lying areas.

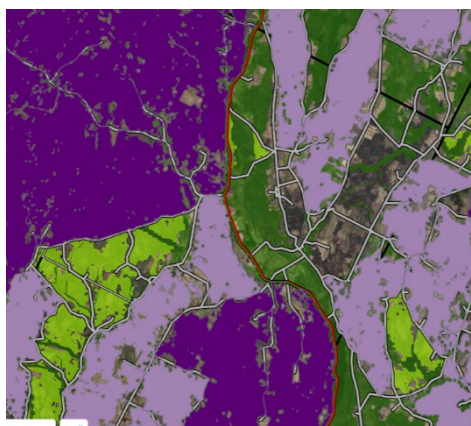
## Existing Conditions

**Vermont Conservation Design provides a powerful tool for maintaining and enhancing the ecological function of our landscape.**

It is important to approach town natural heritage planning from a variety of perspectives, recognizing that our natural resources provide ecological values and functions on many levels. Instead of looking at one ecological component at a time—wetlands, rare species, large forest blocks, etc.—Vermont Conservation Design takes a holistic approach, identifying how these components work together to create a functional network of habitat that can be used by most Vermont species to adapt, migrate, and thrive in the face of climate change and habitat loss through fragmentation.

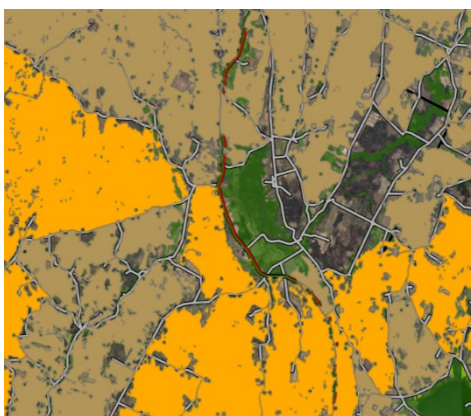
[Biofinder](#), an online mapping tool introduced in 2013 by the Vermont Department of Fish and Wildlife, supports Vermont Conservation Design by integrating data at multiple levels to assess and plan for ecological function. At the **landscape-scale**, we can identify and see patterns in Vermont's forests, waterways, and the places that connect both into functional networks across the region and beyond. These elements include contiguous habitat and corridors, and enduring features such as geology, topography, and elevation. Together, they create a functional network that can support most species.

**Interior forest blocks:** Forest habitat blocks have little or no permanent fragmentation from roads, agriculture, or other forms of development. Shown on the right in purple, the “highest priority interior forest blocks are primarily located in the north northwest corner of the Craftsbury, a 21,000+ acre area that extends into the Lowell Mountain range.



*Interior Forest Blocks*

**Connectivity blocks:** Habitat blocks that create a connected network of forest habitat across Vermont and into adjacent states and provinces. “Highest priority connectivity areas” shown in south-southwest area in orange on the right, are critical because they link to all biophysical regions and encompass spines of a major mountain range.



*Connectivity Blocks*

**Riparian areas and riparian corridors:** In blue on the right, these waterbodies provide vital habitat for a variety of aquatic species, and plants. This area also includes the connected network of streamside vegetation that provides cover for wildlife movement and also allows for plant migration over generations.

At the ***Community and Species Scale***, inventorying natural communities gives us a better understanding of critical features, such as wetlands, riparian and aquatic habitat, and vernal pools. Consideration of elements at this level includes critical habitat such as early-successional forest and shrubland, deer wintering areas, and mast stands. Our natural communities provide habitat components for uncommon, rare, threatened, and endangered species.



*Riparian Corridors*

For planning purposes, it is important to gather information available to us from state agencies such as the Vermont Department of Fish and Wildlife and the Vermont Department of Environmental Conservation's Water Quality Division. These state offices can provide information regarding natural areas and resources in our town and include information on wetlands, surface waters, wildlife habitat, and habitat for rare and endangered species. The Natural Resources Conservation Service (NRCS) has also prepared extensive information on the soils throughout Craftsbury.

The Vermont Nongame and Natural Heritage Program through the Vermont Department of Fish and Wildlife, in February 2009, mapped fourteen sites in Craftsbury that have state-significant natural communities or rare, threatened or endangered plant and animal species. Significant Natural Communities include: Northern White Cedar Swamp, Sedge Meadow, Alluvial Shrub Swamp, Sweet Gale Shoreline Swamp, and Spruce-Fir Tamarack Swamp. Plant species include: Showy Lady's Slipper, Small Lady's Slipper, Large Yellow Lady's Slipper, Ram's Head Lady's Slipper, Mild Water-pepper, Mare's-tail, Straight leaf Pondweed, Marsh Valerian, and Shining Rose. Animals include: Common Loon, and Black-backed Woodpecker .

Bats, which provide important control of insect populations, are declining precipitously because of white nose syndrome. Bat roosting areas (found in dead trees, tree crevices and buildings) should be searched for, identified and conserved.

To maintain and conserve these plants and animals and their habitats (and also those that may be cataloged in the future), landowners are encouraged to utilize programs such as the Vermont Current Use program, Vermont Coverts: Woodlands for Wildlife, Vermont Woodlands Association, USDA Natural Resources Conservation Service, and conservation easements with the Vermont Land Trust and the Northern Rivers Land trust. The Craftsbury Conservation Commission is available to assist landowners with more information about these programs and other conservation techniques.

**It is important for us to consider the information that we, as citizens, may gather.**

Biofinder's data at the community scale has limits and omissions, so field inventorying is critical. This can include surveying of our water resources in our local watershed, forest resources, open space, and local wildlife species and their core and connective habitat. Information gathered by community members



*Elinor Osborn*

and groups such as Sterling College, Vermont Center for Ecostudies, Staying Connected, Craftsbury Academy Woodlot, Bioblitz, Craftsbury Forestry Committee, Craftsbury Conservation Commission, etc. has proven valuable in ascertaining and documenting Craftsbury's natural resources.

The Town of Craftsbury's landscape encompasses approximately 1,920 acres of wetlands, identified on the Vermont Significant Wetlands Inventory, most of which are located on privately owned land. The majority of wetlands in Craftsbury are classified

as Class 2 wetlands. Many of the Town's wetlands are located in the floodplain, adjacent to the Black River. In addition to being classified as "Class 2" many of the Town's wetlands are part of Significant Natural Communities, including: Northern White Cedar Swamp, Spruce Fir Tamarack Swamp, Alluvial Shrub Swamp, and Sedge Meadow.

Vernal pools are also a type of wetland. These small depressions, mainly found in forested areas and devoid of fish, provide critical breeding habitat for amphibians and reptiles in the spring. Biofinder has limited information on the vernal pools of the Craftsbury area. The development of inventories and maps should be done to identify the vernal pools within town.

### **Craftsbury is over 75 percent forested.**

These forests have provided a utilitarian base for the local economy since times of early settlement. Craftsbury forests offer an aesthetic backdrop for the town's pastoral setting and for the distant vistas.

The forests are often affected by insects and diseases: spruce budworm defoliated balsam fir and spruce trees and caused mortality in 1978-1984; we are currently approaching the time when this insect's population cycle is increasing again. Other insects and diseases which are currently present include forest tent caterpillars, sugar maple borers, white pine blister rust, Dutch elm disease and hypoxylon canker. The more recent invasion of emerald ash borer (EAB) has been found in communities surrounding Craftsbury. These insects are threatening the ash trees and have devastating impacts to an otherwise healthy forest. In 2021, an EAB working group was established in Craftsbury to inventory and monitor ash trees in anticipation of the significant expense of maintaining safe rights-of-way as trees

decline and die. To date, 646 ash trees have been inventoried. While EAB has not yet been detected in the Town, the overall health of the trees still appears to be declining.

The emerald ash borer is not the only threat to our forests. The hemlock woolly adelgid attacks hemlock trees and has been found in Vermont. The Asian longhorn beetle attacks hardwood trees and an infestation has been found covering more than 18 square miles in Massachusetts. Another threat to our forests is the nonnative, invasive plant species that are aggressively occupying the understory. More information is available at <http://fpr.vermont.gov/forest/forest-health>.

Potentially rapid changes in our climate will most likely change forest growing conditions. Adaptive responses to deal with this problem are underway. The U.S. Forest Service and universities are providing insightful research into how to practice sustainable forestry to prepare forest stands to be more resilient to these changes. There are good examples of sound forest management throughout Craftsbury on both public and private lands.

Data from the Vermont Natural Resources Council indicate that Vermont's forest cover is increasingly fragmented through gradual and incremental parcelization, subdivision, and development. Craftsbury is not immune to this trend: From 2005 to 2020, the total number of parcels larger than 50 acres decreased, while the number of parcels smaller than 50 acres increased. Over that same period, Craftsbury lost 700 acres of woodland parcels due to residential development. Fragmentation can negatively impact wildlife habitat, water quality, and recreation access. The loss of contiguous ownership can also impede effective management of working lands.

### **Craftsbury has a long-standing commitment to stewardship and conservation.**

The present ownership pattern of Craftsbury's forested lands is almost exclusively private, although several landowners collectively have more than 2,800 acres in conservation easements with the Vermont Land Trust. The town owns three town forests totaling approximately 300 acres. The Municipal Forest Committee in town manages these forests for the benefit of the community. The Craftsbury Academy Trustees own an 80-acre parcel, the Craftsbury Academy Woodlot. Within the past thirty years, an increasing number of private forestland owners in Craftsbury have sought to apply sustainable principles of forestry in managing the lands. With this concern for proper care of forests and the continued development of a local land ethic to guide the relationship between the people of Craftsbury and their forests, this valuable resource will continue to play an important role in the town's future. More than 10,000 acres of Craftsbury's forestlands are enrolled in Vermont's Use Value Appraisal program, also known as Current Use. This program is fostering active stewardship of our forestlands for today and tomorrow. Ecologically Sensitive Treatment Areas (ESTA) are options for owners who want to manage for the protection of significant ecological sites including certain riparian areas. ESTAs need not necessarily be managed for timber, but they do require that protective conservation measures be described in the forest management plan. There are just over 100 enrolled acres in Craftsbury with ESTAs.

The voters of the Town of Craftsbury voted at the 2007 Town Meeting to create the **Craftsbury Conservation Commission**. Operating under 24 V.S.A. Chapter 118, the major goal of a Conservation Commission is to establish community responsibility and stewardship for its natural and cultural resources. Specific tasks of the Craftsbury Conservation Commission include:

- To help meet the goals and objectives of the natural heritage section in the most current Craftsbury Town Plan;
- To assist the selectboard and planning commission with natural resource issues and make recommendations to the Selectboard for conservation projects;
- To inventory and encourage the public's understanding of the town's natural, historic, and cultural resources; and
- To oversee the Craftsbury Conservation Fund.

### **The Conservation Fund**

Established in 2017, the Conservation Fund is money set aside for the use of conservation related projects in the Town of Craftsbury. It allows the Town to collaborate with willing property owners, non-profits, and community volunteer groups to protect important local natural and agricultural resources. The Fund was created because in a growing town like ours, conservation opportunities can arise at any time and disappear just as quickly. It's often hard, if not impossible, for a town to budget or respond in time to gain from those opportunities. Craftsbury's fund would enable the Conservation Commission, Select Board and the public to review and act on conservation opportunities before they are lost. By doing so, it expands landowner options for directing the future of their property.

The Conservation Fund can receive money from donations, outside gifts, grants, and/or money appropriated by the Town of Craftsbury. A primary requirement for the expenditure of moneys from the Conservation Fund is that such expenditure must yield a clear benefit to the Town and must result from a voluntary agreement between the Town or a land trust and the owner. In addition, the Conservation Fund facilitates the conservation vision for Craftsbury as articulated in the Town Plan.

Ultimate responsibility for the disposition of monies from the Conservation Fund rests with the Craftsbury Select Board. The Craftsbury Conservation Commission will evaluate requests and make written recommendations to the Select Board.

A major benefit of this Conservation Fund is that it will help attract additional funds for conservation projects because many state, federal and private sources of conservation funding require community support. The Conservation Fund positions our town to consider these opportunities and, if they are deemed worthy, to support and act on them for the benefit of current and future generations, often by attracting additional funds.

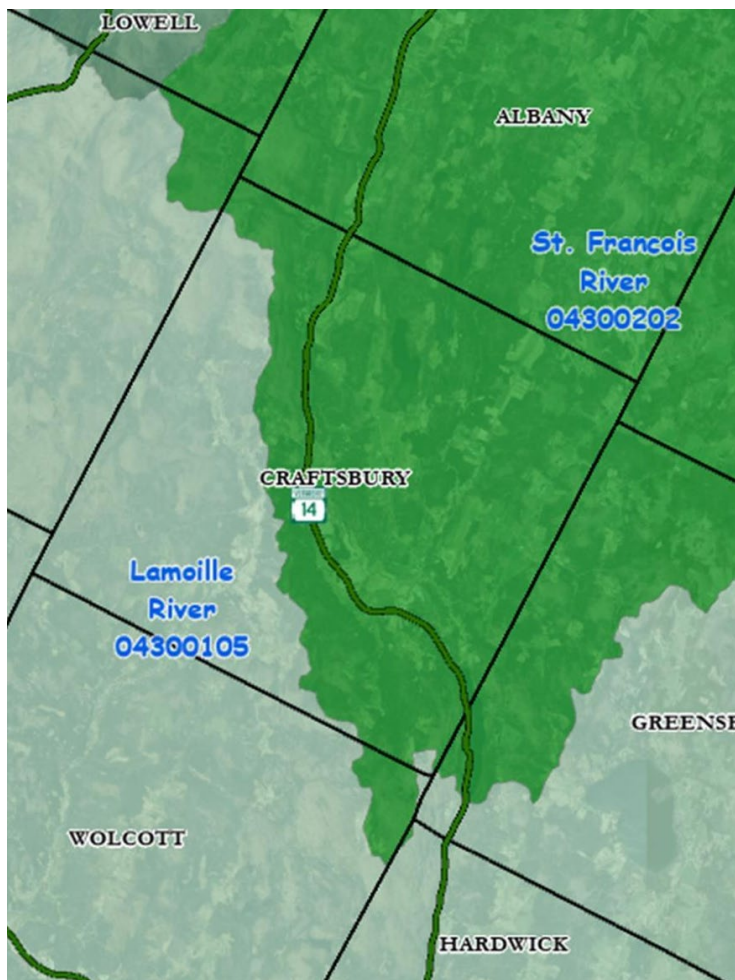
Craftsbury residents have demonstrated support for the Conservation Fund by approving a town appropriation of \$7,000 at town meeting. This support has made it possible for the Conservation Fund to grow over time. As of 2024, the Conservation Fund is over \$38,000.

### **Craftsbury has mapped its ground resources.**

In 2010, Craftsbury received funding through the Vermont Geological Survey for groundwater resource and recharge area maps of the Town. These maps provide the Town with an understanding of groundwater resources within Town boundaries. Potential aquifer and recharge areas are identified on the maps, as well as general groundwater flow directions. Since aquifers are located in sand and gravel deposits and interconnected bedrock fractures, surficial and bedrock mapping of the Town was necessary in order to produce the groundwater maps. Bedrock and surficial mapping was conducted by geologists from the Vermont Geological Survey along with students from a number of Vermont colleges

and universities. The new maps, along with information from existing water wells gathered at the time of drilling (gallons per minute, rock type, surficial materials), were used to derive the groundwater maps. The groundwater maps are valuable for long-term future planning and protection of groundwater resources, and provide useful information for locating new building and well sites, percolation rates, soils information and other land use capability. The maps are housed in the Town Hall and available to the public.

**Each of the watersheds that our waters drain into has been affected by nonpoint source pollution.**



The **Memphremagog watershed**, which covers roughly the eastern half of town, includes the Black River, which runs the length of Craftsbury from south to north. Drainages ultimately reach the South Bay of Lake Memphremagog.

The **Lamoille watershed** covers the western half of town and includes the Wild Branch, which flows into the Lamoille River, which ultimately drains west into Lake Champlain.

Both drainage areas have Tactical Basin Plans, which are designed to provide communities with the tools and resources they need to restore and protect water quality. More about the Memphremagog and Lamoille Tactical Basin Plans is available here: <https://dec.vermont.gov/water-investment/watershed-planning/tactical-basin-planning>

Nonpoint source pollution occurs when runoff, as rainfall or snowmelt, moves over the land surface picking up human-made or natural pollutants and then depositing them into lakes, rivers, wetlands and even groundwater. The main nonpoint source contaminants are sediment, bacteria, nutrients, toxic chemicals and metals. Land uses such as agriculture, forestry, construction, residential areas and septic systems are all potential nonpoint pollution sources.

## Many of our streambanks are eroding.



Portions of some streams, especially the Black River and the Wild Branch, suffer from severe stream bank erosion. Some of the most extensive areas of channel straightening and floodplain encroachments are within the middle main stem reaches between the North Wolcott Road in Wolcott and Denton Hill Road in Craftsbury. Stream bank instability is a complex issue not usually resolved by short term solutions of narrow focus. Such erosion is due to a number of contributing factors, among them soil type, volume of flow, gradient, lack of stream bank vegetation, livestock damage,

beaver population, and previous stream channel alteration. Solutions must therefore address each factor related to soil loss. Such soil loss is alone unfortunate; however, the effects are compounded once it enters the stream. Soil deposition tends to reduce or change food supplies and spawning areas for native fish.

In 2014, The Craftsbury Conservation Commission developed the Upper Black River Stabilization Project, an effort to define the health of the Black River from the river's headwaters in South Albany, through the town of Craftsbury. This project has included: an extensive survey of the streambank stability, documentation of Japanese knotweed infestation, and mapping of this information using Geographic Information Systems (GIS). Through this survey, those areas of streambank failure, sedimentation, and/or knotweed infestation, were documented and remediation options were recommended to the Select Board.

## Roads contribute to erosion and pollution.

Dirt roads are a significant source of soil erosion in Vermont. To maintain clean water and aquatic habitats, it is imperative to pay close attention to road maintenance practices, especially since 77% of Craftsbury's public roadways are unpaved. Such practices have changed over the years. Our roads are wider and straighter and deliver a higher volume of traffic traveling at higher speeds. Techniques now focus on road designs, which shed water as soon as possible to avoid the mud season driving conditions we all have experienced. Such techniques require more manipulation of the road surface and the shoulders. The nature of this work requires more soil disturbance and is more expensive. Resources, education, and money are available via the Agency of Transportation and the Vermont League of Cities and Towns.



Research and water quality monitoring has indicated that roads are responsible for 6-10% of phosphorus loads to Lake Champlain, and other waterways, and roads contribute over 10% of sediment loads.

Excessive sediment and phosphorus can cause algae blooms, increase water turbidity (cloudiness), and degrade fish and invertebrate habitat.

The 2015 legislative session created a new regulatory framework addressing all work on Town Highways, The Municipal Roads General Permit (MRGP), as part of the Vermont Clean Water Act. This general permit is intended to achieve significant reductions in stormwater-related erosion from municipal roads, both paved and unpaved. To maintain our MRGP, Craftsbury has developed a customized, multi-year plan to stabilize road drainage along all hydrologically-connected road segments by 2036. VTrans Vermont Better Roads Program promotes the use of erosion control and maintenance techniques that save money while protecting and enhancing water quality around the State. Grants are available for road projects annually.

### **Invasive species are a threat to the town's natural heritage.**

Once introduced to locations outside their native range, they have no natural competitors or predators. Invasive species can be aquatic or terrestrial plants, or animals.

Both Great Hosmer and Eligo Lakes are infested with Eurasian milfoil, a plant that overpowers native plants, decreases habitat value for underwater life, and decreases recreational usage. Milfoil is spread by boaters moving craft from one body of water to another. To control its spread, avoid boating through milfoil areas; on hauling out, check and wipe down watercraft, and discard, onto dry land, any vegetation caught in motors or elsewhere. There is new legislation in effect on wakeboats, and there are no waterbodies in Craftsbury that can accommodate wakeboating.

Invasive animal species, which harm Vermont's waters, can be introduced by disposing baitfish, bilge water, or aquariums into lakes and streams. These invasives consume food resources, spread disease, and prey on native organisms resulting in decreased biodiversity and impact on the food chain.



Land invasives include Japanese knotweed growing along Craftsbury roadsides and streambanks where its non-stabilizing roots break off to spread more plants and enable erosion. Purple loosestrife grows in wet areas. Non-native buckthorn, bush honeysuckles, Japanese barberry, bishop's weed (also called goutweed or snow-on-the-mountain), wild chervil, Asiatic bittersweet, and burning bush (*Euonymus*) are also crowding out native plants in our roadsides, meadows, and forests. Some of these plants produce fruit that birds eat but are low in nutritional value.

In 2017 the Craftsbury Conservation Commission began a Japanese Knotweed Demonstration Project in Mill Village across from the Little Hosmer Access. The purposes of this ongoing project are to demonstrate various ways to eradicate or at least control this non-native invasive plant and to provide information about the detriments of the increasing populations of invasive species.



The site for the project across from the Little Hosmer fishing access in Mill Village is owned by the State of Vermont under the jurisdiction of the Department of Fish and Wildlife. It was chosen because of its roadside visibility at a well-traveled intersection, and because the Commission and F & W are concerned about the increase of knotweed downstream. Several years ago, fill was brought there, creating a very steep bank and the knotweed eroded into the stream.

The Commission has consulted with other towns and has presented various methods over the years to show the results. In 2018, a licensed herbicide applicator injected large stems in one section with glyphosate. This method can become a precarious one, in that care and strict diligence must be taken with this herbicide. General spraying of an herbicide is not recommended. Other methods shown are pulling, cutting, mowing, and smothering. There was a demonstration of drying methods

as well. We have planted several native species in hopes they will outcompete the knotweed, and a Sterling College group of students inserted willow fascines for the same purpose.

The abundance of invasive plants throughout Craftsbury is very concerning: Craftsbury has been identified as a hotspot of invasive plants. Many forest management plans stipulate that invasive plants be eradicated prior to harvesting or other activities, such as creating trails, that might open up more areas to infestation. To protect the natural heritage of the town, invasive species should be monitored and managed. Some Craftsbury residents have begun to recognize these species on their properties and question how to deal with them. Once established, many species are difficult to control and the impacts they have on the ecosystem pose devastating consequences for the town's natural resources. A list of invasive plants in Vermont as well as tips for identifying and controlling them can be found at:



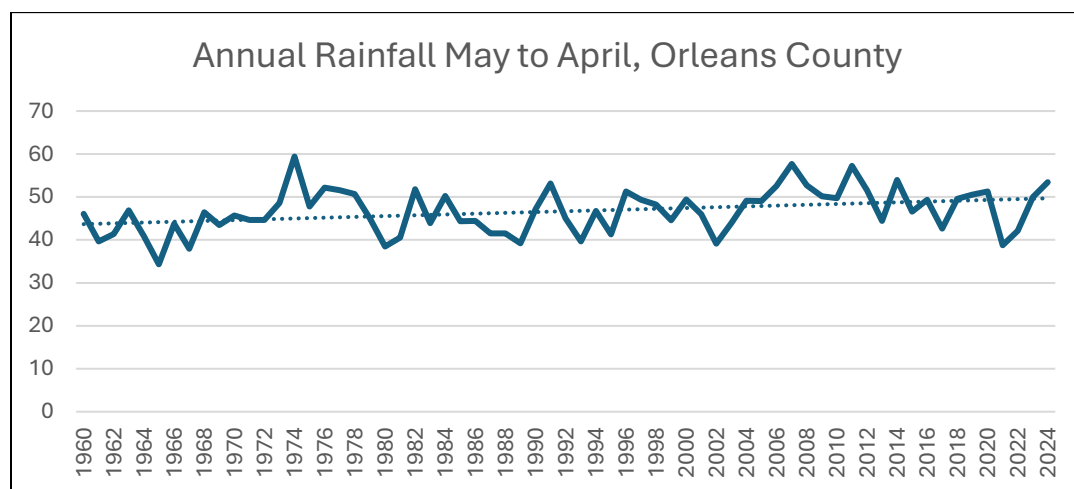
<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/vermont/volunteer/invasives-in-vermont.xml>

## **Craftsbury has an extensive history of flooding.**

Of the 26 disaster declarations in Orleans County since 1960, 11 have involved flood damage in Craftsbury. The most recent losses include the historic July 2023 floods, which resulted in significant damage to Craftsbury roads, bridges, as well as instances of local flash flooding to residences in Mill Village and Craftsbury Common. On December 18, 2023, snow melt and 3" of rainfall on already saturated soils led to additional flooding. The Lamoille River reached the major flood stage.

*Flash flooding* is the most common form of flooding in Craftsbury, and it's likely to occur more frequently in the future. Flash flooding results when precipitation falls so quickly that the soil is unable to absorb the water. As a result, surface runoff collects in small, upstream tributaries and then move quickly downstream at a high velocity. As Vermont's climate continues to warm, we can expect to experience warmer, wetter weather -- and more heavy precipitation events that contribute to flash flooding.

While annual precipitation in Orleans County may vary from year to year, it has increased significantly over the past 60 years.



Sources: NOAA National Centers for Environmental information, Climate at a Glance: County Time Series, published May 2024, retrieved on May 17, 2024 from <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series>

By the end of the century, the Vermont State Climate Office predicts that the heaviest precipitation events (3" of rain or more) will increase in frequency from once every seven years to once every two to three years.

## **Craftsbury has participated in the National Flood Insurance Program (NFIP) since 2001.**

By participating in the NFIP, everyone in Craftsbury can purchase flood insurance. This is especially important because banks require flood insurance for federally-backed mortgages on properties that are located in mapped flood hazard areas. To join the NFIP, the Town was required to adopt local floodplain regulations that met FEMA's minimum requirements ([CFR 44](#)).

Craftsbury's floodplain regulations control development in mapped areas at risk of inundation in a historically significant flood. The FEMA flood maps depict areas where the water rises and overflows its banks on adjoining low-lying lands called *floodplains*. When floodplains become inundated, they act as natural filters and remove excess sediment and nutrients such as phosphorus and nitrogen. They also help to slow downstream flood flows.

