

2.

Land Use

The nature of a town—its particular character, what makes it different from other towns—comes from the land itself—its geography—and from how the town’s citizens use and develop the land within its borders. A Land Use Plan characterizes the relationship between the town’s landscape and the citizens who live there. The same principles of respect for the environment, sound economics and regard for community values that guide all Irasburg town planning also define the Plan’s vision for land use in the future.

The Land Use Plan is the most direct expression of a town’s vision for itself and its future. All the elements of a town plan—economic development, natural resources, utilities and facilities, energy, transportation, housing and education—come together in the Land Use Plan.

Land use planning forces citizens to confront directly the central dilemma of town planning: how to reconcile the needs and wishes of the community, to which every citizen belongs, with the freedom of individuals to do as they choose with their own property, within the constraints of state and federal law and with respect for their fellow citizens.

The effects of land use planning are personal for many Irasburg residents. Property constitutes a significant fraction of the net worth of many citizens. Their economic well-being may depend on their ability to

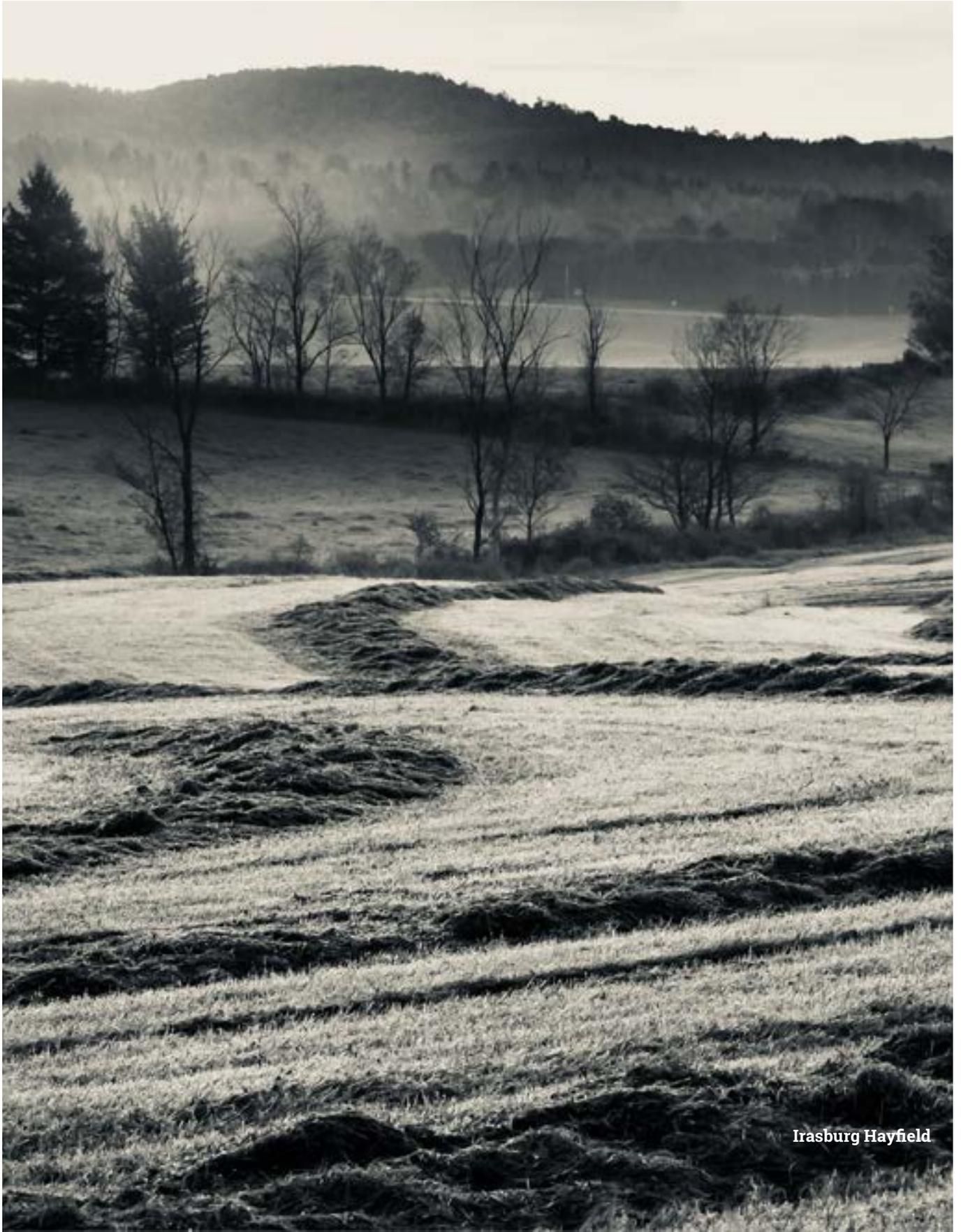
use and develop their property. Families often live and work on land where their grandparents and great-grandparents lived and worked—home places that shape their sense of who they are and where they come from. Successive generations often build homes of their own on acreage of the original family farm.