FEMA's mapped floodplains include the Black River, Seaver Brook, Whitney Brook, Little Hosmer, Duck Pond, Mud Pond, Wild Branch, Eligo Lake, and Webber Brook. The FEMA map was first identified in 1974, revised in 1976, and made effective in 1985. The map is only available on paper, and the data is not

georeferenced. FEMA did not conduct a Flood Insurance Study, so the map also lacks critical detail such as base flood elevations (how high the water might be expected to rise) or delineation of floodways (portions of the stream channel where flood waters run the deepest and fastest during a flood). The age of the maps and lack of detail also make it difficult to determine how many structures are actually located in a floodplain. The Town Garage is in a flood-prone area, and the access to it washed out in the July 2023 flood.

### **Craftsbury's floodplain regulations do not address streambank erosion.**

FEMA's flood maps don't allow for the fact that stream channels move over time, and sometimes, like parts of the Wild Branch, they shift dramatically. The Vermont Rivers Program has designed protocols to evaluate river conditions all over the state. The resulting data are used to map meander belt widths called *river corridors*.

The Agency of Natural Resources has mapped river corridors along streams. For streams with a drainage area of at least two square miles, the mapped river corridors consist of two components: a *meander belt* and a *riparian buffer*. The meander belt (the red boundary in the image on the right) is the minimum area needed to accommodate the movement of the stream channel. The riparian buffer (the yellow boundary) is an extension of the meander belt to provide additional protection. A naturally vegetated buffer helps to protect streambank stability if the meander moves to the edge of the meander belt. For streams with a drainage of less than two square miles, a riparian buffer of 50 feet on either side of the top of the streambank is probably sufficient to accommodate lateral movement of the stream channel.



*Vermont FloodReady*

Major river corridors in Craftsbury include the Black River, the Wild Branch, Whitney Brook, Seaver Brook, and Whetstone Brook. The river corridors and floodplains do not always overlap, so it is possible that a structure can be one hazard area but not the other. Analysis of ANR River Corridor Maps indicates there may be 42 structures in river corridors, 26 of which are probably not located in the floodplain. Approximately 80% of these structures are residential properties (single-family homes and mobile homes). The Town Garage may be located in the river corridor as well. As with the FEMA maps, this data requires additional vetting and site investigation.

## Craftsbury's Flood Plain Regulations will need to be updated and improved.

The Northeast Kingdom will be receiving new flood maps from FEMA very soon. They will be digitally referenced, and they will have orthophotos for easier interpretation. Although Craftsbury is not going to receive any new on-the-ground flood studies, the flood map data will be developed through base level engineering. The new maps will use 1' contours, which is a huge improvement over the existing 20' contours. Essentially, the new maps are going to produce a much more realistic picture of how much water can be stored in areas along streams, rivers, and ponds – and how high the water can get in significant inundation flood events.

When the new maps are effective, FEMA will review our flood plain regulations for continued compliance with their Code of Federal Regulations. Compliance has evolved with interpretation from FEMA's legal counsel over time, and we are all but certain that our Flood Plain Regulations will not be approved by FEMA. If the regulations are not approved, Craftsbury could be dropped from the National Flood Insurance Program, which means that no one would be able to purchase insurance.

Some of the required changes to our flood plain regulations are related to administration and enforcement. We need to document a process determining substantial (when more than 50% of a structure is damaged by flooding). We also need to add new definitions and some statutory references.

The review and subsequent update of Craftsbury's flood plain regulations should also consider ways to address the underlying weaknesses of the National Flood Insurance Program by adding provisions to make our local regulations more flood resilient. Here are some of the considerations:

- **Freeboarding:** Instead of building new residential structures at the base flood elevation (exactly where water is expected to rise in a significant flood) consider elevating two feet above it. This measure will allow policy holders to get a break on their insurance premiums.
- **Objects carried downstream:** Under Craftsbury's existing regulations, recreational vehicles in the flood hazard area must be licensed and road ready at all times so they can be moved out of harm's way when the water rises. However, we know all too well from recent experience that other large items get carried downstream, like fishing shanties, trailers, outhouses, and boats.
- **No new net fill in the floodplain:** FEMA standards do not consider flood storage capacity: Filling and construction may occur in the floodplain without considering loss of flood storage. This is a major shortcoming in that the standards are focused on reducing flood inundation risk to new development, but do not consider the cumulative degradation of floodplain resources and increased flood hazards to existing development that result over time.
- **Critical facilities:** Again, FEMA is silent on this issue. Important structures that are critical to town operations – such as our Town Garage – may be at risk. In the future, it is best to build new critical facilities out of harm's way.
- **Dry land access for new development:** This is another standard not addressed by our existing regulations. Requiring dry land access on new development provides safe egress for property owners and reduces risk to first responders that may need to access homes during a flood emergency.
- **Erosion risks:** Our local flood plain regulations could keep new development out of the river corridor. In essence, don't build any closer to the river corridor than what is already there.

## Policies, Goals, and Strategies

- Policy:** **Protect and manage Craftsbury's natural heritage and biodiversity, and restore ecological health and integrity of the land and waterways throughout town.**
- Goal:** **Raise community awareness about Craftsbury's natural heritage through education and local conservation planning.**
- Strategies:** Support collaboration with Craftsbury Conservation Commission, Craftsbury Municipal Forest Committee, Craftsbury Energy Committee and other town committees as well as Sterling College, Craftsbury Academy, Craftsbury Outdoor Center government institutions, agencies, and organizations regarding education and conservation activities.
- Manage and maintain our town forests and the Craftsbury Academy Woodlot as models of land stewardship.
- Goal:** **Identify and understand the natural resources within Craftsbury and their ecological significance.**
- Strategies:** Maintain a natural heritage database through Town of Craftsbury Nature Inventory Project on iNaturalist.
- Identify and map natural communities and critical wildlife features, including deeryards, bear production areas, vernal pools, large interior forest and connectivity blocks, and wildlife corridors and habitats.
- Identify bullseye granite and other unique geological formations in Craftsbury.
- Identify and map species of mammals, birds, amphibians, invertebrates, flora and their habitat of greatest conservation concern as identified by the Vermont Department of Fish and Wildlife Nongame Natural Heritage Program.
- Develop and utilize maps on land use patterns to understand current agricultural areas, contiguous forestland, and residential/commercial development impacts on natural heritage.
- Investigate open space planning, possibly including a land evaluation and site assessment to develop a consensus-based vision for future conservation efforts, as well as the long-range implications on taxes.
- Goal:** **Minimize ecological impact and loss of biodiversity due to the occurrence of invasive species**
- Strategies:** Educate Craftsbury residents on the potential impacts of invasive species such as, but not limited to, Japanese knotweed, glossy and common buckthorn species, and emerald ash borer.

Demonstrate methods for eradicating and managing invasive species, specifically maintaining the Craftsbury Conservation Commission Japanese Knotweed Demonstration Site in Mill Village.

Partner with state agencies and other organizations by sharing statewide resources on how to protect local biodiversity through invasive species eradication and management.

**Goal:** **Minimize Craftsbury’s exposure to flood risk using floodplains, wetlands, and vegetation buffers to mitigate flood risks.**

**Strategies:** Revisit Craftsbury’s floodplain regulations and make the necessary changes to remain eligible for enrollment in the National Flood Insurance Program. *(This is a priority action. See Part 5 for details.)*

Consider amending regulations to protect erosion-prone and floodwater storage areas from additional development and encroachment.

Ensure proper training and outreach regarding development in flood hazard areas, including forms of development exempt from local regulation, such as required agricultural practices.

Continue to identify and map Craftsbury’s natural flood protection assets, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forested areas.

## 4: Connecting People and Places Through Services and Infrastructure

Vermont county governments have limited jurisdiction and authority, which puts the onus of day-to-day essential operations on our small local government. Craftsbury must manage its limited financial resources and personnel to maintain a safe road network and literally keep the lights on at public facilities. We rely on a network of volunteers



*Elinor Osborn*

-- many of whom serve on multiple local committees -- to keep our residents safe and improve the quality of life. Craftsbury has no public sewer systems, and most residents rely on private wells. This lack of water and sewer capacity severely constrains development in its village centers, especially Craftsbury Village, which already sees a high level of daily activity from local businesses and civic operations. Planned and responsible growth in our community will require creative solutions that leverage partnerships with regional and state entities, as well as grant funds.

**Vision for the future:** Craftsbury is a walkable, bike-able community that is not too dominated by cars. Road travel is safe and slow through town. Craftsbury Village is able to function as a town center with a main street that is safer and more welcoming for everyone. Our community is food secure, and no one goes hungry. Emergency services are available to all. High-speed Internet is available to every household and business.

## Existing conditions

### **We want to maintain the status quo on roads.**

From the 18th Century origins of the Bayley-Hazen Road, to the present, Craftsbury's people have built and used a complicated system of roads. This highway system reached its zenith in the late 19th century, when family farms had spread out to the far reaches of the township, and the villages were at their most populous. Today, the evidence of these many lost roads are the several dead-end lanes including Auld Lang Syne, Town Highway 19, Coburn Hill, and Robert Anderson's pent road. Most of the town's ancient roads will not be added to the Town Highway map unless the landowner requests it. In 2013, the Craftsbury Selectboard adopted an ordinance addressing a long-standing issue regarding the public rights of town trail (formerly part of Coburn Hill Road) in the northwest corner of town. Use of that trail is limited to pedestrians, horses, and non-motorized vehicles.

There is strong sentiment in town for keeping the status quo on both new construction and current road surfaces. An inventory of uses of Craftsbury's town roads revealed that most if not all of the 48+ miles of class 3 and class 4 roads have year-round uses that include farm vehicles, snowmobiles, cross-country skiing, running, walking, birding, horseback riding, sledding, bicycling, and ATVs (which are limited to Class 4 roads). The recreational aspects of our roads, both for residents and visitors, cannot be overstated. Maintaining the surface of existing roads is a continuing priority. We recommend that as many roads as possible be maintained in their current gravel state. This maintenance is contingent, in the long term, on the acquisition of adequate and affordable sources of quality gravel or contractual agreement with other towns.

### **Although our community is largely auto-dependent, we need to accommodate other forms of transportation and recreational uses.**

As with most rural communities, it would be very difficult to get by here without a car. There is no public transit in Craftsbury, but residents may be able to schedule rides with a driver through Rural Community Transport or schedule deliveries through Neighbor to Neighbor. The nearest airports are in Morrisville and Newport, but most residents must travel to Burlington to catch a commercial flight.

Despite our auto-dependence, the community has opportunities to integrate multiple forms of transportation use into the community. In 2011, Vermont's "Complete Streets" bill was signed into law. The legislation is based on a concept that roads should safely accommodate all transportation system users, regardless of age, ability, or what mode of transportation they prefer – walking, biking, driving, or use of transit. The policy applies when new roads are being constructed, and when paved roads are being reconstructed, rehabilitated, or otherwise maintained.

Our community relies on many volunteers who have led efforts to develop transportation alternatives, especially ones that support recreation. Through ongoing coordination and cooperation with land-owners, snowmobiling has enjoyed a half-century presence in the community. The "Craftsbury Snow Chargers" is a volunteer-led effort to maintain VAST-supported trails in town. (Vermont Association of Snow Travelers)

Craftsbury Trails, an informal network of volunteers, convened in 2018 to integrate recreational forms of transportation into our existing road network. The group is currently working to connect the villages

through off-road trail options. Sterling College maintains a system of walking, hiking, and mountain biking trails that are clearly defined throughout Craftsbury Common with “Craftsbury Trails for All” wayfinding signage. The Town received a 2023 Recreational Trails Program grant and began work on improvements in early summer 2024. The college is currently working with Craftsbury Trails to upgrade their system.

The Town recognizes that outdoor recreation is not only a local economic driver, but an essential part of our residents’ well-being. We support ongoing efforts in the pursuit of recreation infrastructure that is safe and universally accessible.

### **Craftsbury Village has a Master Plan to improve multimodal circulation.**

Despite our best efforts, drivers, walkers, cyclists, and others don’t always safely coexist. With ongoing transportation and pedestrian safety issues in the Village caused by lack of parking and speeding, the Craftsbury Planning Commission developed a Master Plan for the Village with funds from a Municipal Planning Grant. The Village Master Plan was an opportunity to explore ways to improve parking, walkability, recreational access, and manage growth to create a safer and more welcoming street for everyone. The Master Plan was developed with a broadly inclusive public outreach process that involved meetings with Village landowners, business owners, and community members. The Craftsbury Village Plan was completed and presented to the Craftsbury Selectboard for approval in the spring of 2023. Recommendations focused on slowing and improving traffic in and around the Village, and they include:

- Painted parking delineations to existing parking areas;
- Removal of the center line;
- painted fog lines and crosswalks;
- Flashing speed signals on both entrances to the Village
- Storefront and roadside wayfinding signage.

These recommendations were presented to the Selectboard, and they have yet to be implemented.

Interestingly, the planning process also considered the creation of a new road bypassing the Village to Cemetery Road to help ease some of the traffic flow. This option was roundly rejected by residents, which is indicative of the Town’s commitment to maintaining the status quo on its road inventory.

### **Craftsbury has a grass-roots, hyperlocal response to food insecurity.**

The Craftsbury Food Share grew out of a collaboration between the Craftsbury/Albany Food for Neighbors Group and Craftsbury Neighbor to Neighbor in the early months of the pandemic, when COVID revealed systemic weakness in our food system.

Today, the Craftsbury Food Share operates out of the Church on the Common, where it serves about 75 households each week. The Craftsbury Food Share, along with the Albany Food Share, became part of the Hardwick Area Food Pantry in 2021. This arrangement has allowed the Food Share to hire a manager, order food from the Vermont Food Bank, and share resources and fundraising efforts all while retaining its uniquely local characteristics. With generous support from the Genny, Pete’s Greens and other local food producers, about 25% of the Food Share items are local. Everyone is welcome to participate. The largest group served are those aged 65 and older.

The Food Share enjoys a highly supportive relationship with the Church. Supplies and shelving stored in the pantry can be pushed behind a curtain when the space is needed for church functions. Programming can expand and contract as needed, and the dining space can be available for Grow-Your-Own workshops, which can attract as many as 25 attendees. In addition to its arrangement with the church, the Food Share relies heavily on volunteers and financial contributions.

Unfortunately, the Food Share is extremely constrained in its current space. With limited on-site storage, the Food Share stores supplies in several places around town. This puts a strain on volunteers. There is now a second structure on the adjacent Craftsbury Public Library(CPL) land, .

Clients currently pick up groceries just outside the basement entryway. However, a public-facing space of about 1,000 sq. ft. could accommodate a more retail-focused experience, where clients could pick what they needed. A 10' x 20' storage room, as well as an 8' x 10' walk-in cooler and freezer for perishables could probably allow for consolidation of supplies.

Besides the CPL, The Common House has been ruled out as an option as it has been sold. The Food Share is on the list of interested parties for purchasing the Catholic Church if it comes up for sale. The Town gave the Food Share \$60,000 toward walk-in coolers and freezers from its ARPA funds.

Meal on Wheels operates through a partnership with the Craftsbury Community Care Center. Each year, more than 4,200 meals are prepared in the CCCC's kitchen. Volunteers deliver the meals to area residents twice a week.

## **Future Use of Village Properties**

Craftsbury Food Share is not alone in its need for accessible multi-purpose community space. The pending sale of the Catholic Church in the Village raises possibilities for other initiatives, such as the relocation of the Town offices, which are currently cramped for space. The existing Town Offices could then be revitalized to provide multi-purpose and community and performance space. Concurrently, the Craftsbury Schools are embarking on long-range visioning exercises for existing facilities. The potential realignment of community facilities in the long-term is a complex issue with many moving parts that will require coordination and ongoing dialog. It may be too soon now, but at some point, the Town may need to develop some conceptual plans to further a more productive discussion on this long-range vision.

## **Internet access was our lifeblood during the pandemic. The Communications Union District is expanding access.**



*Elinor Osborn*

Access to reliable and affordable internet was long considered a necessity in Craftsbury, but social distancing from the pandemic made it an essential lifeline. Communication Union Districts (CUDs), organizations of two or more towns that work together as a municipal entity to build communication infrastructure, were authorized under Vermont Statute a decade ago. NEK Broadband came into

existence in March 2020, and it serves every town in the Northeast Kingdom. In August 2024 NEK Broadband merged with CVFiber, expanding high-speed internet services to 71 communities. The merger is expected to benefit both entities by achieving economies of scale and volume pricing.

An Optical Line Terminal (OLT) has been approved for Craftsbury, which will provide a backbone for a fiber optic network serving Craftsbury, Albany, Greensboro, Hardwick, and Wolcott. Supporting infrastructure for the OLT is beginning to be put in place at the edge of Dustan Field. The OLT will have its own backup power to ensure continuous service in power outages. This investment will give the CUD more clout to pursue funding. There is fiber in Village and in Mill Village, as well as some parts of Creek Road. There are two lines that serve the Outdoor Center. Other areas are served by DSL. Nevertheless, there are still pockets of underserved areas throughout Craftsbury, including areas on the Creek Road, South Albany Road, Lost Nation, Little Hosmer Drive, Coburn Hill, Collinsville, Mill Village, Cemetery Road, and Town Line Road. If a property has a power pole nearby, they can join the network. If the property is off-grid, and there is no power pole, the property owner will need to install one.

During the pandemic, Town government functions relied on virtual meeting capacity, heightening the need for broadband. Recent changes to Vermont's Open Meeting Law require hybrid meetings for all non-advisory boards (like the Selectboard), and electronic recordings of the meetings must be available to the public.

## **The lack of water/sewer infrastructure constrains development in the Villages.**

The community has one public water system owned and operated by Craftsbury Fire District 2 (CFD#2). The system serves 63 accounts around the Common, including Sterling College, Craftsbury Academy, the Church on the Common, and the Craftsbury Public Library. The water system has a backup generator to remain in service when there is an extended power outage, but the water has not been safe to drink for more than two years. In 2021, PFAs (polyfluoroalkyl substances), known carcinogens, were detected in the CFD#2's primary well, requiring the state to issue a Do Not Drink Order. After two years of searching for a replacement source, a well on property owned by Sterling College has been found to have sufficient quantity and quality to serve users into the future. The new well came online in 2025.

All Craftsbury's wastewater is handled by private on-site septic systems. This is dependent on the type of soil present and sufficient area to accomplish satisfactory operation of the system. One-third to one-half acre is required in most cases. These systems typically consist of a 1,000-gallon septic tank followed by a leach field and are generally satisfactory when properly maintained. If this is not done, the solids will pass into the leach field causing the flow to back up and the leach field to not operate properly. There are technologies available such as effluent pumps and filters to enhance the performance of these systems. These features require regular inspection and maintenance.

The Vermont Wastewater and Potable Water Supply Rules took effect in 2007 and apply to soil-based systems with design flows of less than 6,500 gallons per day and sewerage connections of any size. These regulations are triggered when land is subdivided or when new construction takes place. They can also apply when an existing building or structure is modified in a way that increases the design flows or changes the operating requirements of a wastewater or potable water system (e.g. adding an accessory dwelling unit.)

Craftsbury's villages form the heart of the community, yet like 100+ villages across the state, they lack the wastewater capacity for adaptive reuse that may need to occur to keep them vibrant, such as accommodating new housing opportunities or local business. Craftsbury Village experiences this constraint acutely, and there are limited opportunities to site traditional leach fields. During the 2015 Craftsbury Community Visit Process, interest was expressed both in affordable housing development and in clustering new development in and around the Village. The Community Land Trust shares this interest as well. Current wastewater treatment options will be a large factor in determining the feasibility of these concepts.

The potential for fluvial erosion in Craftsbury Village may damage some private septic systems over the next 10 to 20 years. While it makes sense to stop the river from encroaching in back yards to protect the systems, there are drawbacks. Streambank armoring can have downstream impacts, and it can ultimately fail. It is probably more prudent to plan for a resilient, appropriately-scaled wastewater solution today, rather than wait for a crisis to occur.

Other communities similar to Craftsbury have been grappling with this issue, and we have an opportunity to learn from their experiences. Greensboro is currently exploring a system in their village, and they have received a Northern Border Regional Commission grant. Wolcott just passed a bond to support a wastewater system that will serve 48 properties, including the town offices, the town garage, and the elementary school. Local officials from Craftsbury have also met with representatives from Montgomery, which is currently building a wastewater system after years of planning.

What we've learned so far is that wastewater planning is a long-term commitment that requires vision and patience, but we need to start somewhere. First tasks in our wastewater investigation would include establishing a local committee to survey residents and businesses for future needs and establish a shared vision for the community (i.e. How big does it need to be? What are the impacts we want to avoid? What developments do we want to accommodate?) This group could also survey soils, perform GIS analysis, investigate available technologies, and hire an engineer. The Village Wastewater Initiative at the Department of Environmental Conservation (DEC) has some guidance on this phase [https://dec.vermont.gov/sites/dec/files/village\\_wv/WastewaterWorkbook.pdf](https://dec.vermont.gov/sites/dec/files/village_wv/WastewaterWorkbook.pdf)

The next phase of wastewater planning – a feasibility study – typically has funding opportunities from DEC or USDA to cover engineering costs. In this phase, the engineering firm usually identifies three or more alternatives, as well as the pros and cons of each. This phase would also develop initial cost estimates, along with potential finance strategies, possible fee structures, and viable strategies for long-term management.

### **Solid waste management relies heavily on volunteers.**

Craftsbury is one of twelve communities that participate in the Lamoille Regional Solid Waste Management District. The transfer station is at the site of the Town Garage and is open Saturdays from 9:00 to 1:00. The site has a paid attendant, but volunteers are essential to its ongoing operation as they assist residents with off-loading trash, recycling and food scraps. Trash cannot be stored at the site, which can create some logistical challenges. Without adequate staff, the transfer station can be vulnerable to closure.

### **Planning for climate change is a challenge for a small town like Craftsbury.**

The Town has a volunteer Fire Department that receives an annual stipend from the Town. The Department has experienced an increase in volume and complexity of calls in recent years. In addition to the six structure fires and six chimney fires that occurred in 2023, the Department responded to four brush fires, twelve smoke alarm calls, nine vehicle accidents and one car fire, six electrical/powerline fires, one carbon monoxide incident, and 80 medical emergencies.

The Craftsbury Fire Department also has had to respond to weather and flooding-related emergencies in a changing climate. While we are still recovering from the most recent impacts of flooding, we also must be prepared to deal with ice accumulation from warming winters, power outages from localized high winds and severe storms, temperature extremes, not to mention public health hazards from infectious disease, and the spread of invasive species. Ironically, even drought and fires remain a concern, since unstable climate patterns are likely to increase variability in the peaks and troughs of precipitation, and early snow melts can create conditions favorable to brush fires.

In late 2022, Craftsbury adopted a Local Hazard Mitigation Plan that was approved by FEMA, allowing the community to receive hazard mitigation funds from FEMA. FEMA approval is a rigorous process, and the plan had to consider a range of hazards as well as strategies for mitigating them: flooding, infectious disease spread, high winds, extreme winter conditions, wildfire, drought, invasive species, hail, and extreme heat.

Approval of the plan is only valid for five years, so a team of hazard mitigation interests meet at least annually to collect information and present recommendations to the Selectboard. Representatives include the Planning Commission, the Conservation commission, and Neighbor to Neighbor. Their work helps to keep the plan a living document and facilitate the never-ending challenge of learning from the most recent disaster. Currently the most pressing concerns are focused on the need for sheltering in a facility that's closer than North Country Union High School in Newport. The Academy can serve as a shelter, and it recently installed a generator. Prior to 2023, we knew that Mill Village residents were likely to be isolated in a flood, but in fact, the isolation was widespread. Ten roads received major damage in the 2023 flood, and bridges were intact but underwater. South Craftsbury, Cemetery, Black River, North Craftsbury, and Post Roads were completely underwater, and most roads were impassable. Portions of Route 14 were closed. With so many roads closed, it may be necessary to identify five or six satellite locations for sheltering. Reciprocal sheltering agreements with Greensboro and Albany might be prudent.

Craftsbury's hazard mitigation planning process allows for the vital ongoing cross-communication and exchange of information, yet the network is an informal one. We must continue to nurture this collaborative effort, which will not only allow for a more meaningful and expedient update of the LHMP but will improve the way we respond to disasters in the future.

## **What we do today can maximize the funding that we receive in the NEXT disaster.**

When a community requires public assistance for damaged infrastructure in a federally declared disaster, FEMA usually covers 75% of the loss. (The reimbursement rate for 2023 was higher, but this is not typical.) The State's Emergency Relief and Assistance Fund (ERAF) covers half of the remaining matching funds (usually 12.5%), if the community has taken all these steps to reduce flood damage:

1. Adopt the most current Town Road and Bridge Standards (which can be found in the VTrans Orange Book: Handbook for Local Officials).
2. Adopt flood regulations that meet the minimum standards for enrollment in the National Flood Insurance Program
3. Maintain a Local Emergency Management Plan (adopt annually after town meeting and submit before May 1)
4. Adopt a FEMA-approved Local Hazard Mitigation Plan

Craftsbury currently meets all four requirements, which means that ERAF will cover 12.5% of the public infrastructure losses experienced in the next disaster. Additionally, Craftsbury may receive an increased state match, if we adopt flood regulations that are more aggressive than the minimum standards of the National Flood Insurance Program. In that case, the Town will only have to pay for 7.5% of the damaged infrastructure. This incentive has been in place since 2014, but the high price tag from recent floods is now making this incentive far more attractive to communities.

## **Craftsbury supports our regional and statewide energy goals.**

This plan supports the goals of [NVDA's Regional Energy Plan](#) as well as [Vermont's 2022 Comprehensive Energy Plan](#), and [Vermont's 2021 Climate Action Plan](#). To meet state energy and climate goals, Vermont is planning for a major shift away from fossil fuels in the transportation, heating (thermal), and electricity

sectors to renewable sources of energy; achieve efficiency in all sectors, and increase in-state renewable energy generation. Energy efficiency and conservation, as well as efforts to reduce energy burden remain at the forefront. Even with these aspirations, it is important to be clear-eyed about where Vermont can focus its sustainability efforts ([EAN 2024 Report](#)):

- Second highest per capita greenhouse gas (GHG) emissions in New England
- Third highest average energy burden in the U.S. (8.3%)
- Among the four states with the highest reliance on fossil fuel oil and propane for home heating
- Highest annual vehicle miles traveled (VMT) per capita in the Northeast

Since 2008, the Craftsbury Energy Committee (CEC) has focused on weatherization priorities, public awareness of viable energy savings solutions, and basic research about energy use in Craftsbury. The CEC believes this serves a larger societal goal of reducing the Town's carbon footprint, improving the Town's stability and resilience in meeting our daily energy requirements, while protecting our historical and natural heritage. The CEC is extremely active, and it serves as a model and inspiration for other communities throughout the region. They effectively promote low- and no-cost weatherization opportunities tabling at community events, posting on Front Porch Forum, and distributing flyers through the Craftsbury Food Share and Monday Meals. According to the EAN Energy Dashboard, Craftsbury residents have completed 129 weatherization projects since 2010.

Other CEC initiatives include:

- **Window Inserts:** In 2023, volunteers built 255 window inserts for 45 homes. More than half of these were provided free of charge to individuals facing financial barriers.
- **Firewood Program:** This annual collaboration with Sterling College and the Outdoor Center provides fuel assistance to households in need. In 2023, the CEC supplied 30 cords of firewood to 23 households.
- **LED Light bulb giveaway:** The CEC continues to distribute up to 10 LED bulbs per household at Town Meeting Day.

The CEC has partnered with the Craftsbury Public Library to equip the library with a solar electric and battery back-up system. The system includes roof mounted solar panels, a 20 kWh back-up battery and other components that will provide renewable and reliable power, creating a resilience center for residents to access the Internet during power outages.

The Town of Craftsbury was recently awarded \$393,412 in Municipal Energy Resilience Program grants to support substantial upgrades to the Town Hall and the Fire Station and Garage. Improvements include HVAC, air sealing and insulation, heat pumps, and battery storage. The Town Hall upgrade also includes a level 2 EV charger and solar array.

Appendix A has more information about Craftsbury's energy use, as well as targets for fuel switching, weatherization, and energy generation in support of state and region-wide energy goals.

## Policies, Goals and Strategies

**Policy:**           **As a vibrant center of community, civic, and commercial activity. Craftsbury Village is the logical place to encourage a more diverse range of much-needed housing opportunities. Lack of wastewater capacity, however, remains a challenge. We must**

**commit to wastewater planning to achieve a solution of a scale that is appropriate and sustainable.**

**Goals:**        **Keep Craftsbury roads safe for all users.**

**Maintain a safe and passable network of roads at a cost affordable to the Town.**

**Keep our transportation infrastructure up to date and flood resilient.**

**Strategies:**    Participate in regional road foreman trainings and Transportation Advisory Committee meetings to stay abreast of flood resilience measures for the Town's roads and bridges.

Attempt to achieve yearly updating of the Town's transportation infrastructure information in the Vermont Online Bridge and Culvert Inventory Tool.

Identify and replace undersized and failing culverts.

**Goal:**        **Implement the recommendations from the Village Master Plan**

**Strategies:**    Identify an advocate and ombudsman for the Village Master Plan who can regularly liaise with the Selectboard, the Planning Commission, as well as residents and businesses in the Village. This person – who could be the part-time Community Development Coordinator – should also regularly communicate with the regional planning commission to ensure that local initiatives are coordinated with the regional Transportation Planning Initiatives.

Explore feasibility of other options identified in the Village Master Plan, including the delineation of on-street parking, designation of off-street parking, redesign of the Creek Road intersection, and traffic calming techniques, such as raised crossings, chicanes, and rumble strips.

When bridge #35 (the bridge on the South Craftsbury Road in the Village) gets replaced, ensure there is coordination and input from the Town to make sure that the improvements are compatible with the Village Master Plan, and that the new bridge promotes safe multi-modal circulation. (Participants in the planning process, for example, noted that people regularly speed over the bridge, making the area unsafe for walkers.)

**Goal:**        **Pursue wastewater funding solutions for Craftsbury Village**

**Strategy:**    Establish a wastewater planning task force. This entity will consist of, at a minimum, Village residents and business owners, as well as representatives from the Planning Commission, the Conservation Commission and the Headwaters Community Land Trust. This entity will also be supported by the Community Development Coordinator. *(This is a Priority Action. See Part 5 for details.)*

**Policy:**        **Craftsbury supports the development of new, community-scale renewable energy in the region to meet the Vermont Comprehensive Energy Plan's goal of using 90% renewable energy by 2050, in a manner that is affordable, equitable, and respects the natural environment and its inhabitants.**

**Goal:** **Decrease transportation energy burden costs & fossil fuel pollution by reducing single-occupancy vehicle (SOV) trips and reducing fossil-fuel vehicle miles traveled.**

**Strategy:** Maintain local representation on our Communications Union District to support teleworking.

Pursue options for the development of better bicycle- pedestrian lanes along the developed areas of Craftsbury, including the addition of fog lines and removal of the center line, as identified in the Village Master Plan.

Erect “Share the Road” signage to raise awareness.

Erect a flashing speed feedback sign at village gateways and the Common Hill.

Reduce vehicle idling in private and public spaces.

**Goals:** **Reduce regional energy burden and fossil fuel pollution to support the State’s climate and weatherization goals.**

**Build robust community awareness about the available resources and ongoing activities in energy efficiency, both privately and publicly, to encourage further participation.**

**Intensify efforts to promote energy conservation and weatherization activities at the household and Town levels.**

**Strategies:** Publicize successful examples of efficiency, weatherization, and renewable energy production to promote change.

Make information available about lending programs that can improve the efficiency of older housing stock, such as Efficiency Vermont’s “Heat Saver” loan and USDA Direct and Guaranteed Loan Programs, for single homes and multi-family homes.

Publicize success stories from Town residents that have installed renewable systems.

Continue the Town funding of a bulk purchase of LED light bulbs to sell to Craftsbury residents.

Continue public education and publicize success stories on weatherization, heating systems and renewable energy projects.

Cultivate and promote a network of local contractors who can complete weatherization and energy upgrades.

**Goal:** **Promote climate-ready and resilient community infrastructure.**

**Strategies:** Continue to collect data on current energy usage in Town Buildings.

Collect data on energy use after the MERP grant-funded projects (Town Hall and Town Garage) are completed.

Publicize the results of weatherization and energy efficiency changes in the school buildings.

Ensure firefighters have training for solar installations.

Promote net-zero and near-net zero development, such as “passive design” principles, and Vermod.

**Goal: Promote Fuel Switching**

Strategy: Develop more complete baseline data on energy usage including electricity, heating energy, and fuel for road operations in order to identify ways to make additional improvements such as more generation of power, conservation, building improvements, and operational practices.

Work with the Northeast Kingdom food leadership coalition and others to leverage resources for food producers (such as Rural Energy for America Grants).

**Goal: Increase food security in Craftsbury. Ensure long-term food access.**

Strategy: Support community and civic entities in their search for multi-purpose spaces and ensure that the Food Share is always included in these explorations.

**Goals: Ensure the Town and its facilities are prepared to meet the demands of the next disaster.**

**Ensure the Town can receive the maximum outside assistance in the event of the next federally declared disaster.**

Strategies: Maintain and regularly update the Local Emergency Management Plan.

Maintain and update Craftsbury’s Local Hazard Mitigation Plan.

Continue to meet the VTrans Road and Bridge standards.

Follow up on installation of generator at the Academy.

Pursue distributed and centralized sheltering arrangements.

## 5: Priority Actions for Craftsbury

While the Craftsbury Town Plan contains multiple implementation actions, the following initiatives are considered **PRIORITY** actions because they can address some of the town's most pressing issues, such as preserving rural character, promoting a vibrant local economy, and broadening housing options for all. Moreover, all priority actions are interrelated.

### **Priority Action 1: Establish an ad hoc committee to research and present options for local development oversight to the selectboard.**

**Context:** Our town is facing change, and there are concerns about the rate and scale of development locally. We need to reassess our local planning policies to ensure that we continue to meet our residents' needs. Recent building and development trends suggest that it is time to have a broader conversation about development controls. On a broader level, Vermont is facing a sea change in its approach to land use and controls with the passage of Act 181. This is an opportunity for us to investigate our local options and land use oversight. Land use regulations cover a broad array of possibilities, and do not necessarily entail what people traditionally think of as "Zoning."

**How and when:** Within three months of adopting this plan, the Selectboard shall appoint a committee to spearhead the investigation. This process could take at least 18 months, while members of the committee research options and conduct extensive public outreach. Funding may be available to support outreach and research through the Municipal Planning Grant program. At the conclusion of 18 months, the ad hoc committee should present recommendations that align with the Rural Character principles outlined in this plan.

### **Priority Action 2: Appoint a part-time Community Development Coordinator**

**Context:** While the previous Craftsbury Town Plan contained numerous objectives to promote a vibrant local business economy, all the actions proved to be unattainable for a small community that relies largely on volunteers. What's more, the surge in grant funding opportunities during the pandemic recovery uncovered significant opportunities for our community, but also placed administrative pressures on our small government. It's clear that there are multiple community groups that could benefit from grant writing and administration. A part-time Community Development Coordinator could liaise with the business community and help local entities pursue grants and tax funding incentives. Additionally, a dedicated coordinator could successfully advocate for implementation of the recently completed Master Plan for Craftsbury Village.

**How and when:** We realize that this is an expense for the Town to carry, but it comes with a significant return on investment. Start up funding may be available through a Vermont Community Development Program Planning Grant, the Vermont Community Foundation, USDA Rural Development, or the Rural Communities Development Initiative.

### **Priority Action 3: Pursue wastewater solutions for Craftsbury Village.**

**Context:** Not only is our Village currently constrained in future development – we are at risk of losing septic systems to erosion in the long-term. As learned from other communities, wastewater planning is a long-term endeavor that requires significant public outreach and evaluation. We cannot wait for or hope to achieve an expedient solution when a crisis occurs. There is an opportunity to learn from other communities who have recently scaled this challenge, such as Jeffersonville, as well as West Burke, which will now install two smaller systems in their village.

**How and when:** The Vermont Clean Water Revolving Fund is a starting place to explore feasibility. This program is open annually to communities. Locally, this effort could be spearheaded by the ad hoc development review committee or the Community Development Coordinator. Ideally, both entities should be involved in some capacity, as well as a representative from the Headwaters Community Land Trust.

**Priority Action 4: Revisit Craftsbury’s floodplain regulations and make the necessary changes to remain eligible for the Town’s enrollment in the National Flood Insurance Program.**

**Context:** FEMA has commenced the flood hazard remapping process in Orleans County, which means that in two years, our floodplain regulations will be reviewed for compliance with their minimum standards in CFR 44. Since our floodplain regulations were adopted nearly a quarter-century ago, they will not be deemed compliant, which means that our ability to continue participation in the National Flood Insurance Program will be in jeopardy. If we don’t participate in the National Flood Insurance Program, our residents will not be able to obtain flood insurance through the NFIP, and our town could see a reduced state share for damaged infrastructure in the next federally declared disaster.

**How and when:** The Agency of Natural Resources has created template regulations that can help us continue to remain enrolled in the National Flood Insurance Program. The regulations also offer an opportunity to encourage more flood resilient development practices in town. The regional planning commission currently has a contract with the ANR to provide technical assistance.

# Appendix A: Craftsbury Enhanced Energy Profile

The Town of Craftsbury supports the goals of [NVDA's Regional Energy Plan](#), adhering to Vermont's Act 174, and aligning with [Vermont's 2022 Comprehensive Energy Plan](#) (CEP), and [Vermont's 2021 Climate Action Plan](#). To meet state energy and climate goals, Vermont is planning for a major shift away from fossil fuels in the transportation, heating (thermal), and electricity sectors to renewable sources of energy, efficiency in all sectors, and increase in-state renewable energy generation. Energy efficiency and conservation, as well as efforts to reduce energy burden remain at the forefront. Even with these aspirations, it is important to be clear-eyed about where Vermont can focus its sustainability efforts ([EAN 2024 Report](#)):

- Second highest per capita greenhouse gas (GHG) emissions in New England
- Third highest average energy burden in the U.S. (8.3%)
- Among the four states with the highest reliance on fossil fuel oil and propane for home heating
- Highest annual vehicle miles traveled (VMT) per capita in the Northeast

It is important to incorporate equity and justice into all energy planning aspects. As goals, objectives and actions are considered and implemented, it is critical to consider three questions to empower more inclusive decision-making in Craftsbury and across the NEK:

1) Who is helped?      2) Who is harmed?      3) Who is missing?

In alignment with NVDA's Regional Energy Plan, Craftsbury aspires to follow the overarching goals and principles detailed in the Energy Equity Project (EEP) Framework:

- Everyone has continuous access to energy.
- Everyone lives in a healthy, safe, and comfortable home.
- No one spends more than 6% of their income on energy bills.
- Those who are most impacted have the most powerful voice in decision making and receive a share of benefits.

According to the [Vermont Municipal Vulnerability Indicators \(MVI\) Tool](#), the following factors have been flagged for climate vulnerability in Craftsbury because they are above or below Vermont state averages. Therefore, special consideration and inclusion of these more vulnerable populations should be incorporated into local planning efforts.

According to the MVI, the following percentages in Craftsbury are above the state average, indicating potential factors for climate vulnerability:

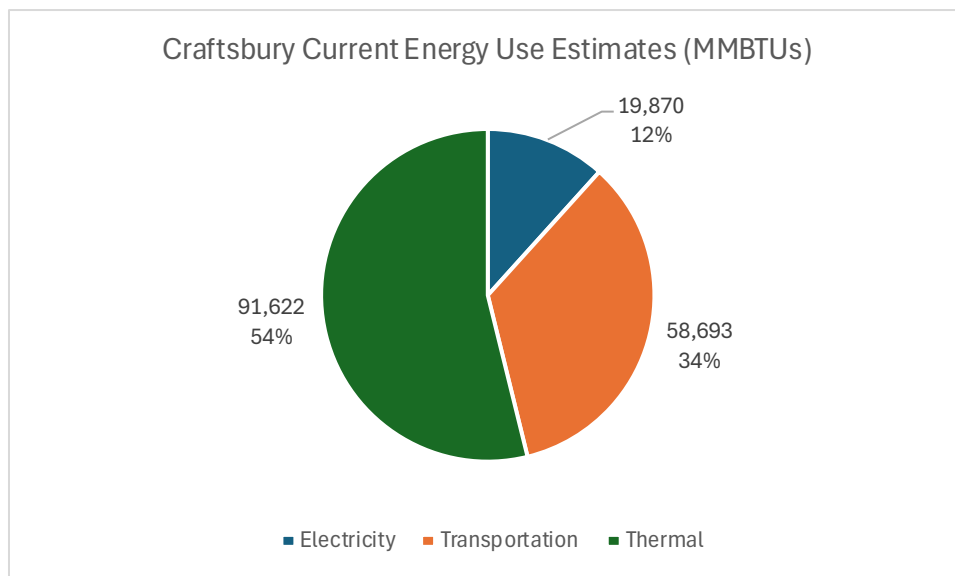
- elderly residents
- disabled residents
- African American, Hispanic, and multiracial residents
- Outdoor workers

- Housing cost burden

According to the MVI, the percentage of Craftsbury residents with Internet access is below the state average, indicating potential climate vulnerability. are above the state average, indicating potential factors for climate vulnerability:

## Craftsbury Energy Analysis and Targets:

The data in this section is intended to provide an overview of current energy use in Craftsbury and a sense of the trajectories and pace of change needed to help meet the State’s climate and energy goals. According to NVDA estimates, the thermal sector (heating space and water for residential and commercial properties) is largest at 54%, followed by the transportation sector at 34%, and then electricity at 12% percent.



**Sources:** Current energy estimates were developed using multiple sources with assistance from NVDA in 2024, including the Vermont Department of Public Service, Efficiency Vermont, U.S. Census American Community Survey, and Vermont Department of Labor.

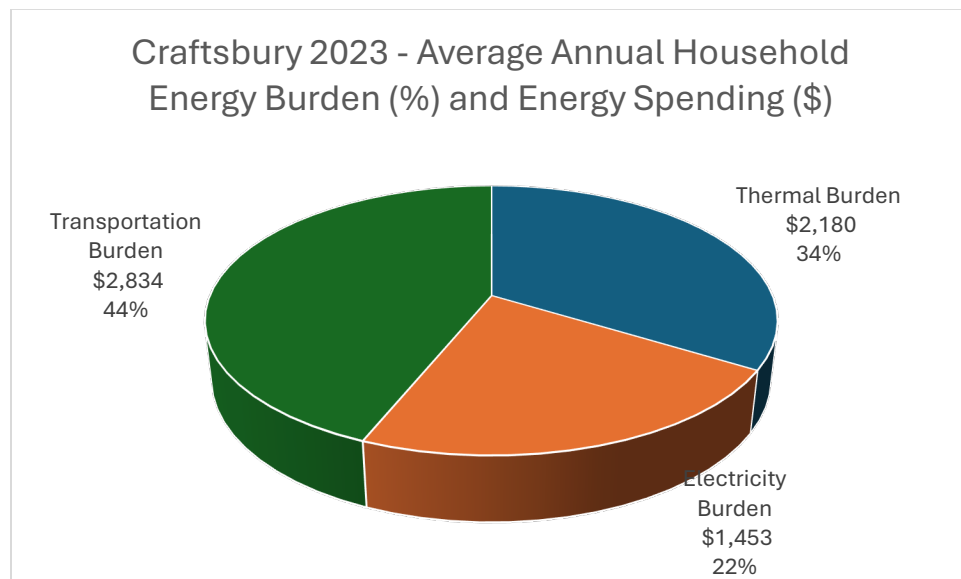
### Analysis of Resources, Needs, Scarcities, Costs, & Problems:

Energy burden is one way to understand the impact of energy expenses on Vermont households. It calculates how much Vermonters spend on electricity, heating, and driving, as a percentage of their households' income. Nationally, an energy burden *greater than 6%* (excluding transportation) is considered high and is correlated with a “greater risk for respiratory diseases, increased stress and economic hardship, and difficulty in moving out of poverty” (ACEEE). According to the [2023 Efficiency Vermont Energy Burden Report](#):

- About half of NEK communities have > 6% combined thermal + electricity energy burden
- Over one-third of NEK communities have > 6% transportation energy burden

Craftsbury total energy burden is 8.9% (including transportation, electricity and thermal), which is relatively low for the region, yet still above the 6% target. Craftsbury’s energy burden equates to more

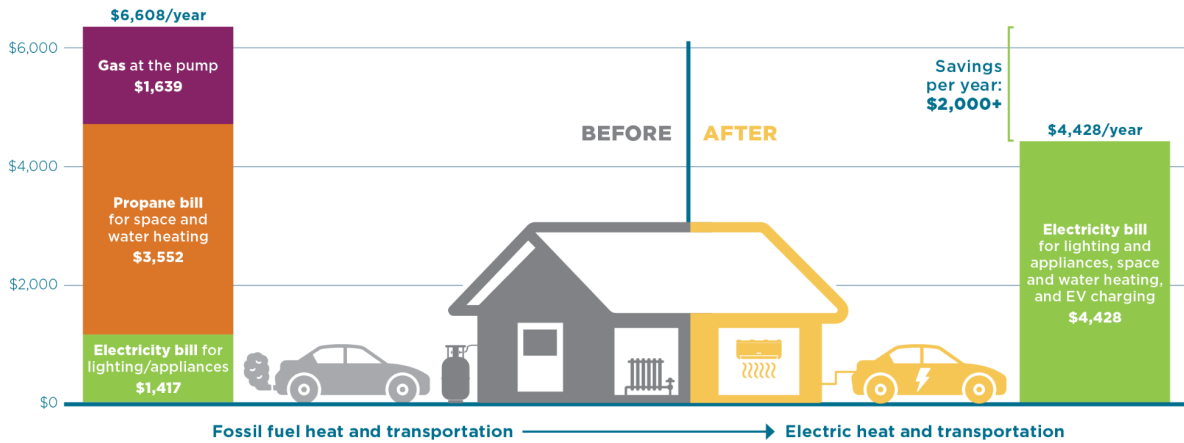
than \$6,400 in annual energy expenses across the average household. The pie chart below shows the breakdown of average energy spending for households in Craftsbury, with thermal burden highest, followed by transportation, then electricity. Reducing reliance on fossil fuels can have significant benefits when it comes to lowering costs for those who face the highest energy burdens.



**Source:** [2023 Efficiency Vermont Energy Burden Report](#)

NEK households with lower and fixed incomes typically use *less* energy than those with higher incomes, yet on average, spend *more* of their income on energy expenses, like heating, electricity, and transportation. High energy burdens can increase the risk of transitioning into poverty or of experiencing long-term poverty by 150-200% ([EAN](#) 2024). Weatherization and switching away from fossil fuels to more electrification are effective ways to reduce household energy burden and increase comfort.

## Estimated annual energy bill costs for a sample Vermont single-family household, before and after electrification



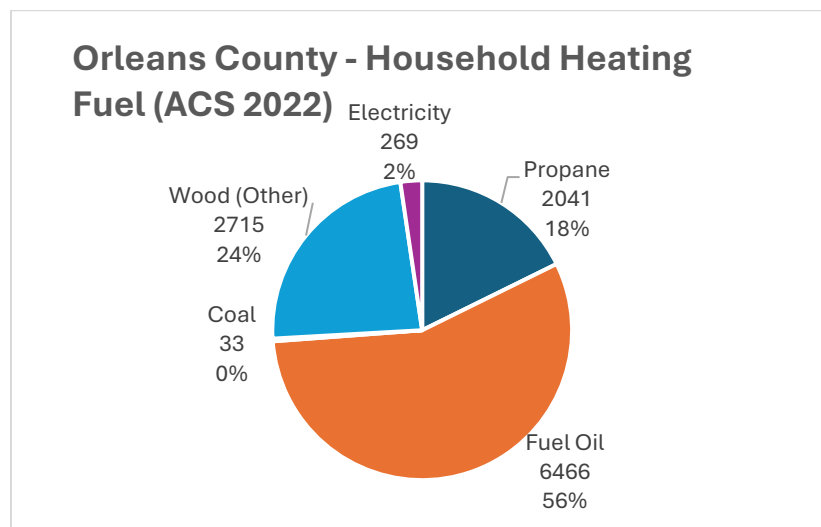
**Sources:** Energy bill savings calculated based on the average monthly prices for propane, gasoline, and electricity in 2023, from the Vermont Department of Public Service and EIA. Electricity bill costs for lighting and appliances reflect statewide average annual household electricity expenditures (Efficiency Vermont, "Vermont Energy Burden Report," 2023). Annual transportation fuel costs calculated using average fuel efficiency of 23.4 MPG for vehicles registered in VT from the 2021 Vermont Transportation Energy Profile and VT average annual vehicle miles traveled (VMT) of 11,084 miles/year from the Federal Highway Administration. **Note:** Actual energy bill savings will depend on a number of factors, including a household's electricity rate. Several Vermont utilities offer lower electric rates for managed EV charging, providing additional savings to households with access to those rates. Upfront equipment/vehicle costs vary based on model and incentive eligibility; because of this variance, upfront costs are not quantified here. Savings estimates are for a one car household. Savings will be higher for households replacing multiple gas vehicles with electric vehicles.

**ENERGY ACTION NETWORK**

## Current Energy Use across Three Sectors (Thermal, Transportation, Electricity)

### #1 - Thermal/Heating (54% of Craftsbury Energy Use, 34% of average annual household energy spending)

The data below describes how occupied homes are heated in Orleans County. According to the U.S. Census Data, 74% burn fossil fuels (oil, propane, coal) to heat their homes, followed by 24% wood heating. In fact, oil is often the back-up fuel source for homes that primarily burn wood for heat. While the region has no utility fossil gas, propane was used by 18% of homes. Electricity is used least, at just 2% for household heating needs. As of 2023 in Craftsbury, there are a cumulative total of 58 cold climate heat pumps, 49 heat pump water heaters, and a total of 129 out of 553 occupied homes weatherized according to the [EAN Vermont Energy Dashboard](#).



**Source:** [U.S. Census Bureau](#). "Physical Housing Characteristics for Occupied Housing Units." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2504, 2022.

The age of the housing stock is likely the most significant contributor to the overall thermal usage in Craftsbury, with nearly one-third of Craftsbury's housing units built prior to 1940. Older homes are likely to be poorly insulated and leakier, driving up energy consumption and costs. Weatherization programs and assistance provided by NETO and Efficiency Vermont are a critical first step, alongside beneficial electrification, to drive down thermal energy burden in Craftsbury and improve occupants' comfort and health.