In a March 2016 survey¹, Irasburg residents expressed strong support for preserving Irasburg’s historic character, rural setting and natural resources. A historic Common unites the village center. Unbroken tracts of forest support a traditional forest industry, provide wildlife habitat and promote wildlife diversity, and play a key role in preserving air and water quality. Acres of fertile farmland produce crops of grass, hay and corn for dairy farms. The water quality is high in the rivers and streams of the Black River basin. Ridgelines surround the village and define the landscape character and quality of the community for both residents and visitors. Future development should take place in ways that enable a future of strengthened economic opportunity in a context that preserves the qualities citizens most value in the town where they have chosen to make their home.

In this Chapter:

- *Existing Land Use*
- *Patterns of Development*
- *Future Land Use*
- *Aesthetics*
- *Goals & Actions*

¹ See Appendix B, Survey



Irasburg Hayfield

Irasburg’s economic future is closely linked to the town’s identity as an iconic Northeast Kingdom village. As relentless development overtakes the rest of the nation, and even parts of Vermont, the appeal of this beautiful and largely undeveloped part of the world as a tourist and retirement destination—and simply as a good place to live and raise a family—becomes an ever-more-important economic asset.

The Land Use Plan must also support a secure, stable, resilient supply of energy to sustain the development and quality of life that citizens envision for Irasburg’s future.

All these factors and more must inform an effective Land Use Plan that encourages orderly growth and economic development while preserving the natural resources, historic character and sense of community that give residents the quality of life that they value.

Existing Land Use

A distinctive topography places the heart of the town of Irasburg and its historic village Common in a bowl, rimmed by the surrounding ridgelines. The bottom of the bowl (elevation 940 feet) is itself 140 feet above the Black River that skirts the village. There exists a particular harmony between the built structures and the natural landscape that shapes the community’s identity. This geographic and historic heritage provides the foundation for Irasburg’s long-term economic, environmental and human well-being. The overwhelming majority of respondents to the 2016 Irasburg Community Survey regard Irasburg’s rural setting (95.4 percent) and historic buildings (77.1 percent) as reasons to make Irasburg their home².

No one could describe Irasburg as an isolated hamlet. Vermont Routes 58 and 14, as well

² See Appendix B Survey

as two much-used town roads, meet at Irasburg’s town center, placing the historic village at the intersection of well-traveled thoroughfares and making it a lively meeting place. These roads outline the Common, laid out in 1815, that is Irasburg’s most recognizable feature.

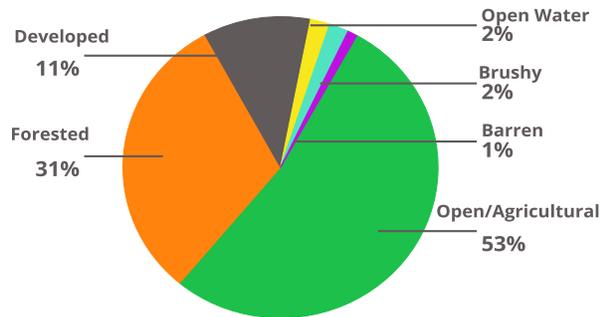


Fig. 2.1 Land Cover In Irasburg in 2016

Irasburg’s topographic and geographic characteristics and its roots as an agricultural community have engendered a rural residential development pattern throughout its 12,632 acres. Much of the land (85 percent) is open or used for agriculture and silviculture. The historic pattern of development places many of the town’s commercial and municipal services in the village center, while much of the population dwells along the state and local roads that radiate from the town center. Figure 2.1 shows land cover in Irasburg in 2016. This pattern of development varies little from Irasburg’s historic development patterns.