## **#2 - Transportation (34% of Craftsbury's energy use, 44% of average household annual energy spending )**

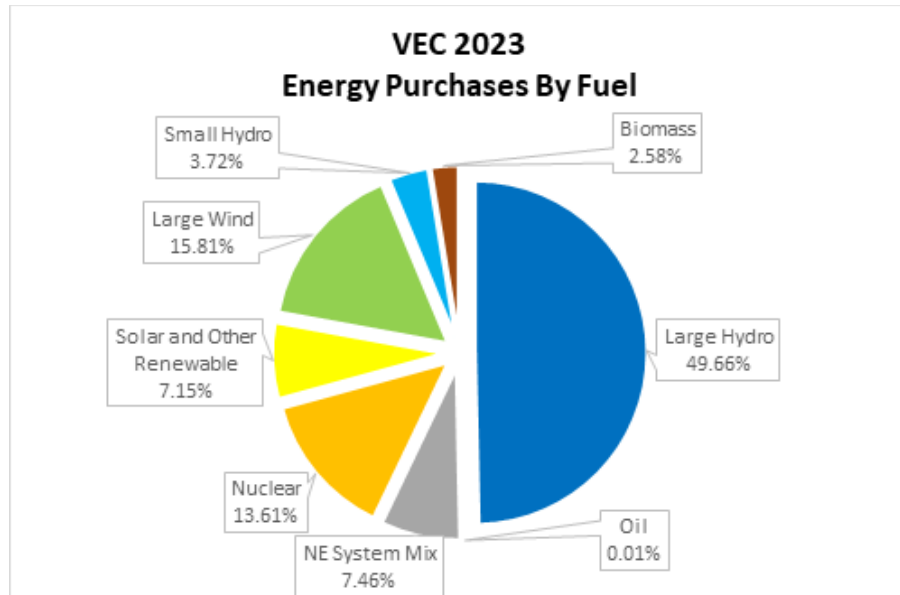
It is estimated that there are 725 fossil-fuel burning light-duty vehicles in Craftsbury, each driving an average of 15,000 miles a year. According to Efficiency Vermont records, there are 44 registered electric vehicles in Craftsbury as of 2023 (32 all-electric and 12 plug-in hybrid).

### **Increasing Transportation Equity - Transportation Demand Management (TDM)**

Transportation infrastructure that increases the quality and types of available transportation choices is referred to as Transportation Demand Management, or TDM, and is a priority of the Vermont Comprehensive Energy Plan. Multi-modal choices like public transit, carpooling, ridesharing, bicycling, and walking — all of which provide alternatives to getting around by single-occupancy vehicle — can increase the affordability of transport for Vermonters, encourage economic development in village centers and promote an active and healthy lifestyle. Multi-modal transportation that connects people to jobs and services (affordably and conveniently) can reduce single-occupancy trips, lower transportation costs and fossil fuel pollution, while improving health and economic opportunities. Admittedly, Craftsbury is highly auto-dependent, and there are no public transit routes through town. However, as transportation and land use policies are considered for Craftsbury, it will be important to closely work and plan with, not just for, our most impacted community members. This will help ensure that NEK transportation energy burden, the highest in the state, is reduced equitably and that people with low incomes, disabilities, older Vermonters, and renters do not struggle to afford electric vehicles, electric bikes/scooters, charging equipment, and other desired mobility options.

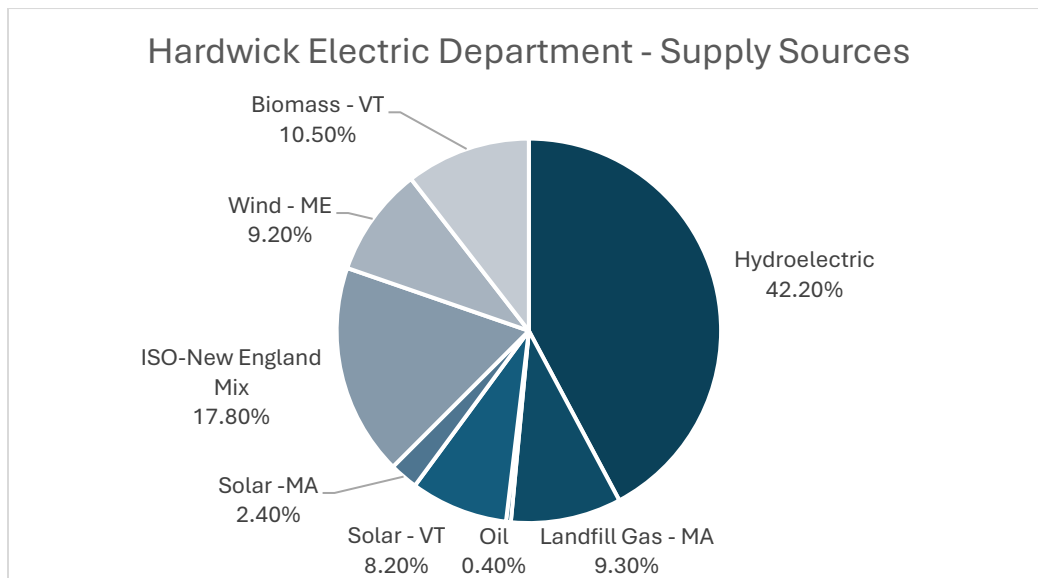
## **#3 - Electricity (12% of Craftsbury Energy Use, 22% of average annual household energy spending)**

Craftsbury is served by two electric utilities, Hardwick Electric Department (HED) and the Vermont Electric Coop (VEC), both of which have become increasingly involved with the issues and policies associated with renewable energy production, particularly distributed, small-scale power generation. VEC is a member-owned electric distribution facility. Both primarily serve residential customers (about 72% and 88% respectively.) Both utilities maintain diverse power supplies using a variety of fuel mixes and combinations of short- and long-term contracts to minimize costs and maintain price stability. There is no one set equation for achieving this delicate balance. VEC's long-term power supply needs are projected based on forecasts conducted every three years and detailed in their Integrated Resource Plan ([IRP](#)) required by the VT Public Utilities Commission (PUC). Below is VEC's breakdown of electricity purchases by fuel type in 2023 from their website.



Source: <https://vermontelectric.coop/electric-system/power-supply>

In addition to incentives and other energy transformation programs, [VEC's Community Solar program](#) offers Co-op members the opportunity to sponsor panels on VEC solar arrays for either 10 or 20 years and receive a fixed, guaranteed monthly credit on their electric bill, which can help reduce energy burden.

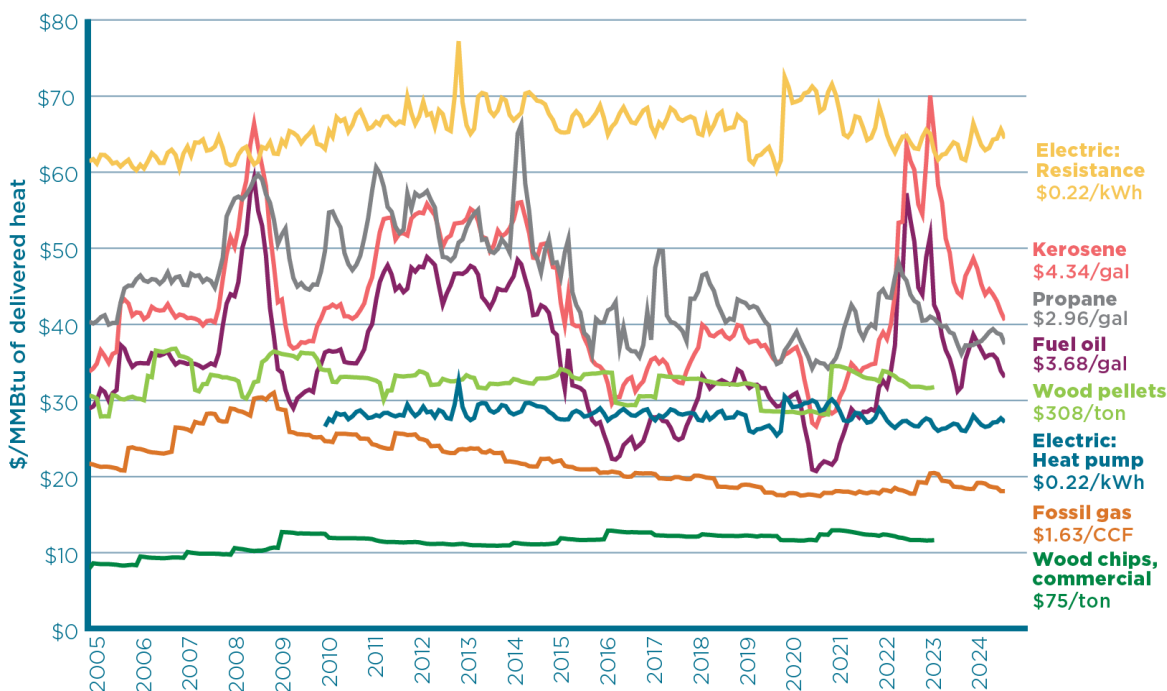


Above is Hardwick Electric's breakdown of electricity power sources, as detailed in VPPSA's 2023 Integrated Resource Plan ([IRP](#)) required by the VT Public Utilities Commission (PUC). Hardwick Electric (like all municipal utilities in Vermont) is represented by the Vermont Public Power Supply Authority (VPPSA), which has broad authority to buy and sell wholesale power on behalf of all the municipalities. According to the website, "VPPSA provides its members with a broad spectrum of joint action services such as: power aggregation, financial support, IT support, rate planning support and legislative and

regulatory representation.” VPPSA also provides [energy services programs](#) for its member utilities, including energy incentives and rebates for all ratepayers.

According to Efficiency Vermont data provided to NVDA in 2024, Craftsbury average residential electric usage was 6,427 kilowatt hours (kWh) a year, which is slightly higher than the Vermont annual average of 6,337 kWh from 2021 through 2023. For comparison, the United States’ average annual residential electricity usage was 10,500 kWh, an average of about 875 kWh per month ([EIA](#), 2023). It is worth noting that electricity consumption patterns are expected to increase as more beneficial electrification takes place. In Vermont, renewable heat sources have historically seen less price volatility over time than fossil fuel options, meaning efficient heating systems powered by electricity can help reduce energy burden over time. The following EAN chart shows the cost of various Vermont heating options through June 2024.

## Cost comparison of different heating fuel options over time (adjusted for inflation, June 2024 dollars)



**Sources:** Fuel oil, propane, kerosene prices: VT Department of Public Service, Retail Prices of Heating Fuels, 2024. Fossil gas: VGS, 2024. Electricity: EIA, 2024. Wood chips, wood pellets: Biomass Energy Research Center, 2023. **Notes:** Electricity prices presented here are a statewide average but vary by utility territory. The reason propane is usually more expensive per MMBtu than fuel oil but less expensive on a per gallon basis is because propane has a lower energy content per gallon (66% of the energy of fuel oil per gallon). Prices reflect data availability at the time of publication: through June 2024. Prices shown are in June 2024 dollars, using the U.S. Bureau of Labor Statistics Consumer Price Index.



## LEAP - Low Emissions Analysis Platform - Hypothetical Targets for 2025, 2035, and 2050

The following LEAP projections estimate the rate of technological adoption across the thermal, transportation, and electricity sectors needed to meet Vermont Climate Action Plan (CAP) goals. These

are hypothetical targets to help imagine the pace at which the Town might consider weatherizing its building stock, switching to efficient, electric heating (cold climate heat pumps and heat pump water heaters) and transitioning to electric vehicles.

CAP Mitigation Regional <b>Residential</b> New Cold Climate Heat Pumps						
Technology	2020	2025	2030	2035	2040	2050
ASHP 2 Head	340	2,044	3,758	5,482	7,214	8,094
ASHP Central	527	3,179	5,863	8,584	11,351	12,612
ASHP HE	499	3,002	5,519	8,050	10,593	11,886
GSHP HE	62	371	682	995	1,309	1,469
<b>Total</b>	<b>1,427</b>	<b>8,597</b>	<b>15,822</b>	<b>23,112</b>	<b>30,468</b>	<b>34,060</b>
<b>Craftsbury</b>	<b>1.70%</b>	146	269	393	518	579

CAP Mitigation Regional <b>Commercial</b> New Cold Climate Heat Pumps						
	2020	2025	2030	2035	2040	2050
New CCHP	178	3,201	6,365	9,680	11,898	12,380
<b>Craftsbury</b>	<b>2.40%</b>	77	153	232	286	297

Regional <b>Residential</b> New Retrofits						
Scenario	2020	2025	2030	2035	2040	2050
Baseline Scenario	1,105	2,283	3,372	4,408	5,480	7,745
CAP Mitigation	1,766	6,221	10,677	13,446	16,215	<b>21,752</b>
<b>Craftsbury</b>	<b>1.70%</b>	106	182	229	276	370

Regional <b>Residential</b> New Heat Pump Water Heaters						
Scenario	2020	2025	2030	2035	2040	2050
Baseline Scenario	388	457	460	463	466	476
CAP Mitigation	388	5,650	12,200	18,817	25,509	25,819
<b>Craftsbury</b>	<b>1.70%</b>	96	207	320	434	439

CAP Mitigation Regional <b>Passenger Car EV and PHEV</b> Stock						
Vehicle Type	2015	2025	2030	2035	2040	2050
Battery Electric	20	985	4,253	10,159	16,127	23,926
Plug In Hybrid	50	187	175	144	91	33
<b>Total</b>	<b>70</b>	<b>1,172</b>	<b>4,428</b>	<b>10,303</b>	<b>16,218</b>	<b>23,959</b>
<b>Craftsbury</b>	<b>1.53%</b>	18	68	158	248	367

CAP Mitigation Regional <b>Light Duty Truck EV and PHEV</b> Stock						
Vehicle Type	2015	2025	2030	2035	2040	2050
Battery Electric	3	1,158	6,896	16,217	24,560	33,073
Plug In Hybrid	33	122	168	161	107	40
<b>Total</b>	<b>36</b>	<b>1,280</b>	<b>7,064</b>	<b>16,378</b>	<b>24,667</b>	<b>33,113</b>
<b>Craftsbury</b>	<b>1.53%</b>	20	108	251	377	507

## Renewable Energy, Storage, Transmission & Distribution Resources

In support of the State's goal of 90% energy from renewable sources by 2050, each region in Vermont has a set of renewable energy generation targets. Generation targets can be met through a variety of renewable technologies, including solar, wind, geothermal, hydro and biomass. Because NVDA's region already generates a disproportionate share of renewables relative to our low population, the Northeast Kingdom is well on track for its contributions to the 2050 targets for renewable energy generation, based on our population and energy resource potential. See the updated NVDA Regional Energy Plan for more information about renewable energy, storage, transmission, and distribution resources relevant to Craftsbury, and specifically the "NEK Policy on the Development of Renewable Energy Resources" ([NVDA 2023 Enhanced Energy Plan, pg. 17](#)) which can be used to identify areas unsuitable for development, but more importantly guide decision-making around identified potential (and preferred) areas for renewable energy development to meet regional energy demand, reduce energy burden, and contribute to the state energy and climate goals. Underlying assumptions were made about suitability factors, such as slope and direction of land, elevation and wind speeds, and access and proximity to grid-related infrastructure.

NVDA has provided Craftsbury with maps depicting solar, wind, woody biomass and hydroelectric renewable energy potential in the Town. All maps are included in the appendix of this Plan. Based on Craftsbury population and energy resource potential, shown on the maps provided by NVDA, sufficient land has been identified to reasonably contribute to Vermont reaching its 2050 targets for renewable electric generation. For context, approximately one acre of land can host ~300-kW solar array. For rural areas, solar arrays offer positive co-benefits when combined with agriculture, also known as agrivoltaics. Additionally, siting renewable generation (possibly combined with energy storage such as a battery) in proximity to key food resources like food shelves, community gardens/fridges, grocery stores, etc. can be a way to improve access to local, more affordable, and healthier food options.

#### **Craftsbury Existing Renewable Energy Capacity & Estimated Generation:**

- **Solar** – 2,242 kW total capacity (152 existing sites: largest 150 kW; smallest 1.35 kW)
  - 3,143 MWh total estimated renewable energy generation
  - **Average system size:** 14.8 kW

#### **Craftsbury Potential Renewable Energy Generation with No State Constraints:**

- Solar – 1,341 acres (271 agrivoltaics)
- Wind – 96 acres
- Woody Biomass – 8,812 acres
- Hydroelectric – no potential

## **Transmission Constraints and Electricity Demand**

The central-west and northwestern area of the Northeast Kingdom (which includes Craftsbury) is served by a severely constrained transmission line, which already carries the significant outputs from Kingdom Community Wind and the Sheffield Wind projects. Both wind generations sites have faced transmission challenges and shut-downs, leading to financial losses to the developers and utilities. While the transmission line upgrade is a short-term fix, it is a costly one. Constraints are further exacerbated by the

reality that the area generates far more power than it consumes, leading utilities to oppose a number of recently proposed renewable projects in the area.

Ironically, our area has been highly efficient in reducing electric demand through a variety of efficiency measures. While this is in principle, good for the community and the environment, the reduced demand for electricity further hampers the financially viable development of new renewable generation.

While the short-term solution is the upgrade of the transmission line, the long-range solution is beneficial electrification, the replacement of traditional fossil-fuel sources with electricity. Fuel switching, as in the installation of heat pumps and the increased use of EVs, is critical to the reduction of greenhouse gasses and attaining energy independence.

To meet the new renewable energy portfolio requirements, utility companies and energy service providers provide incentives for fuel switching to build demand for electricity. Vermont Electric Coop, for example, is offering financial incentives to individuals who purchase EVs. Additionally, its Clean Air Program offers customized service to underserved and off-grid customers. There is a significant opportunity for Craftsbury to identify its electrification needs as incentives programs are refined and implemented.

# Appendix B: Craftsbury Community Survey Results

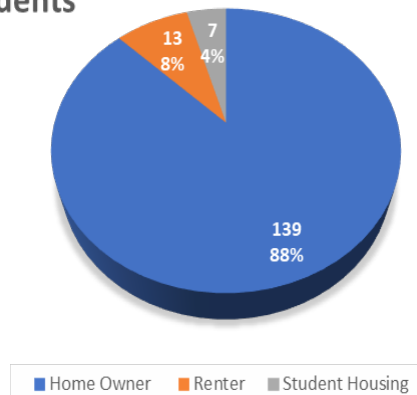
## About the Respondents

### 1. Housing and Residency Status (159 responses):

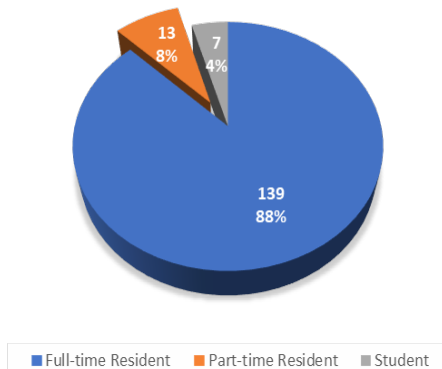
88% of survey respondents reported they own their own home, with the remaining 12% being made up of renters (8%) and students (4%). (Figure 1.1)

88% of respondents also reported to be full-time residents of Craftsbury. 77% (10) of the part-time residents stay in Craftsbury throughout the year while the other 23% (3) visit Craftsbury only during certain times of the year. Of the 13 part-time residents, 12 own their own home in Craftsbury. (Figure 1.2 and 1.3)

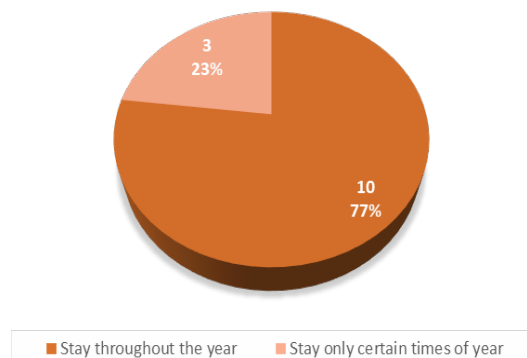
**Figure 1.1: Housing Status - All respondents**



**1.2: Residential Status - All respondents**



**1.3: Part-Time Residents**



Compared to the [previous survey](#) completed in 2015, a greater proportion of respondents in 2023 indicated that they are full-time Craftsbury residents (88%) than in 2015 (73%). The percentage of

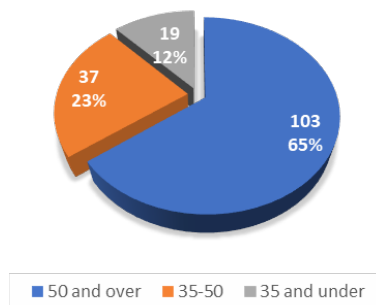
respondents reporting that they own their Craftsbury home was also greater in 2023, with 88% of respondents reporting to own their own home compared to 83% in 2015.

In regard to part-time residents, a similar proportion of respondents indicated that they visit Craftsbury year round in 2023 (77%) and 2015 (75%).

## **2. Age (159 responses):**

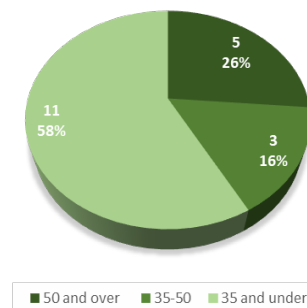
Of the 159 respondents, 103 reported being over the age of 50 (65%), 37 reported being between the ages of 35-50 (23%), and 19 reported being 35 or younger (12%). (Figure 2.1)

**2.1: Age - All Respondents**

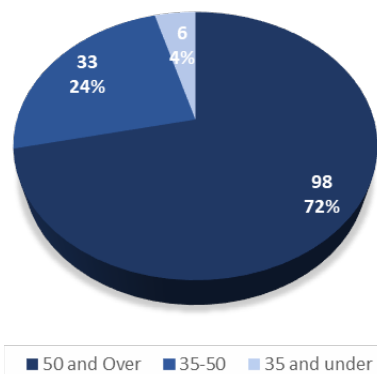


Of the respondents who identified as renters or students, 58% were under the age of 35, 16% were between the age of 35-50, and 26% were over the age of 50. (Figure 2.2)

**2.2: Age - Renters and Students**



**2.3: Age - Homeowners**



Respondents who identified themselves as homeowners tended to be older than renters and students, with 72% of this demographic reporting to be 50 or older. 24% of the remaining homeowners were between the ages of 35-50, and 4% were 35 or younger. (Figure 2.3)

The age distribution of respondents in 2023 was very similar to the age distribution from the 2015 survey, with 65% of respondents reporting to be 50 or older in 2023 compared to 66% in 2015. In 2015, 13% of respondents reported to be between the ages of 40-49, 12% reported as 30-39, and the remaining 9% were 29 or younger. Similarly in 2023, 23% of respondents were between the ages of 35-50 and 12% were 35 and under.

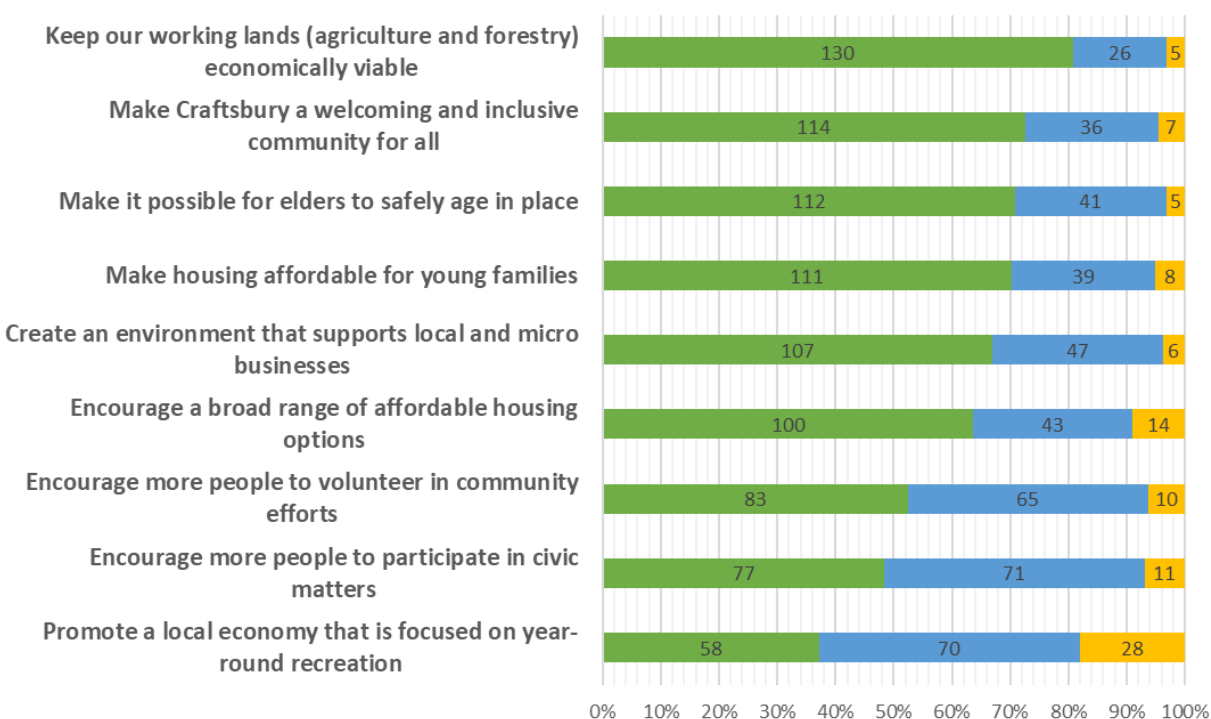
## Community and Culture

### 3. Question: Tell us about the issues that define our sense of community. Which objectives are most important to you?

■ More Important  
■ Somewhat Important  
■ Less Important

Overall, respondents were in favor of a majority of the proposed objectives regarding the Craftsbury community. Of the nine objectives, respondents showed the strongest support for keeping working lands economically viable, with 81% of responses deeming this “more important.”

Figure 3.1



Respondents also showed strong support for making Craftsbury welcoming and inclusive, making housing affordable for young families, and making it possible for elders to safely age in place, with each of these objectives receiving 70% or more of responses deeming them “more important” goals.

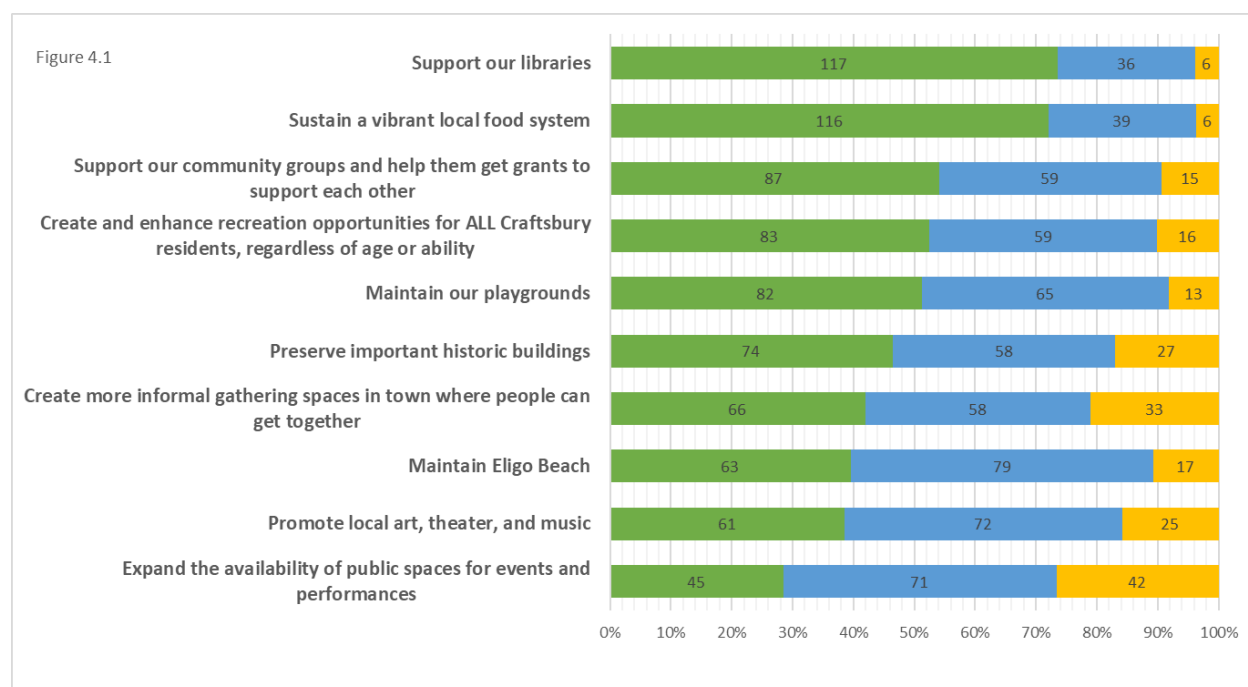
The only proposed objectives that did not receive a majority of “more important” responses were promoting a local economy that is focused on year-round recreation and encouraging more people to participate in civic matters. The year-round recreation objective received 70 “somewhat important

responses” (43%) and 28 “less important” responses (18%). Similarly, the civic matters participation objective received 71 “somewhat important” responses (45%) and 11 “less important” responses (7%).

#### 4. Question: What can we do to better support the shared values of our town?

Over 70% of respondents considered supporting the town’s libraries and sustaining a vibrant local food system to be “more important” in regard to supporting Craftsbury’s shared values.

A majority of respondents also considered support for community groups recreation opportunities, and



the town’s playgrounds to be “more important” concerns to maintain and enhance the community’s values.

Results were more evenly distributed for the remaining five categories including preserving historic buildings, informal town gathering spaces, maintaining Eligo Beach, promoting local arts, and expanding public space availability for events. In all of these cases, a majority of respondents still indicated that these areas of focus were either “more important” or “somewhat important” to Craftsbury’s values.

Respondents also indicated through additional feedback that improving and more frequently utilizing shared towns spaces as well as repairing and preserving historic town buildings were two areas that could help bolster Craftsbury’s community values.

## Land Use and the Environment

### 5. Question: What can we do to strengthen our commitment to the natural environment?

Overall, there was strong community support for initiatives regarding the environment, with all proposed goals receiving a majority of “more important” responses. Keeping lakes and streams clean and protecting the ecological function of streams and wetlands both received over 80% “more important” indications from respondents, followed closely by maintaining and protecting open lands and conserving wildlife habitats which received 75% high priority feedback.

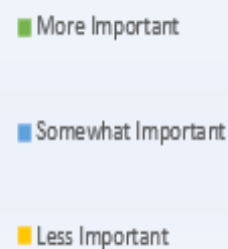
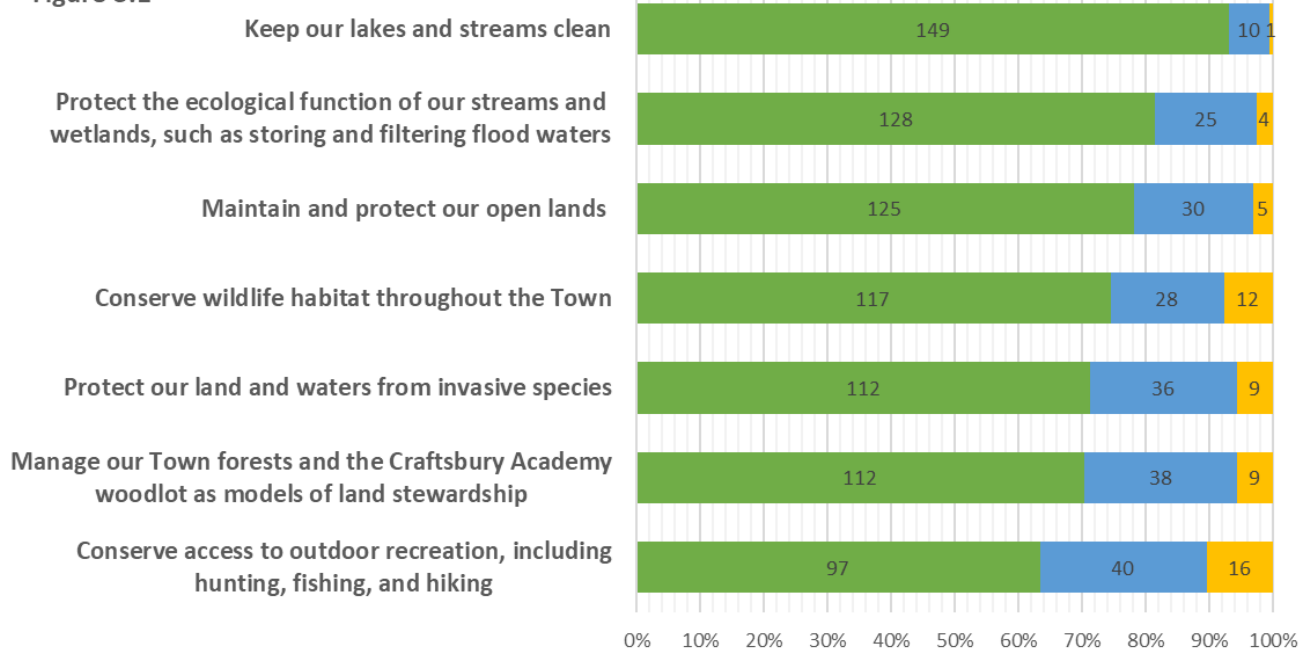


Figure 5.1



Many respondents provided additional feedback for this portion of the survey, much of which focused on hunting and trapping in Craftsbury. Opinions on this were mixed, with some respondents emphasizing the importance of hunting and trapping to Craftsbury’s culture and history, while others felt it was important to prioritize limiting or more strongly regulating hunting in the area.

Multiple respondents also emphasized the importance of responsible development and slow growth, prioritizing sustainability and renewable energy, and increasing access to Craftsbury’s natural resources via additional trails and access points to waterways.

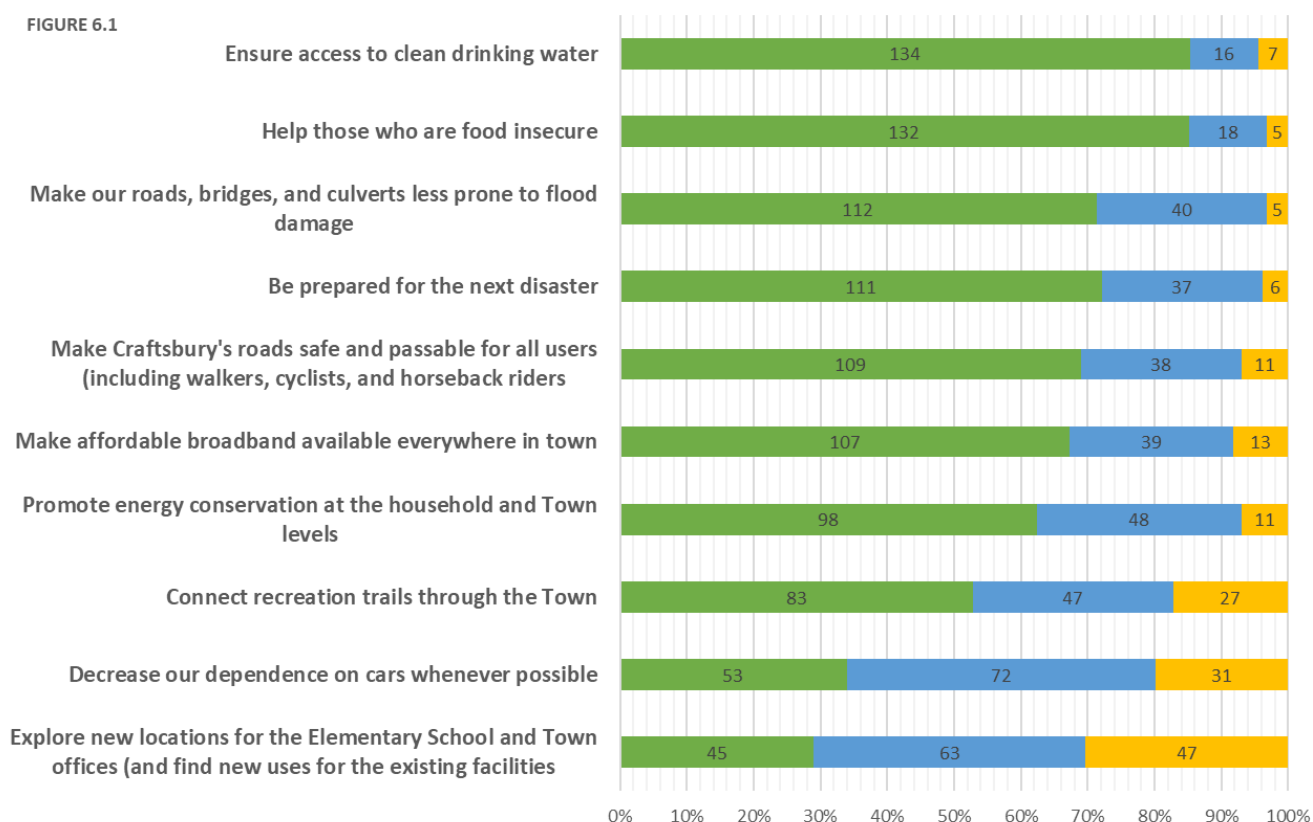
## Infrastructure and Services

6. Question: How can we better support our residents in their daily lives?

Respondents indicated that ensuring access to clean drinking water and helping

■ More Important  
■ Somewhat Important  
■ Less Important

FIGURE 6.1



those who are food insecure were the two highest priority goals, with both of these choices receiving over 80% “more important” responses. Protecting roads, bridges and culverts from flood damage and preparing for the next disaster also received overwhelming positive feedback with over 70% of all respondents selecting “more important” as well.

The only two proposed goals to receive a majority lower priority feedback were decreasing dependence on cars and exploring new locations for the Elementary School and Town Offices. These two categories received 66% and 71% “somewhat important” or “less important” responses respectively.

# Appendix C: Community Values Mapping

## Overview

In anticipation of updating the Town Plan, the Craftsbury Planning Commission hosted a Community Values Mapping (CVM) Workshop on March 20, 2024, in the Craftsbury Town Hall. The CVM Workshop is a grass-roots planning activity that has been used successfully in other communities, including Waterbury, Guildford, and Johnson. In this planning exercise participants were invited to break into smaller groups to address two basic questions:

*What places in Craftsbury do you love?*

*What do you value about these places?*

Results from the CVM may be helpful in informing future decisions, including community and land use planning and investments, and future conservation efforts.

The Planning Commission ordered pizza for everyone. More than 35 attendees from the community participated. Northeastern Vermont Development Association, the regional planning commission, helped to facilitate the event and provided wall-sized maps for analysis.

## Small Groups and Value Groups

Attendees were organized into six small groups. Each small group gathered around a wall-sized map and were asked to draw circles/polygons on the maps. The circles identified general areas of interest that were deemed important for different values. These values were identified on each map legend by color, and each map was accompanied by a set of matching pens for marking the map accordingly. The legend of value groups was pre-set to help participants get ideas about what to mark.

- Working lands: GREEN
- Community Hubs: YELLOW
- Historic Areas: BROWN
- Hunting & Fishing: BLUE
- Natural Areas: PURPLE
- Recreation: RED
- Scenic Views: ORANGE

Each small group had a facilitator to encourage conversation and pose questions. There were no right or wrong answers in this planning exercise, and the mapping exercise was simply about identifying underlying values, rather than the means to accomplish specific land use goals. Overlapping polygons were encouraged, and participants were not expected to be precise in marking locations (e.g. adhering to parcel lines or metes and bounds).

The small group mapping exercises lasted just over an hour and sparked considerable conversation. Each map had a note panel to summarize high points of the conversations that took place. At the conclusion, each group selected a representative to present their findings to everyone. Report-outs were BRIEF – limited to about 3 minutes each and were focused on the high-level findings from each group.

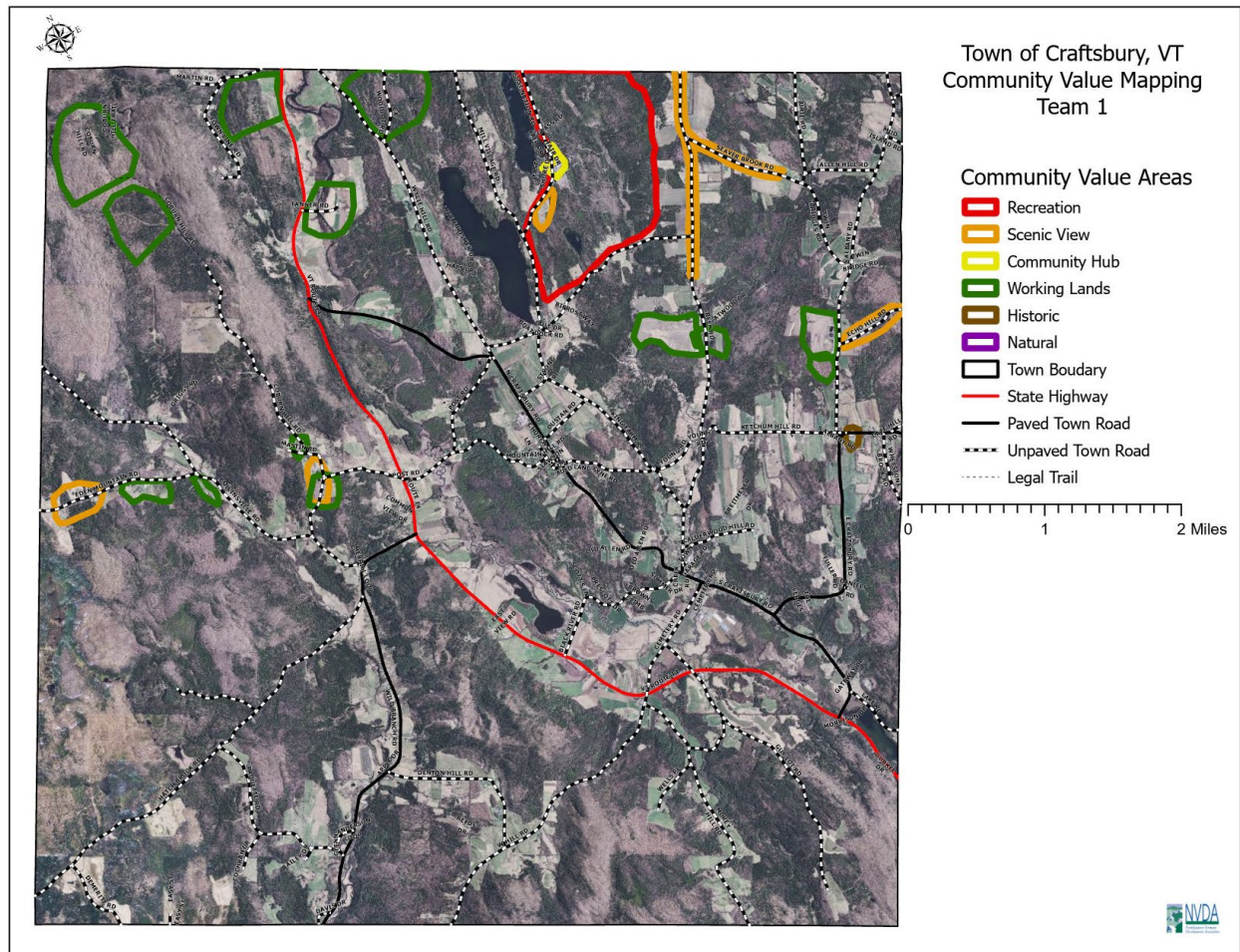
Following the event, the map results were digitized in GIS.



## Maps and Results

### Small Group Maps

The following maps show each of the small groups as digitized, along with any notes taken during the session.

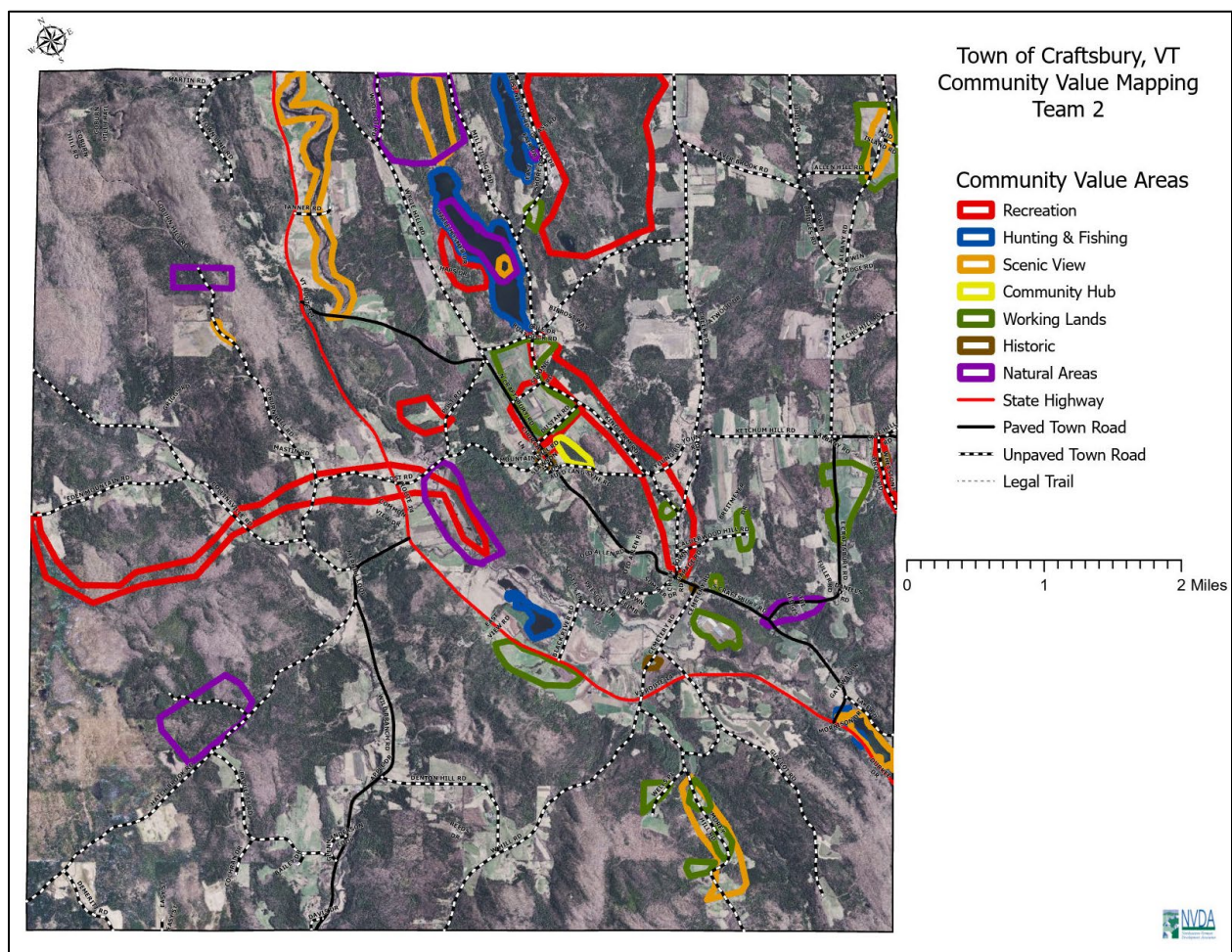


#### Team 1 NOTES

- Scenic Views (Orange) – Drawn from vantage point
- Working lands: Wild Branch; Browns Berries, Moffat’s Tree Farm; Strong Farm; Fairmont
- Community Hubs: Green space – walking trails; “Genny” + C Village Store; Common;
- Outdoor Center; Churches; Libraries
- Historic: Cemeteries; Museum; Academy
- Natural Areas: Academy Woodlot; Whetstone Brook
- Recreation: Outdoor Center: Whitney brook swim hole; Lakes
- Views (Drawn from vantage points): Creek rd.; Morey Hill rd; Echo Hill rd; West Hill rd;
- Lakes

Additional Notes (Used by presenter)

- Upper Black River, ski trail, and wood turtle habitat
- Wet stone Brook – walking and views
- Creek road – wild life and views
- The common – the people and all that goes on
- Great Hosmer – Swimming and walking
- Outdoor Center
- Cemeteries
- The brooks for their wild life, swimming, and fishing
- Farm lands
- All the events
- The gravel roads
- Working Lands



#### Team 2 Notes

- Views from the middle of Little Hosmer are amazing – all directions

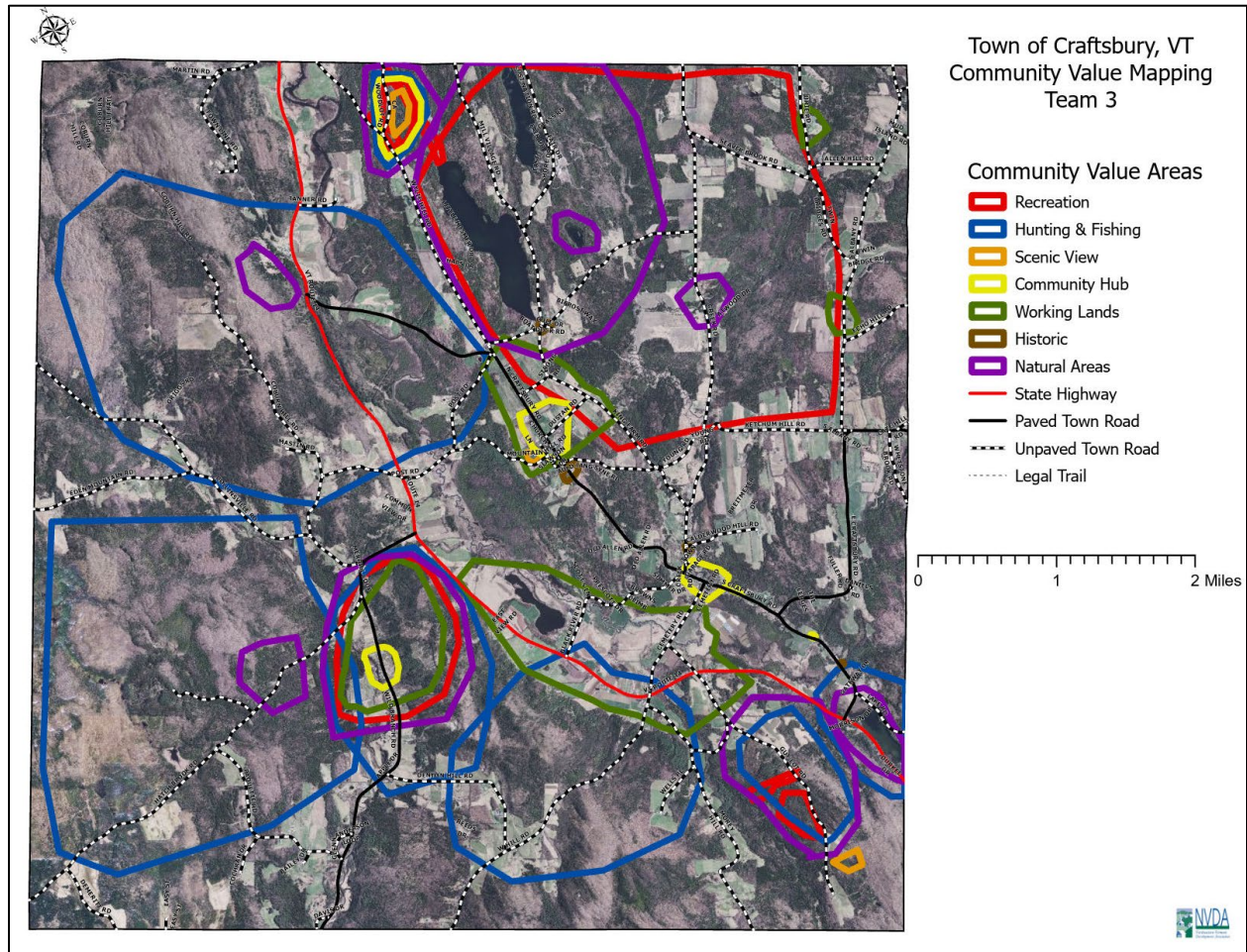
#### Dream List”

- Trail along N. Craftsbury Rd to link up to Dustan/Strong/King Farm walking loop

- Wildlife Center/Nature center for education
- Keep King Farm Rd dirt for a quieter path to common

#### Additional Notes

- Dust mitigation on popular back roads/unpaved roads where many in the village walk for recreation. Plantings? On road sides...
- Town-owned property behind town garage – Cedar Woods represents (small) forested public land – rare in the village – wildlife, possible quiet refuge for village folks.