Patterns of Development

Compact, mixed-use development in village centers has much to recommend it. Such “smart growth” can conserve energy by reducing vehicle miles traveled; reduce costs associated with maintaining roads and infrastructure; and preserve forest blocks and agricultural land. Economic and residential growth within areas intended for concentrated development allows people to walk to their destinations and makes public transit services

- A vibrant after-school enrichment program, operated through the Leach Public Library, brings Irasburg schoolchildren to the library, the Town Hall, and other historic buildings after school every weekday—and brings their parents to pick them up.
- The United Church has restored its steeple to its historical white color.
- A historic country schoolhouse has been moved to the village center and repurposed as the Town Clerk's Office.
- A refurbished and redecorated Town Hall attracts an increasing number of wedding receptions and other social events to this graceful building, and efforts have begun to market the space more widely.
- A "First Annual" October harvest festival brought visitors and citizens to the Common.
- The third annual free Thanksgiving dinner brought more than 300 local people to the Town Hall in 2018.
- Sports teams of all ages play baseball on the Common every spring, and Christmas lights sparkle on the spruce tree each December.
- Volunteers plant annuals around the gazebo and tend young trees along the Common's perimeter.
- A fledgling farmers' market has sprouted.
- The volume of traffic that passes through Irasburg's town center each day represents a potential customer base for retail and service business development.

The ridgelines that surround the village should remain protected, given their importance to the distinctive landscape character and quality of the town.

Irasburg intends to seek Village Center Designation, with the recognition that such a designation will help to provide incentives for additional village center reinvestment, increase population density, and economic and civic activity in the village center.

Timing and Intensity of Growth

Future development in Irasburg should not exceed the town's ability to provide public services. Irasburg does not have a municipal wastewater treatment facility, so development should occur on those soils best suited for septic capacity. Small-scale shared septic facilities are encouraged. Eighty percent of Irasburg citizens surveyed favored home-based businesses; Irasburg needs access to broadband internet to meet these business needs.

Future Land Use

Growth and development in Irasburg have been slow. Twenty-first-century development in Irasburg is likely to follow the pattern that has historically characterized Irasburg's development: a concentrated village center, with residential dwellings and small businesses located along the principal routes radiating from the center. This historic pattern of development along the roadways protects and

preserves the integrity of the forests and agricultural lands that Irasburg citizens value. Given the value and importance of working lands, this plan encourages agriculture and silviculture throughout Irasburg.

The ridgelines that surround the village should remain protected, given their importance to the distinctive landscape character and quality of this rural Vermont town, their harmony with the scale of the built environment, their value to the forest economy, their key role in the long-term protection of upland headwaters of the Black River basin, their importance in conserving wildlife habitat and diversity, and their key role in climate resilience. In October 2015, 421 Irasburg voters petitioned the Selectboard to develop a Town Plan to protect all of the town's ridgelines from development.

In keeping with a strong tradition of self-determination, Irasburg has not elected to adopt any land use regulations for future growth and development. A town plan is not prescriptive or proscriptive. It provides a vision, but it does not dictate the course of development within the town. However, Act 250 criterion 10 establishes that development proposals triggering Act 250 jurisdiction³ must comply with all duly adopted local and regional plans. Accordingly, this chapter draws on widely shared Irasburg community values to broadly characterize the types and scales of development appropriate in different areas of town.

This Irasburg Town Plan establishes the following five land use areas as delineated on the maps in Appendix A.

Village Center

The village center at the hub of Irasburg includes commercial and civic enterprises, dense single family and multi-family housing, and the town Common. Route 14 borders the Common to the west and Route 58 to the north, the Creek Road to the east, and Park Avenue to the south.

Purpose: As the historic and business focus, the village center is the core of activity in Irasburg. It provides for a mix of commercial, residential and public uses while maintaining the historic heritage of the village.

Present Land Uses: The village center is the site of the Irasburg Village School, Town Hall, the Irasburg Common, the Leach Public Library, the U.S. Post Office and the Town Clerk's Office. A general store, a locksmith and a foam-insulation service are located here, as well as artisans, churches, a low-income housing development, and home-based occupations. Many single and multi-family

residences occupy this area and considerable foot traffic traverses it throughout the day. It is a busy transportation corridor and a lively center for neighbor-to-neighbor interaction.

Future Land Uses: Future development should complement the historic village, with a dense variety of business, public and residential buildings that preserve and strengthen the historic character and provide amenities to the community. Future buildings should be of a compatible size, character and scale with existing buildings. People of all ages frequent the area, so it should be walkable, bikeable, skiable, and should provide safe transportation connectivity. It should provide space for community and civic activities. Recreation facilities and public facilities are encouraged here. Irasburg should request Village Center Designation for this area from the Vermont Department of Housing and Community Development.