#### Team 3 Notes:

- Village Hub: General Store, Post Office
- Common Hub: Library, Common, Sterling
- Neighborhoods are so important
- Trails are significant (community hub + a way to travel)
- Scenic: Hatch Brook Town Forest
- Foraging in natural areas
- Working Lands – appreciate them in general
- \*white Pines (symbol of transition)

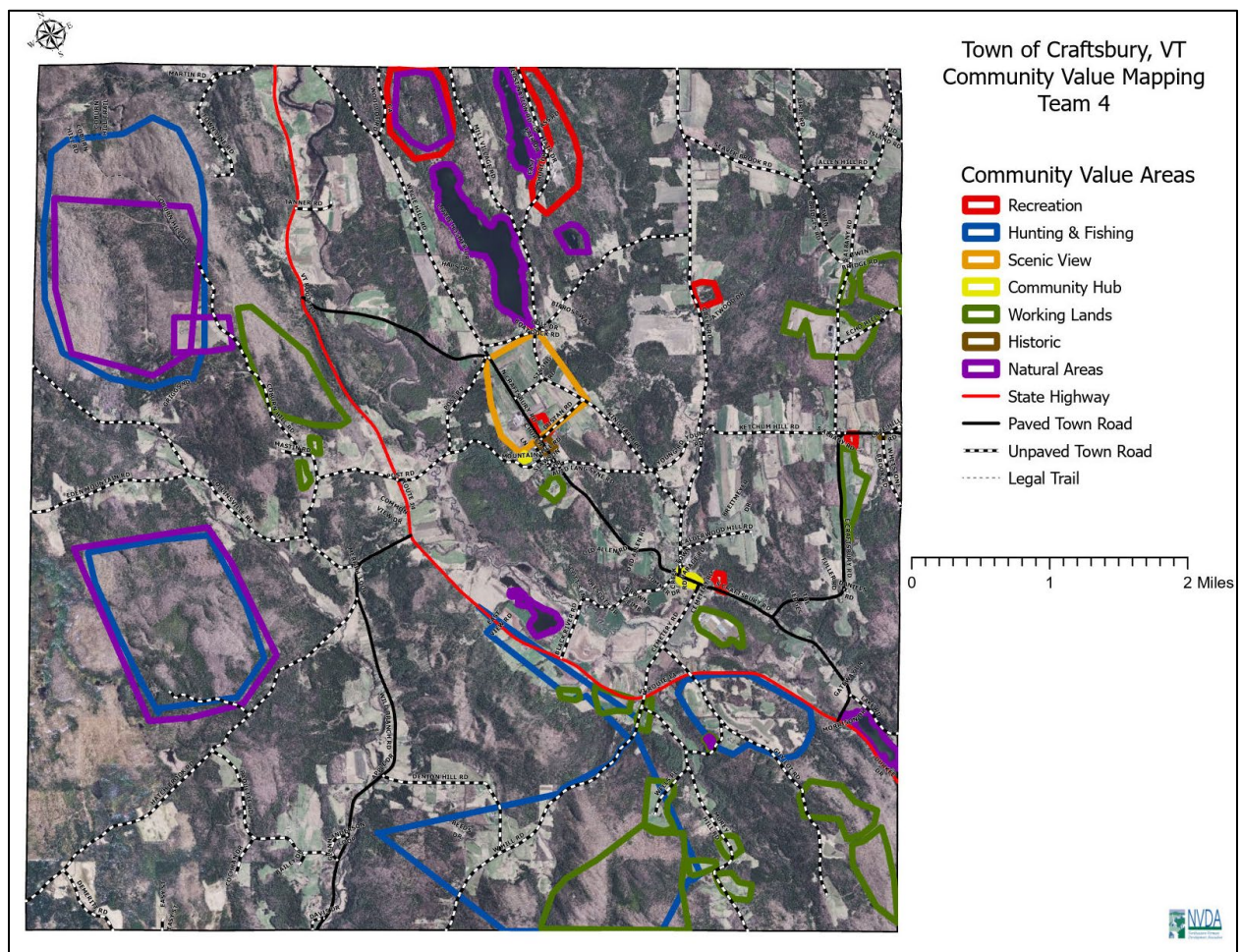
- \*Red Oak
- \*Red Pines
- \*Tamaracks
- \*No White cedar swamps

#### Additional Notes (“Themes”)

- Natural Areas + Habitat very important to group
- Highlighted animals
- We talked about our backyard
- Town forest + school woodlot
- Hunting + fishing important
- Multiple values from all of us in school woodlot

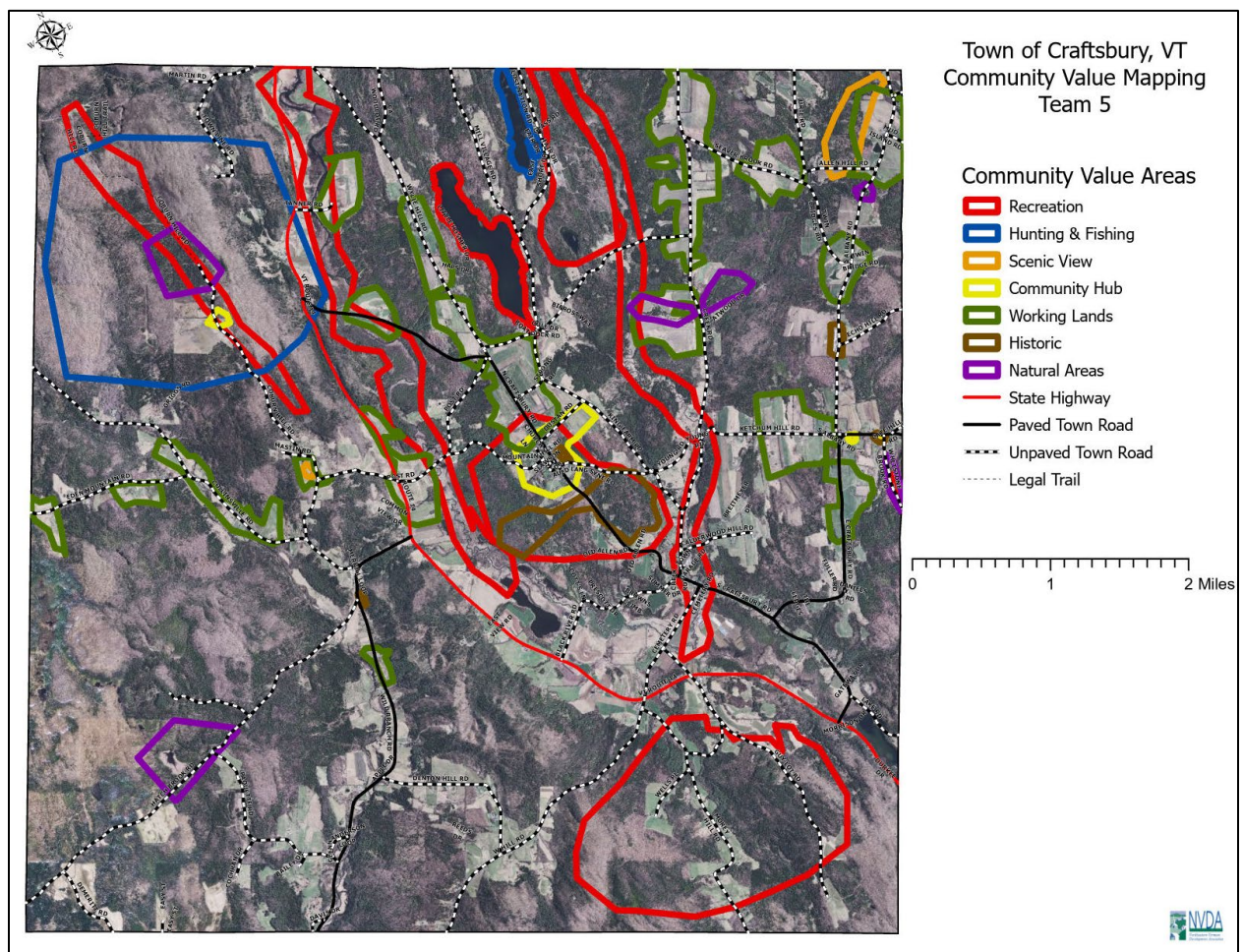
HUBS: Mill village, E Crafts., Common, Village

We like to enjoy spaces along + in groups



#### Team 4 Notes:

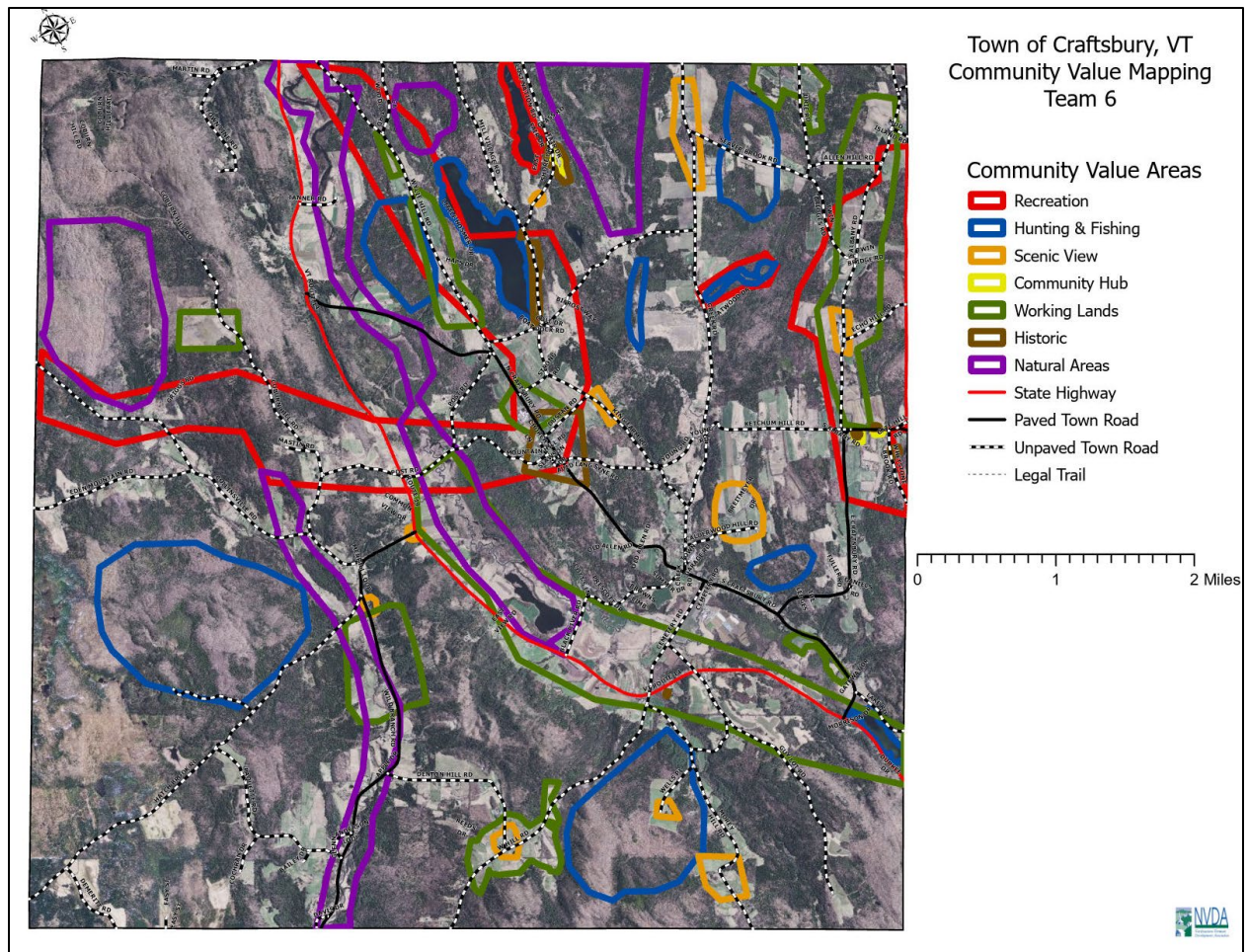
- Community sharing 'open land' between neighbors
- Black River Watershed
  - Recreation area
  - Natural area
- Craftsbury outdoor center
  - Trail access
- Craftsbury common – Community hub
- Craftsbury Village – Community hub
- Value of quieter dirt roads
- Open fields = Working lands; scenic views
- Public concern – wastewater management as population increases
- Potential Land for 'renewable energy' solar fields



## Team 5 Notes

- All current farm land
- We value unposted land
- Former Sterling land
- Trail network private land owner agreement
- Catamount trail agreement
- Village ski trail
- What % of land is open for hunting?
- Vast trail
- Logging, Christmas tree farm, sugaring, dairy farm, Ag land
  - Working lands as the backdrop

(Working lands as a general backdrop was a recurrent comment throughout the process. Some of the working groups stopped attempting to map all the working lands in the community because they were too vast!)



#### Team 6 Notes:

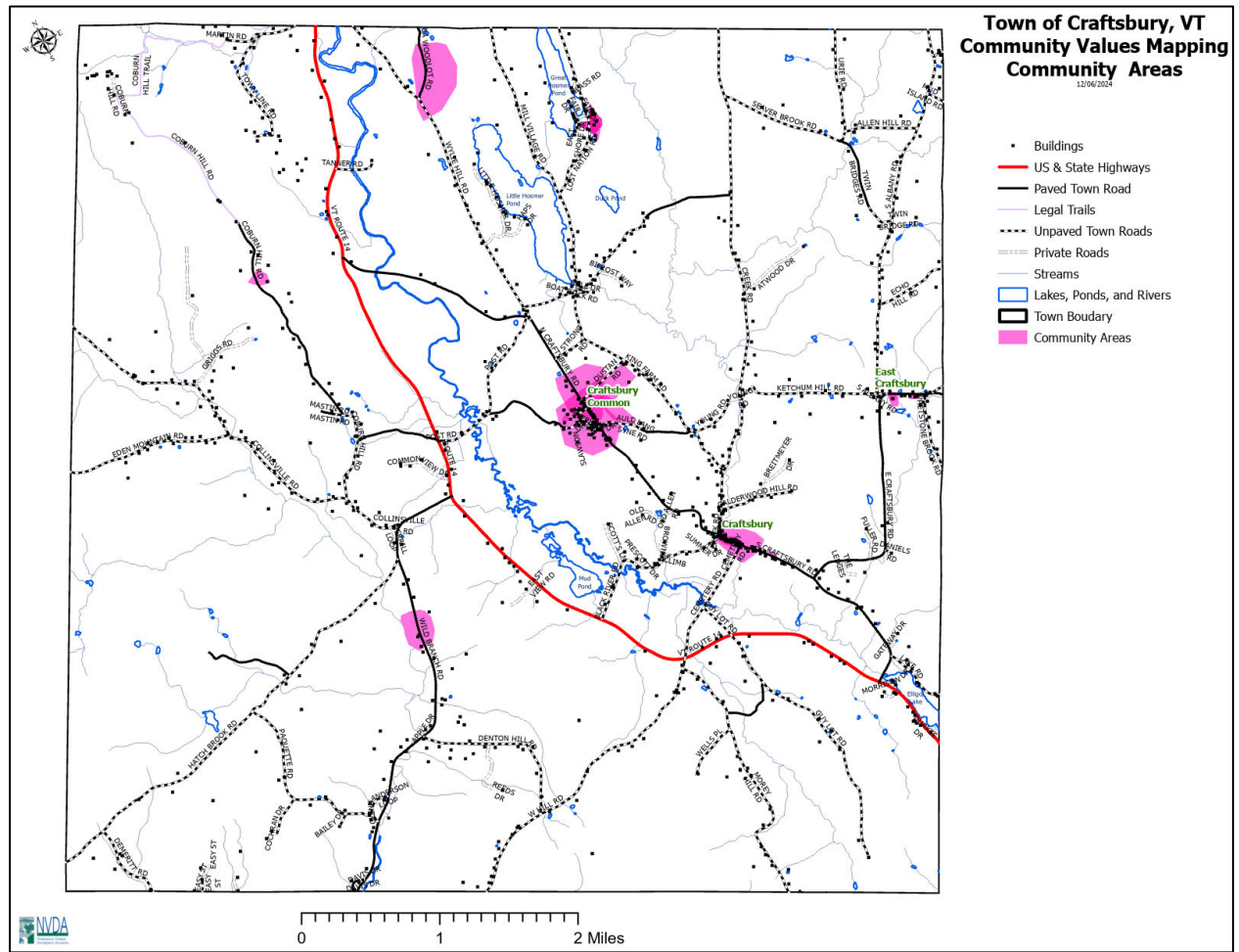
- Dunbar House – oldest in Craftsbury
- Community Hubs
  - Libraries
  - Village
  - Common
  - E. Craftsbury
- All fields = working lands, effectively, Sugar bush too; xmas trees
- Airport on Wylie Hill
- Trails connect communities in winter but not non-snow months

#### Results by Value Group:

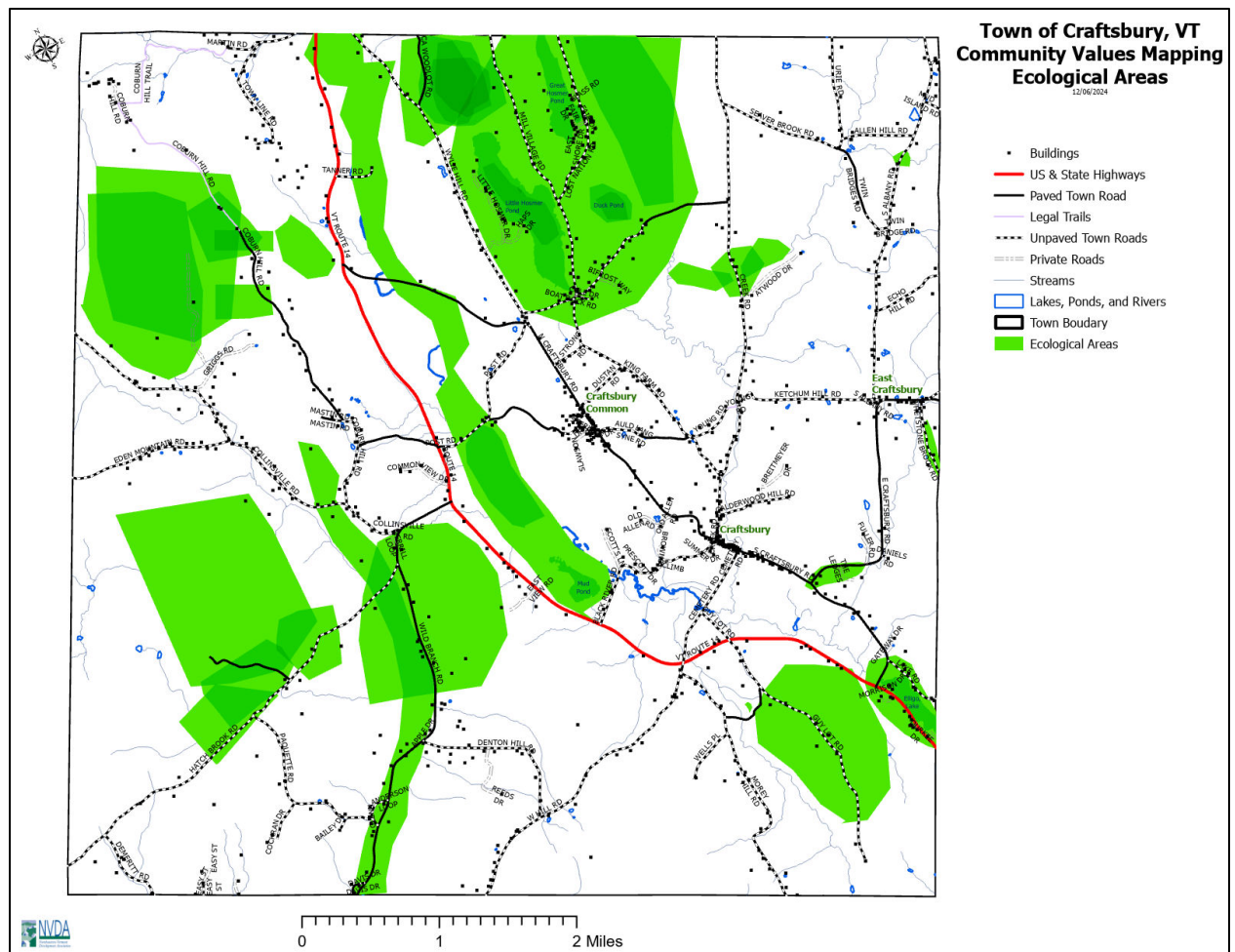
The following maps show each of the value group maps as digitized, including inputs from all of the small groups. Please note that a “Working Lands” Values map was not generated because participants felt that

they were present town-wide. The darkest areas on the maps show greatest concurrence among the small groups.