Village Center Designation

The Vermont Department of Housing and Community Development oversees the Village Center Designation program to encourage and recognize local efforts to revitalize Vermont's traditional village centers. Irasburg supports applying to this program for its village center area to become a Designated Village Center. This designation will achieve the goals of the plan by encouraging mixed-use development and revitalization in the historic village center while preserving the surrounding landscape. This area is characterized by commercial, civic, religious and residential uses. It maintains the historic look and feel of an earlier century.

³ Act 250 Jurisdiction There are 12 inclusion and five exclusion criteria for Act 250 jurisdiction. Act 250 criteria are more restrictive if a town does not have permanent zoning or subdivision bylaws which is the case for Irasburg. For Irasburg inclusion criteria are: non-residential development on more than 1 acre, 10 residential units, 10 mobile homes within a 5 mile radius, subdivision of 6 lots within 5 years, government projects over 10 acres, any changes to existing developments that would require permit if initiated today, primary communication structures above 50 feet or 20 feet above an existing building, exploration for radioactive material, oil/gas well, land tract fragmentation of 5 lots within 5 miles or within 10 years, any withdrawal of more than 340,000 gallons of groundwater per day. Exclusion criteria are farming, logging, forestry, electric generation, electric transmission, agricultural fairs, horse shows, composting. This description is notintended for precise determination of jurisdiction.

The Designation will give business owners and municipal bodies access to financial opportunities to re-invest into their properties to maintain the historic character and to implement needed safety and accessibility improvements. The Designation will also encourage a healthier, safer and more walkable village center for people of all ages by increasing investments in these locations and reducing the combined cost of housing and transportation. The Designation will enhance the value of this popular and unique place for both residents and visitors. Seventy percent of survey respondents encouraged the development of tourism and hospitality industries. Irasburg will make good use of the funding, training and resources available to communities with this Designation.

Forests

Irasburg's forests make up 31 percent of the town's area and comprise about 75 percent hardwood (maple, ash, beech, poplar, birch) and 25 percent softwood (spruce, cedar and pine). Forests include steep slopes, high elevations and abundant wildlife. Forests encircle the town and largely follow the town's topography. Steep slopes, the presence of significant statewide soils and the threat of erosion discourage development in these areas. The forests are a key element in Irasburg's traditional rural way of life: timber, pulp and firewood harvesting; sugaring, hunting, fishing, camping and foraging.

Purpose: Forests are a significant part of Irasburg's working landscape. Large unbroken blocks of forest are critical for maintaining wildlife habitat and species diversity. Forests provide economic opportunities as well as an affordable, renewable heat source for 40 percent of Irasburg homes. Woody biomass has significant potential as a clean, local, renewable source of energy in the form of wood chips and pellets. Forests have a key role to

play in climate resilience, the ability to respond to climate change. Irasburg's forests sequester about 2.6 metric tons of carbon per acre per year, for an annual total of 12,400 tons of carbon, equal to the annual emissions of 2,610 vehicles. This plan strongly encourages the protection and preservation of these forests and the siting of all new development so as to minimize impacts to this significant resource. Currently, Irasburg has

30 parcels enrolled in the forestland category of the Current Use Program. These parcels total 4,366 acres. This means that the majority of forested land is under forest management within the Current Use Programs. This Plan strongly encourages continuing this exemplary practice.

Present Land Uses: Forests comprise almost a third of Irasburg's land area. These

areas are currently used for silvicultural practices including sugaring, timber harvesting, firewood, and Christmas tree operations. Many Irasburg citizens earn their livings in forest-related activities. This area has some single-family residences.

Future Land Uses: This Plan strongly encourages the protection and preservation of Irasburg's forests and discourages large developments in forested areas. Planning for climate resilience is key to 21st-century forest management, according to Orleans County Forester Jared Nunery. "One of the most important goals is keeping forests forests," he says. "This means maintaining working forests, promoting healthy forests, and maintaining diversity within forests."

Utility-scale and commercial-scale renewable energy projects are discouraged in these areas. Appropriate uses include silvicultural practices, sugaring, woodlots, wildlife habitat conservation, recreation, and primitive camps. Permanent road construction (with the exception of truck roads used in forestry operations) is discouraged in forest

Irasburg's forests make up 31 percent of the town's area and comprise about 75 percent hardwood and 25 percent softwood.

tracts. Any new roads built here must be built to avoid causing soil erosion, disturbing habitat, increasing runoff, degrading water sources or fragmenting blocks of forestland.