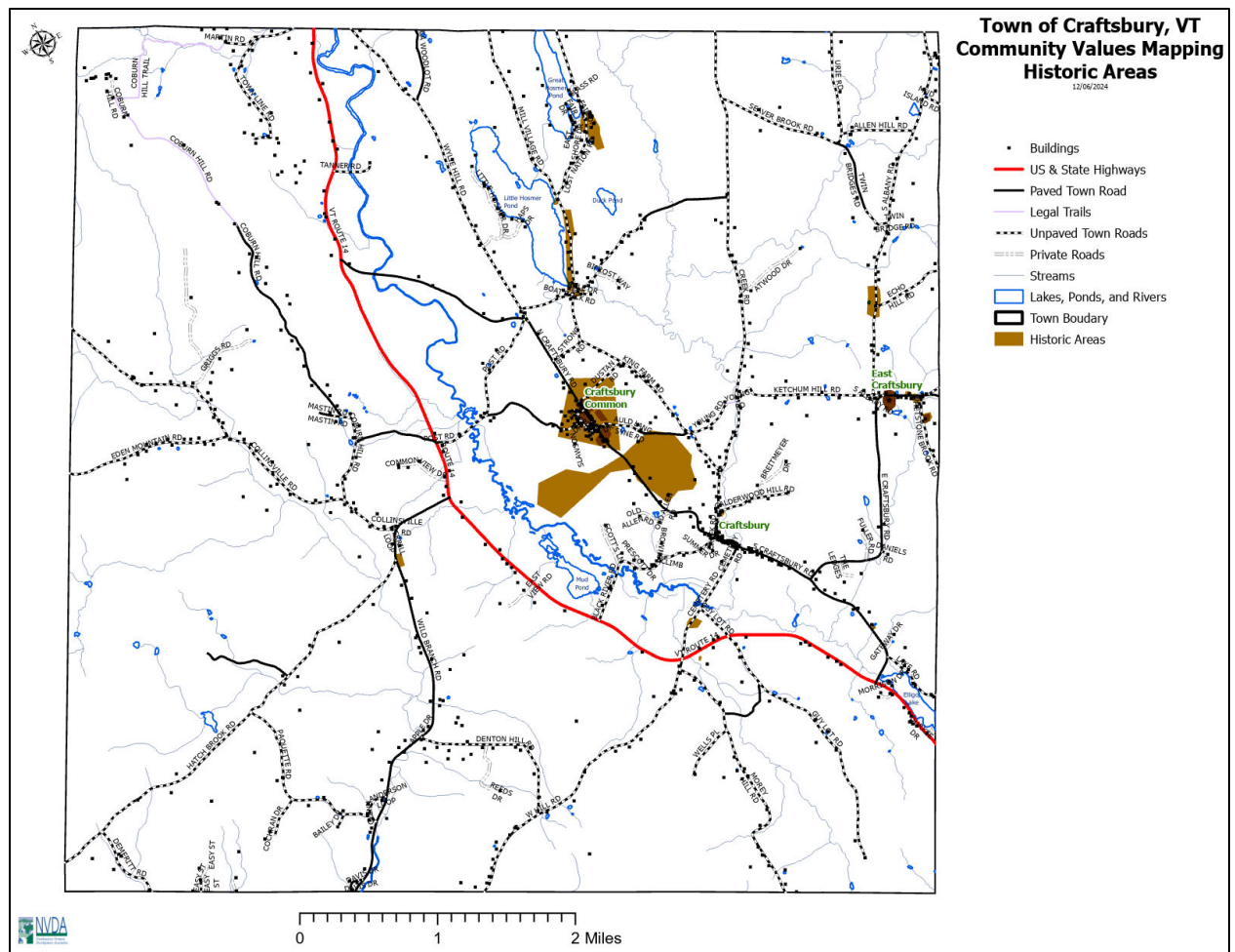
### Community Hubs Map



## Natural Areas/Habitats



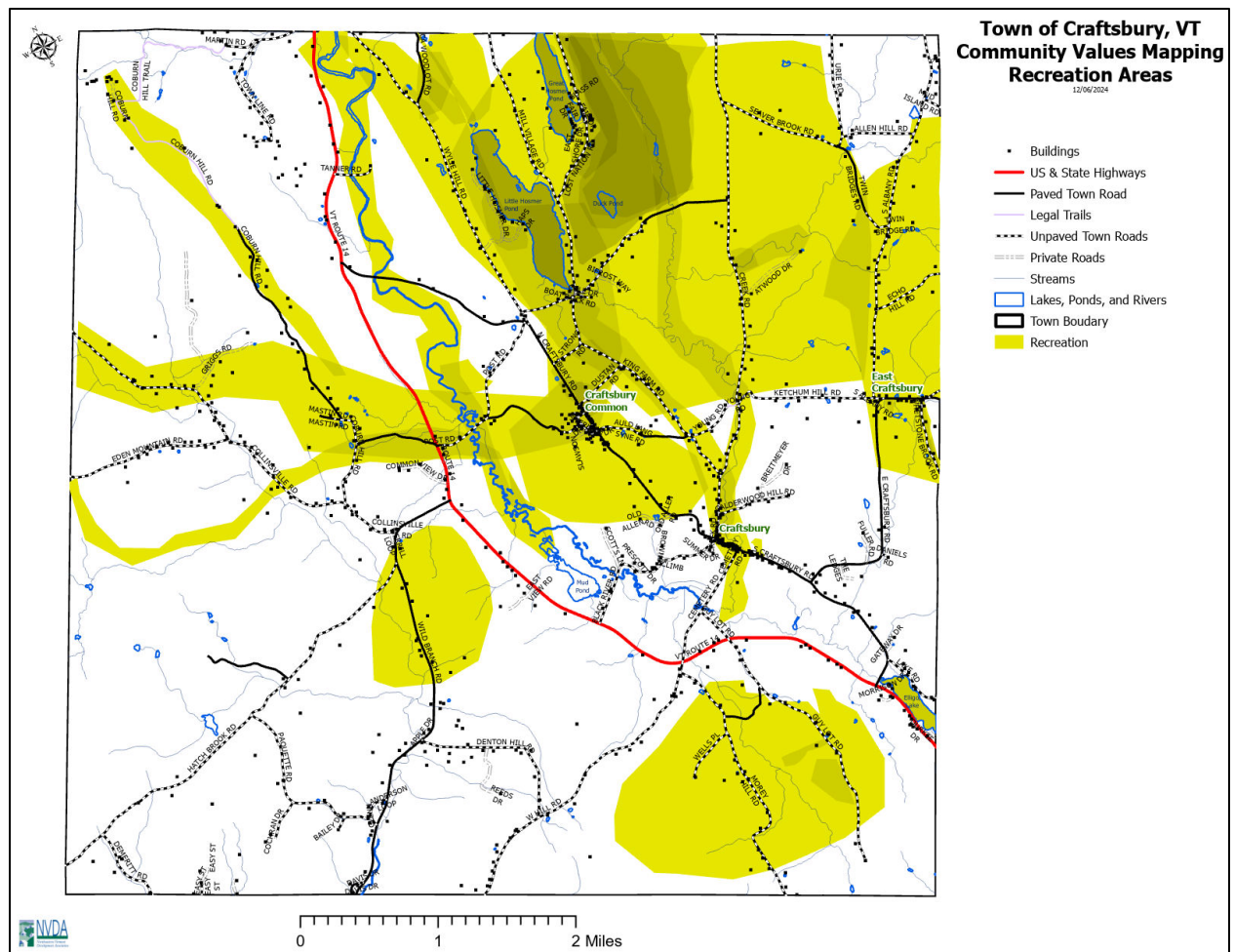
## Historic Areas



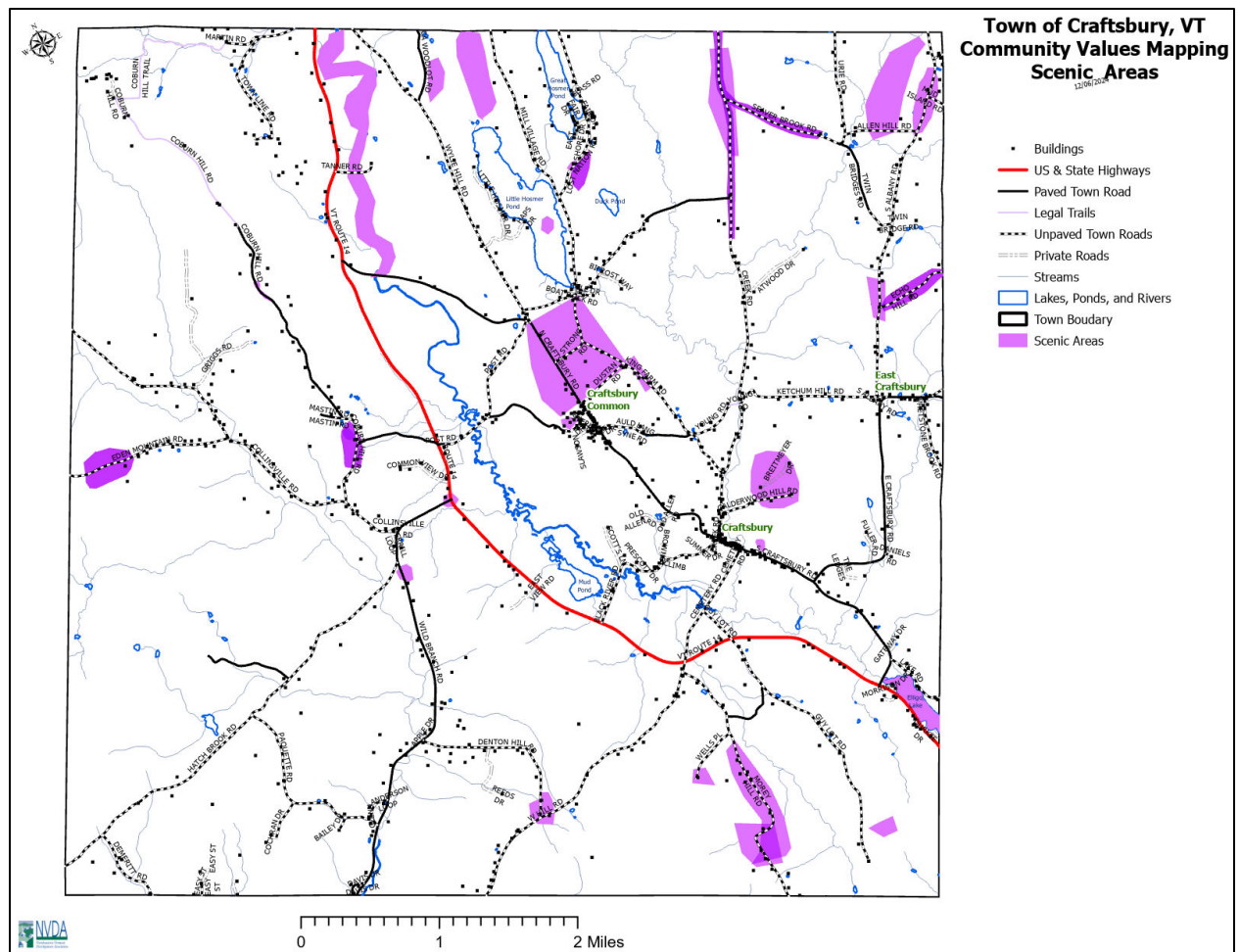
## Page 92



## Recreation

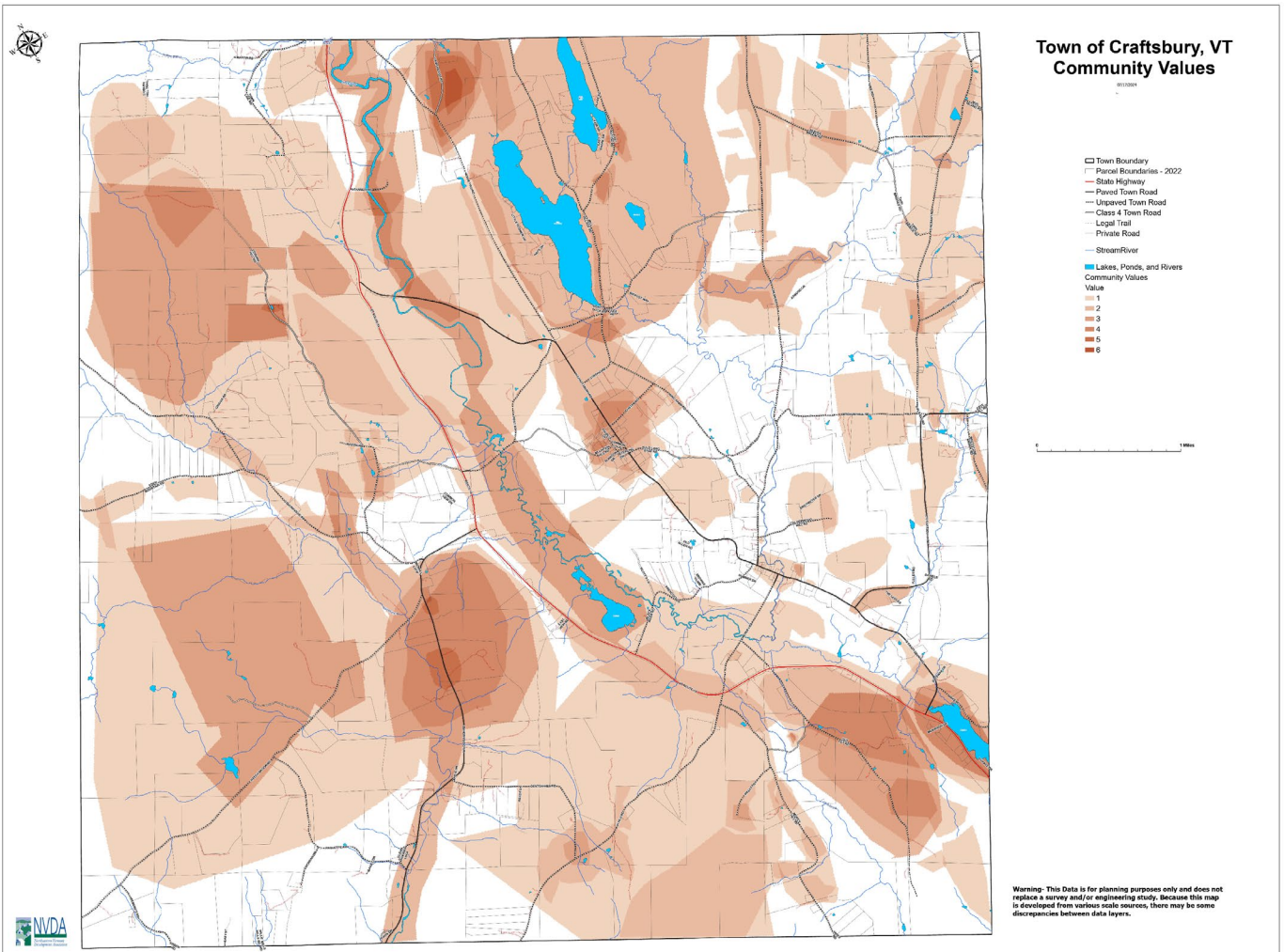


## Scenic Areas



## Overlapping Values Map

Each value group (e.g. “recreation” or “scenic area”) combines results from ALL of the small group maps, seven value groups in all. The following shows an overlap of these seven value groups, ranging from 0 to 6, with 6 being the highest degree of overlap. These do NOT refer to a particular value group. Rather they show the number of value groups overlapping at that location. To determine which values are present at that location, refer to the Results by Value Group maps.



Overlapping value groups are not necessarily good or bad. They simply show that a particular location is important for a variety of reasons. When thinking about any of these overlapping locations, it is necessary to understand the particular suite of value groups present in any location to understand the implications they may have for land use planning or other community objectives. For example, a forested area that shows recreation, hunting and fishing, and scenic values at the same location suggests that it meets a variety of community needs and may be unsuitable for other uses such as commercial development. However, a location that shows recreation and hunting and fishing values might point to potential conflicts, such as mountain biking and hunting occurring at the time, which is potentially dangerous. Furthermore, even areas that reflect only one value group might still be so important to the

community that other uses might not be welcomed by the community there. So, overlapping value groups alone don't describe the level of importance of any one location.

# Appendix D: Regional and Local Future Land Use Mapping Categories

## Future Land Use Categories

A longstanding statutory requirement of a duly adopted municipal plan is a “land use plan, which shall consist of a map and statement of present and prospective land uses.” Our proposed land use map is informed by the mapping methodologies developed by the regional planning commissions in response to Act 181.

Land Use Category	How it’s described in statute	How it was developed
Hamlets	These are small historic clusters of homes, and perhaps a public building. They are not planned for significant growth, and they don’t have public water or wastewater systems.	These are identified as points on a map. While the regional map generally looks for clustered settlement areas with eight structures or more, we felt that Collinsville, in addition to Mill Village, should be identified as a hamlet on Craftsbury future land use map.
Village Centers	These are vibrant, mixed-use centers that bring together community economic activity and civic assets.	We included all the existing areas all designated as Village Centers (Craftsbury Village, East Craftsbury, and Craftsbury Common). Because the original designations followed fairly restrictive boundaries, we added immediately adjacent areas that could also be identified as part of traditional settlement areas. (We used historic district maps in the state historic register to confirm this.)
Resource Based Recreation Areas	Large-scale resource-based recreation facilities that are often concentrated around ski resorts, lakeshores, or <i>concentrated</i> trail networks, which provide infrastructure, jobs, and housing to support recreational activities.	We felt that the Outdoor Center met this description, especially because they have dining and lodging facilities.
Rural Agriculture/Rural Forestry	Blocks of forest or farmland that sustain resource industries,	For forestry, this layer was originally developed land cover

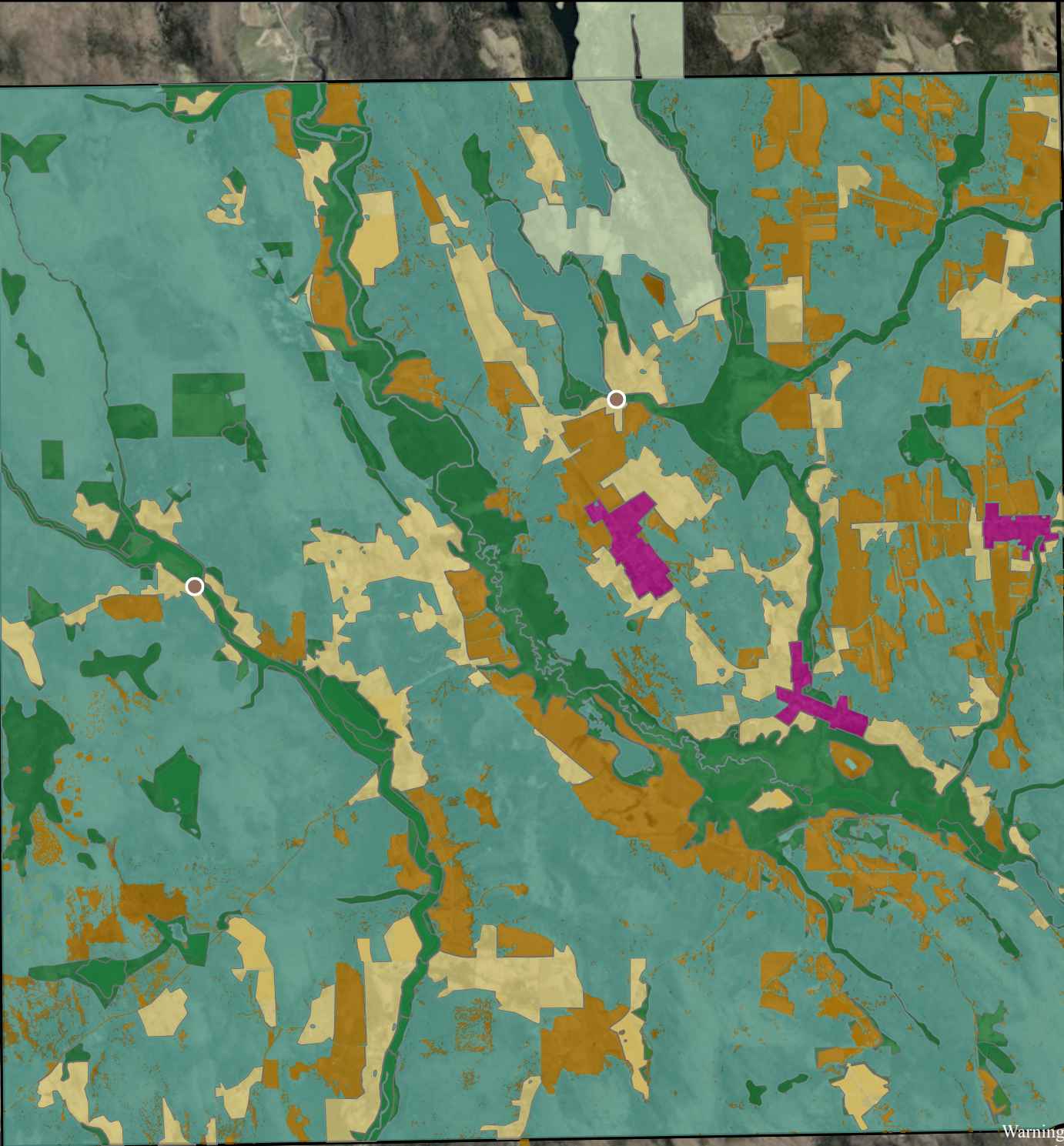
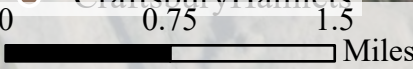
	provide critical wildlife habitat and movements, outdoor recreation, aquifer recharge, and scenic beauty, and contribute to economy and quality of life.	data from UVM. For agriculture this layer was developed by using farm parcels from the grand list that contained enrolled lands as of 2022. While this layer appears as a single layer in the regional plan, we felt that our land-based economy was significant enough to develop as separate layers. We also added hayfields to the agricultural layer.
Rural Conservation	These are areas that intended to be conserved, either with regulations or State or non-profit purchase of development rights. These lands have significant ecological value, and require special protection due to their uniqueness, fragility, or ecological importance.	This map includes highest priority interior forest blocks, highest priority connectivity blocks, class 1 and 2 wetlands of 5+ acres, Zone 1 source water protection areas, and mapped flood inundation and erosion areas. Conservation easements or restrictions are not included in this layer because conservation easements are meant to continue the underling working-lands use. For example, farms with conservation easements would be included in the Rural Agricultural layer.
Rural General	These are areas that promote the preservation of Vermont's traditional working landscape and natural area features. This area comprises the balance of rural areas that are neither sensitive natural areas nor working lands.	This area is characterized by low-density residential development, as well as limited commercial development that would be considered <i>compatible with</i> productive lands and natural areas.

# Craftsbury Future Land Use

May 2025



- Village Centers
- Rural General
- Rural Conservation
- Recreational Areas
- Agriculture
- Forest
- Town Boundary
- Craftsbury Hamlets

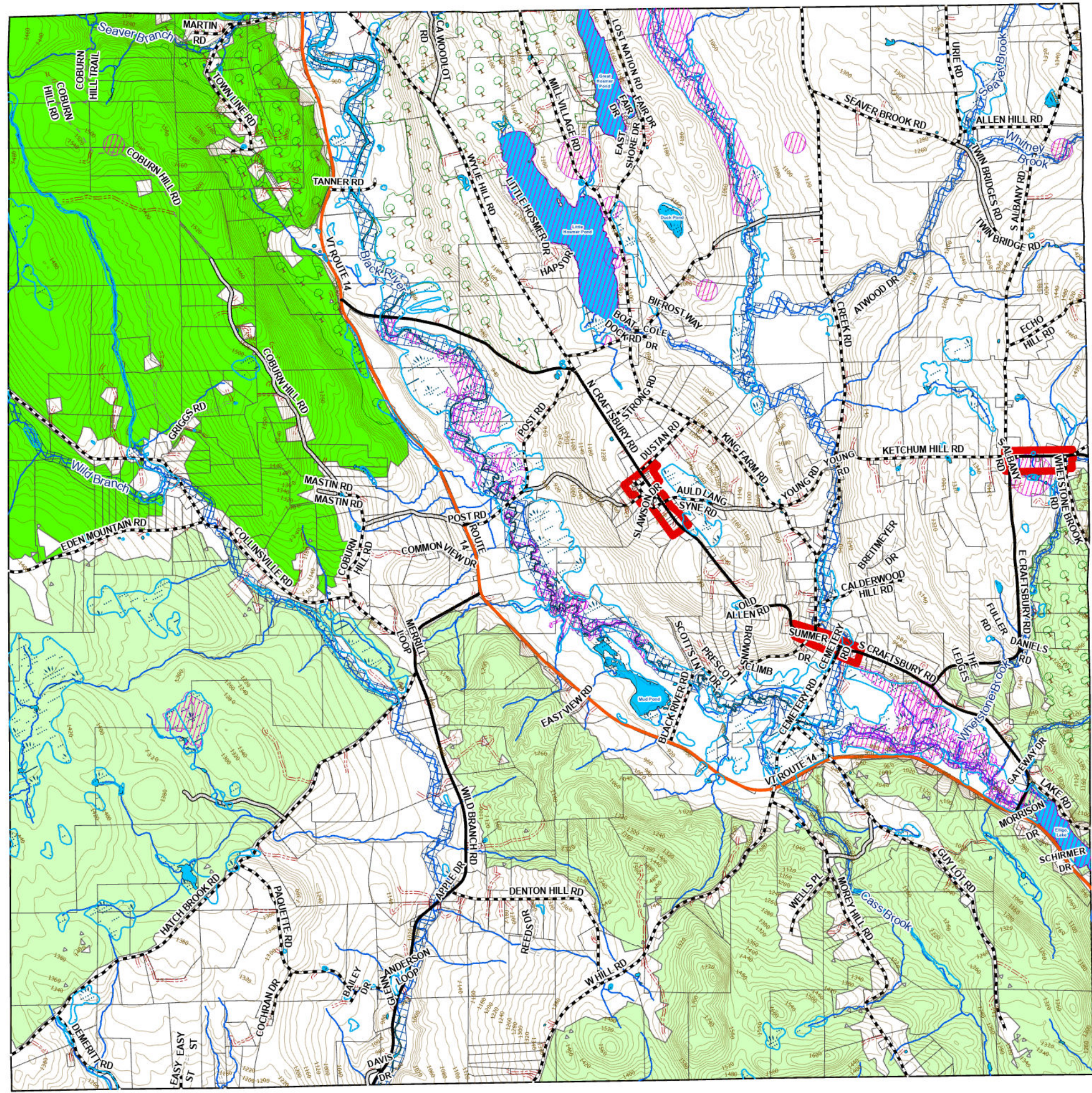


Warning: This data is for planning purposes only and does not replace a survey or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.

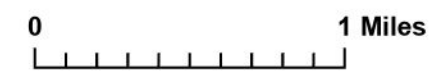


# Town of Craftsbury, VT Natural Resource Constraints

10/17/2023



- Town Boundary
- Parcel Boundaries - 2022
- State Highway
- Paved Town Road
- Unpaved Town Road
- Class 4 Town Road
- Legal Trail
- Private Road
- Stream/River
- Lakes, Ponds, and Rivers
- 20' Interval Elevation Contours
- Interior Forest Blocks
- Connectivity Blocks
- Deer Wintering Areas
- Rare/Threatened Species/Habitat
- River Corridors
- Designated Village Centers
- Wetlands



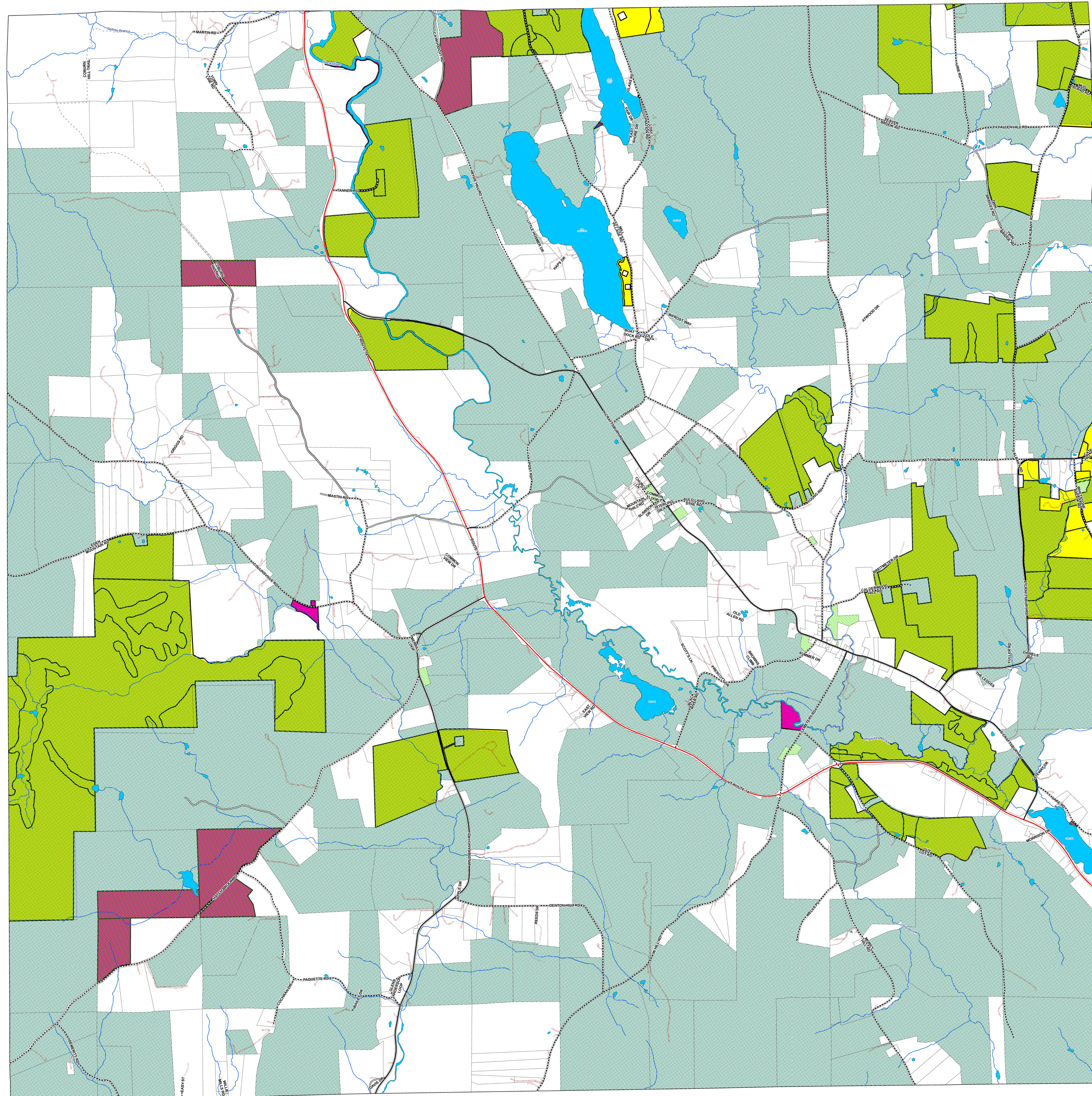
**Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.**





# Town of Craftsbury, VT Conserved Lands

10/17/2023



- Town Boundary
- Parcel Boundaries - 2022
- Protected Lands
- Other entities
- Land Trusts
- Town Land
- Current Use Lands - 2022
- State Highway
- Paved Town Road
- Unpaved Town Road
- Class 4 Town Road
- ... Legal Trail
- Private Road
- Stream/River
- Lakes, Ponds, and Rivers

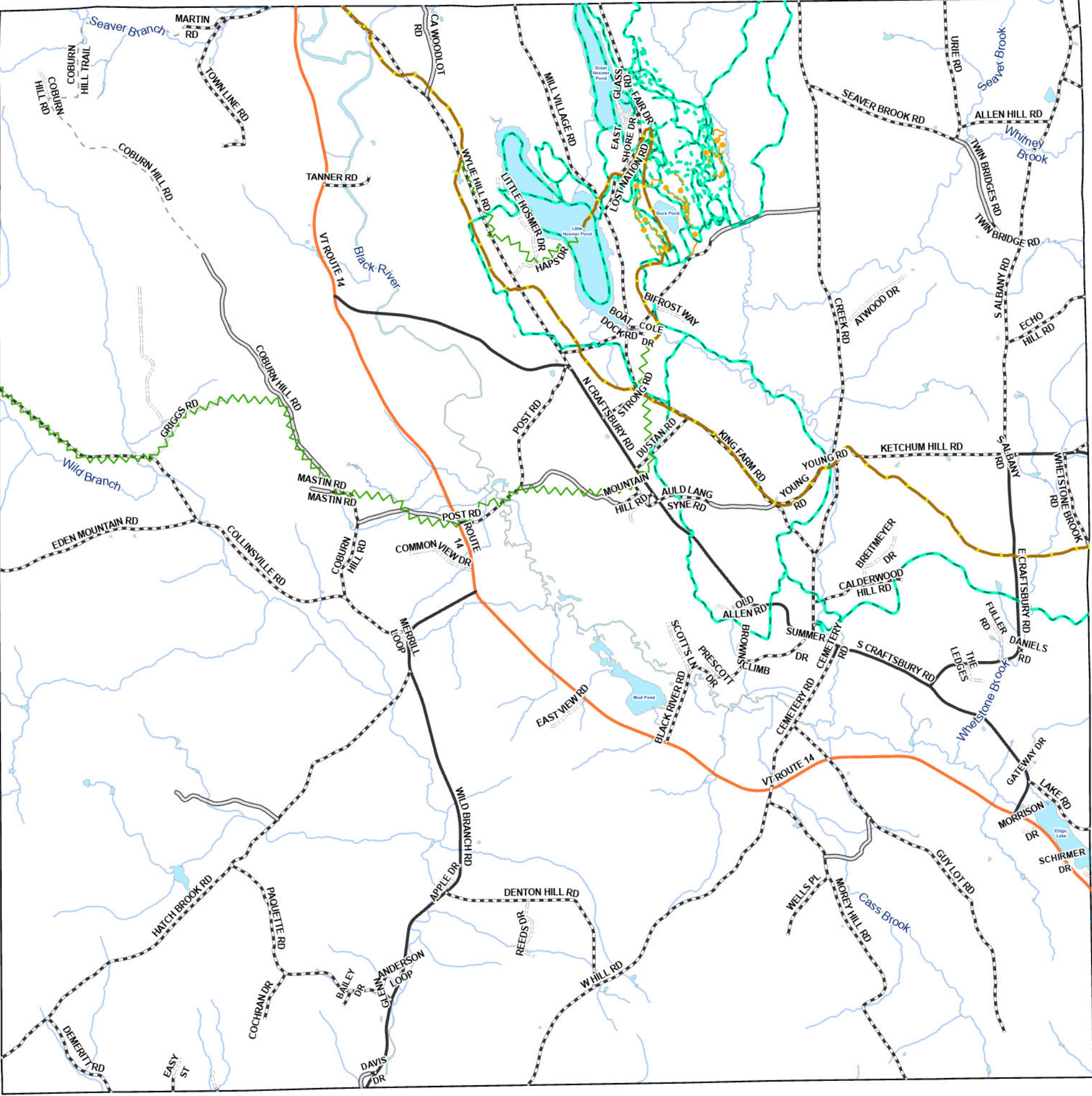
0 1 Miles

Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.



Town of Craftsbury, VT  
Transportation Map

08/29/2025



- Town Boundary
- State Highway
- Paved Town Road
- Unpaved Town Road
- Class 4 Town Road
- Legal Trail
- Private Road
- Stream/River
- Mountain Bike Trails
- Cross-country Ski Trails
- Snowshoe Trails
- Catanount Trail
- VAST Trails

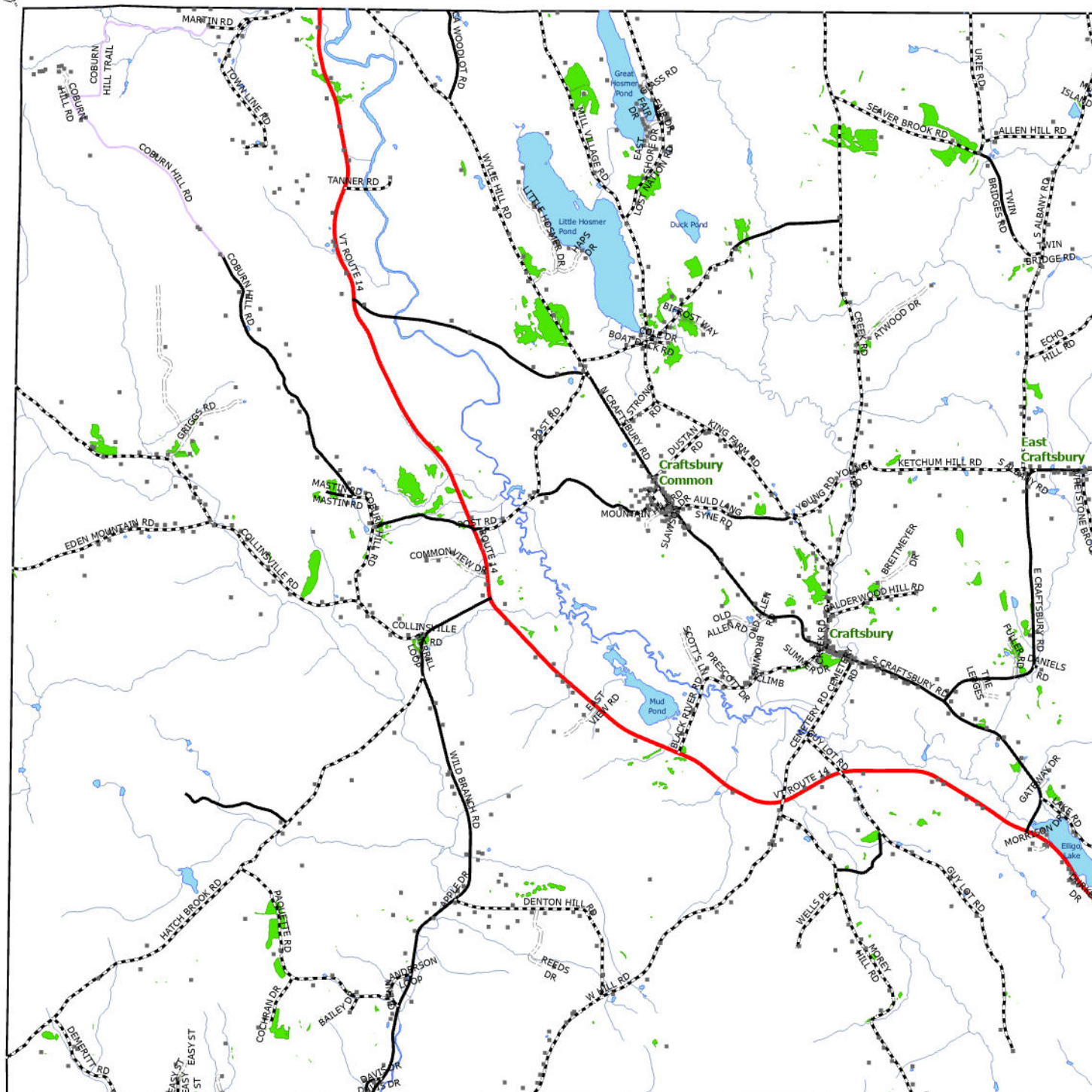


Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.



# Town of Craftsbury, VT Agrivoltaic Potential Map

12/06/2024

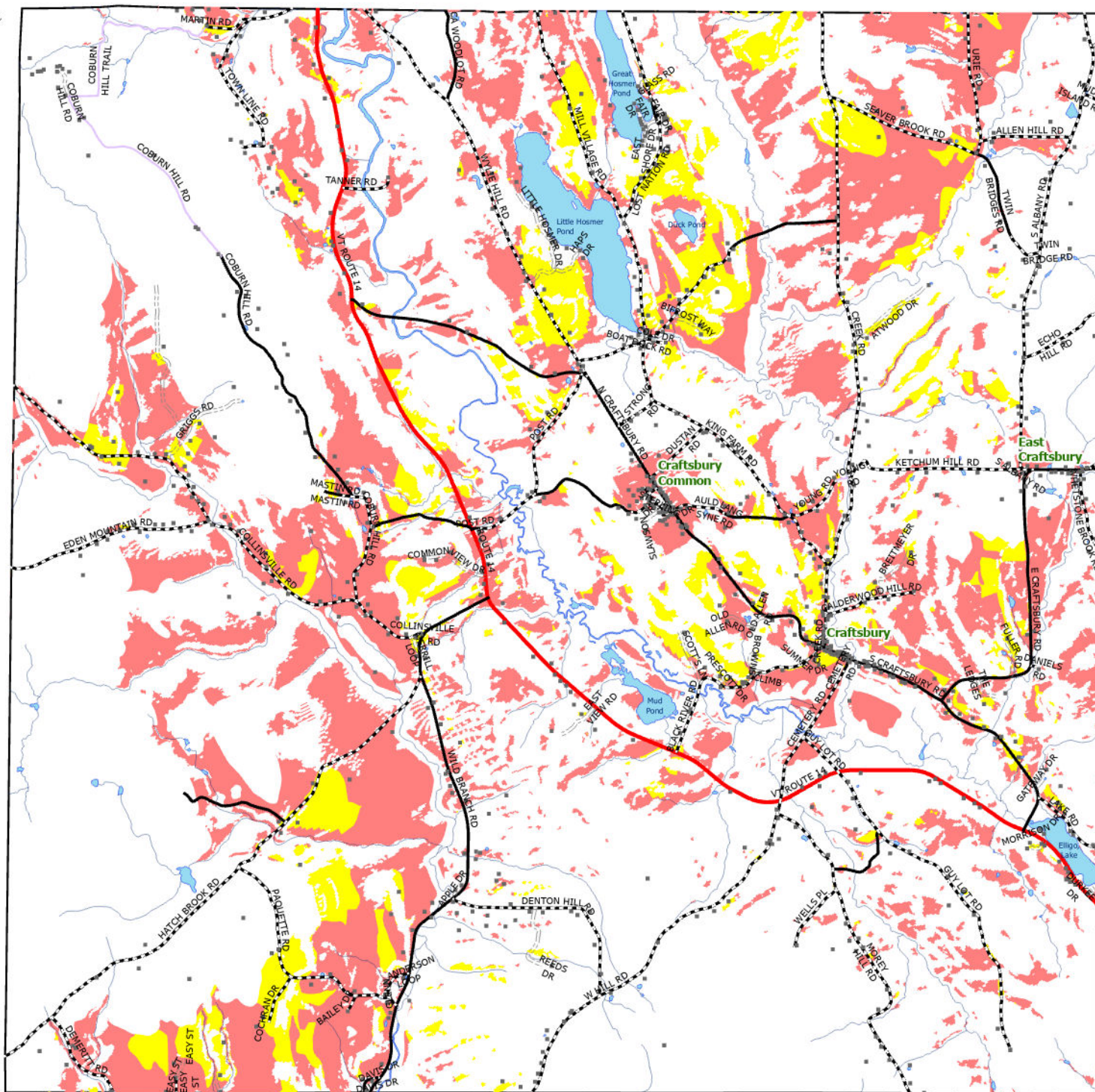


- Buildings
- US & State Highways
- Paved Town Road
- Legal Trails
- - - Unpaved Town Roads
- - - Private Roads
- Streams
- Lakes, Ponds, and Rivers
- Potential Agrivoltaic Areas (271 acres)



# Town of Craftsbury, VT Solar Energy Potential

03/06/2025



- Buildings
  - US & State Highways
  - Paved Town Road
  - Legal Trails
  - Unpaved Town Roads
  - Private Roads
  - Streams
  - Lakes, Ponds, and Rivers
- Prime Solar Energy Generation Areas**
- No State Constraints (1,341 acres)
  - Possible State Constraints (4,809 acres)



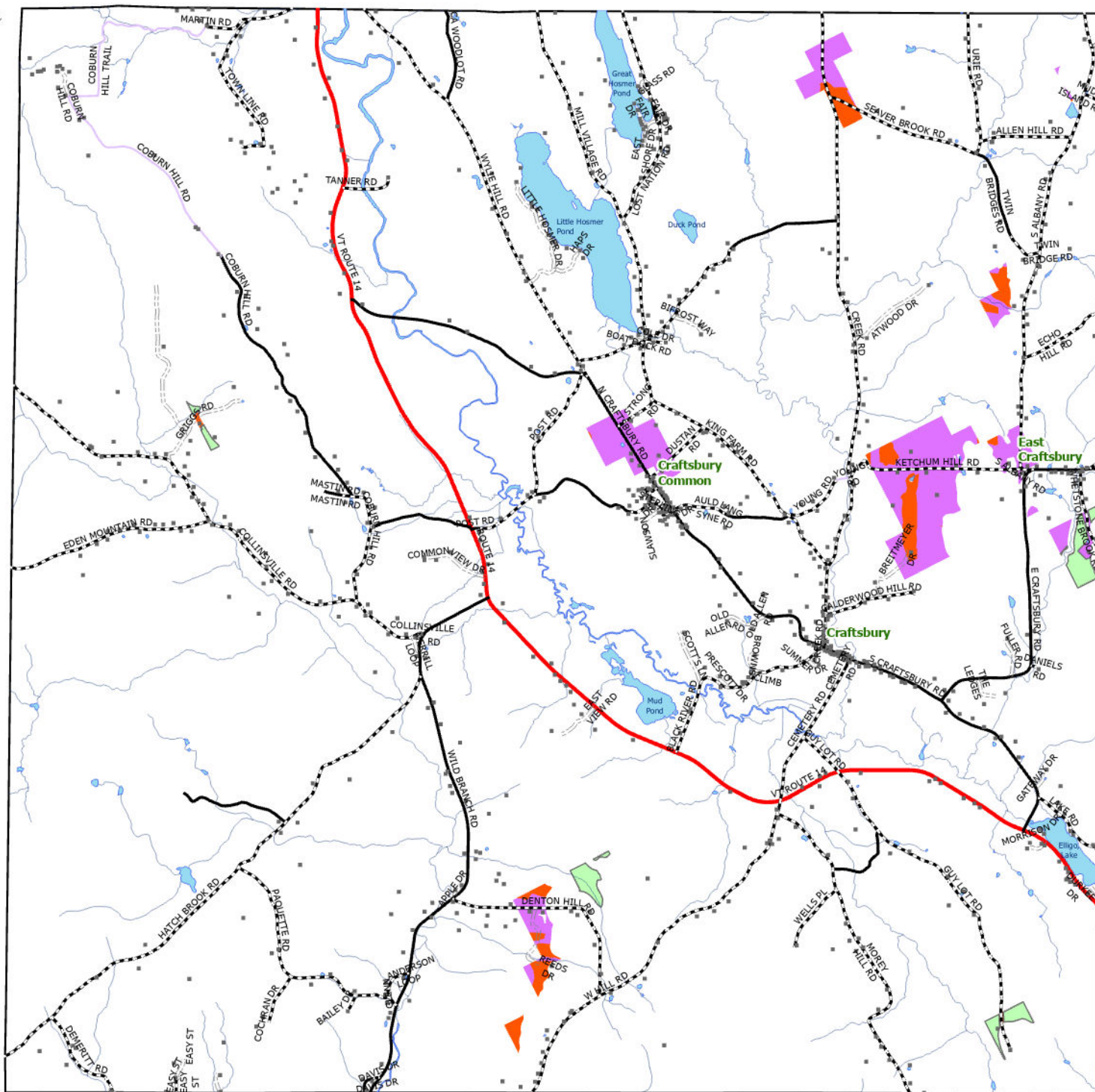
0 1 2 Miles

Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.



# Town of Craftsbury, VT Wind Energy Potential

03/06/2025



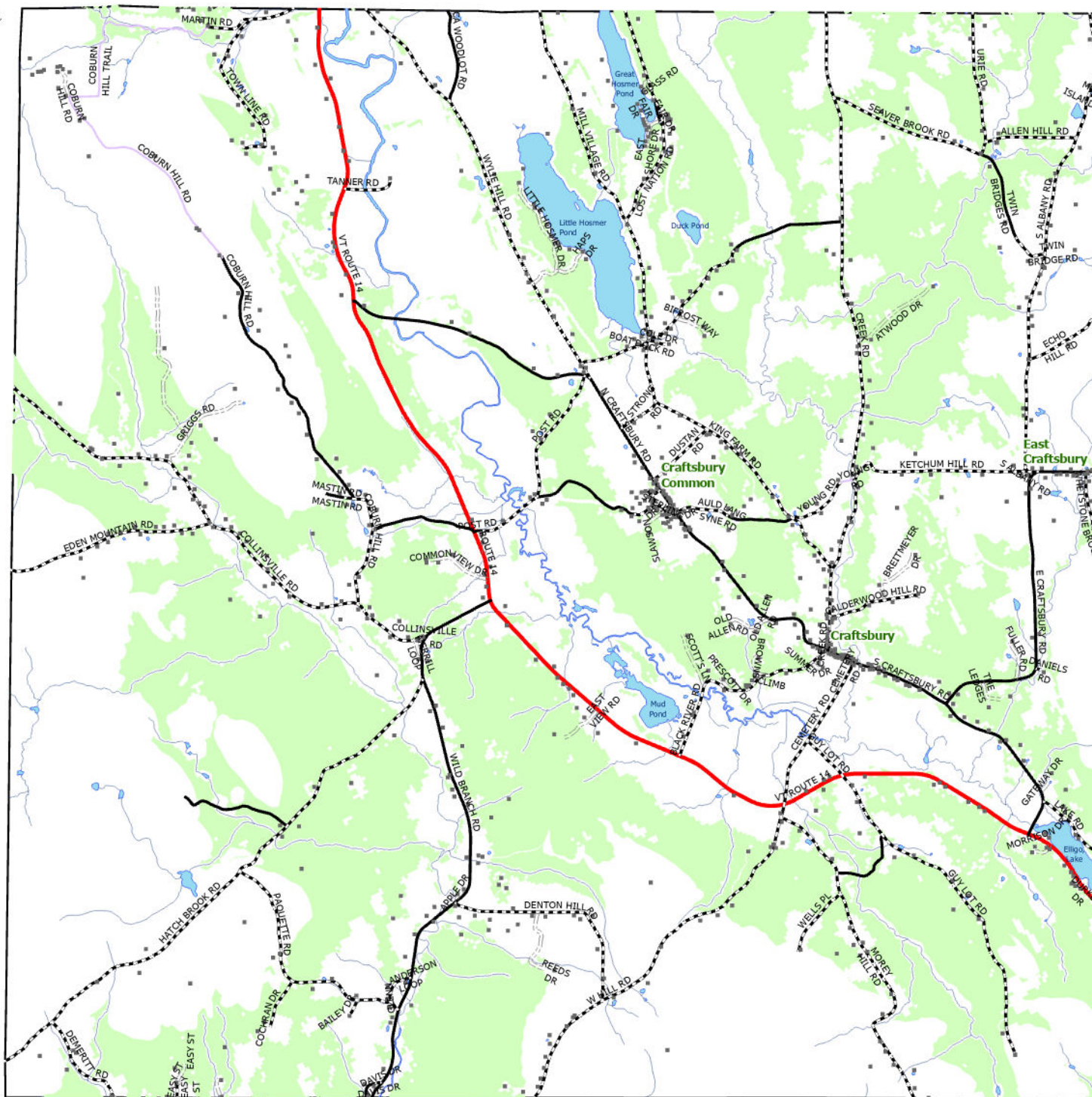
- Buildings
  - US & State Highways
  - Paved Town Road
  - Legal Trails
  - Unpaved Town Roads
  - Private Roads
  - Streams
  - Lakes, Ponds, and Rivers
- ### Prime Wind Energy Generation Areas
- No State Constraints (96 acres)
  - Possible State Constraints (372 acres)
  - Possible Forest (59 acres)



# Town of Craftsbury, VT Woody Biomass Potential

03/06/2025

- Buildings
- US & State Highways
- Paved Town Road
- Legal Trails
- Unpaved Town Roads
- Private Roads
- Streams
- Lakes, Ponds, and Rivers
- Woody Biomass Resource Areas ( 8,812 acres)



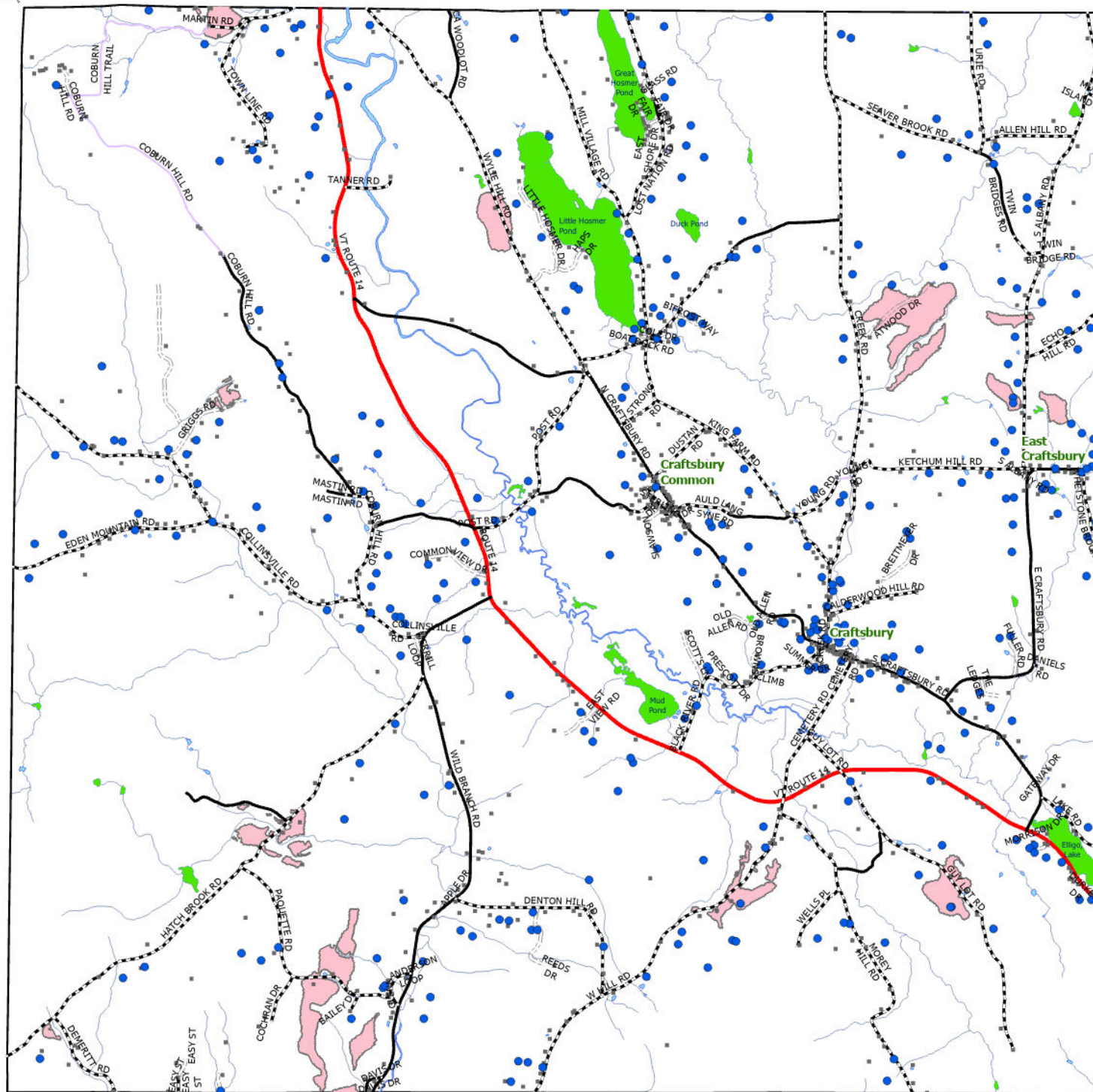
0 1 2 Miles



Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.

# Town of Craftsbury, VT Geothermal Potential Map

12/06/2024



- Buildings
- US & State Highways
- Paved Town Road
- Legal Trails
- - - Unpaved Town Roads
- ... Private Roads
- Streams
- Lakes, Ponds, and Rivers
- Geothermal Closed Loop Horizontal or Vertical Systems (5,366 acres)
- Potential Geothermal Closed Loop Pond Systems (344 acres)
- Potential Geothermal Open Loop Systems: Wells (329 existing wells)