Rural/ Agriculture

The largest share of Irasburg's acreage is devoted to agriculture and rural development. Besides agriculture, this area supports small forest operations, housing, light industry, some commercial activities, home-based businesses and recreation. The agricultural areas are open and largely dedicated to dairy farming. Some 14 farms of varying scale contribute to the economy, employ workers in Irasburg, and act as land stewards, enhancing the beauty and defining the rural nature of the community.

Purpose: The Rural/ Agriculture Area accommodates a historical pattern of low-density rural residential development, agriculture and forestry. The purpose of this area is to provide land for housing, small businesses and agricultural enterprises, such as haying, dairying, raising beef cattle and other livestock, beekeeping and other diversified agricultural operations. Agriculture areas are part of Irasburg's working landscape. This plan strongly encourages the protection of the traditional development pattern and the preservation of the resources this area contains.

Present Land Uses: Uses in this area include agriculture, single-family and multi-family housing, forestry, light industry, commercial activities, home-based businesses and recreation. The area includes a number of active dairy and vegetable farms, comprising houses, accessory structures and barns. Recreation also occurs here.

Future Land Uses: Survey results suggest that current land use patterns will likely continue. Future growth in this area should not alter Irasburg's traditional settlement pattern and should not outpace the town's ability to provide services. As farmers find innovative ways to remain financially viable, diversified uses are encouraged so long as deleterious impacts to traffic, noise and natural resources are minimal. Preservation of agricultural and open space areas has a high priority. This area is appropriate for residential- and commercial-scale energy projects. Appropriately sited community-based solar energy projects might be located here. Utility-scale solar energy projects are discouraged in these areas unless co-located on existing structures (solar arrays on existing roofs, for example), although marginal agricultural land might be suitable for projects of 500 kW or less.

Mountains, Hills and Ridgelines

The largest share of Irasburg's acreage is devoted to agriculture and rural development.

The village of Irasburg is surrounded by ridgelines, outlined against the sky. Lowell Mountain and Kidder Hill define the ridgeline west of the village center; Round Hill to the south and west; Butternut Hill and Allen Hill to the north and east; and Burton Hill to the south. Irasburg's rivers and streams have their upland headwaters on these

hills and ridgelines, which have steep slopes, many of 20 percent or greater, making them susceptible to erosion. Lowell Mountain, Butternut Hill and Allen Hill contain large forest blocks, much of it conserved forestland and essential habitat for a wide range of wildlife. Generations of Irasburg citizens have hunted and fished along these ridgelines. Kidder Hill has both forests and open land, with widely spaced residences, camps and a farm along Kidder Hill Ridge Road. Burton Hill has forests and agricultural fields; with farms and residences along Burton Hill Road, a well-traveled road linking Irasburg and Barton.

Purpose: The form, line, color, texture, dominance, scale and continuity of Irasburg’s unspoiled ridgelines serve to define the visual character of Irasburg’s landscape. These ridgelines are visible from most points in Irasburg, and from all points in Irasburg’s historic village center. The town’s built environment has developed over the centuries at a scale and in a pattern that is in harmony with mountain, hills and ridgelines. The resulting vividness, intactness and unity define the visual quality of Irasburg’s landscape. As development overtakes much of the nation and the state, the unspoiled silhouettes of Irasburg’s ridgelines become increasingly important in making the town a desirable destination for tourists, businesses and residents, all important to Irasburg’s economic future. As the upland sources of Irasburg’s rivers and streams, the ridgelines play a key role in flood prevention and the protection of water quality.

Generations of Irasburg citizens have hunted and fished along these ridgelines.

Because of their defining role in the visual character and quality of Irasburg’s landscape, their unique ecosystems, their upland headwaters, and the potential for significant visual and environmental impacts by development, the mountain, hills and ridgelines are considered intrinsic to the character of Irasburg and must be protected from future development.

Present Land Use: As described above, current land use of Irasburg’s mountains, hills and ridgelines comprises forestry, including conserved forestland; small-scale agriculture; recreation—principally hunting and fishing, but also hiking, snowmobiling, snowshoeing, cross-country skiing—and, increasingly, nature study. Residential dwellings, including camps, are largely confined to the areas along existing roads. Current development does not rise above the tops of the trees on the ridgelines.

Future Land Use: The surrounding mountain, hills and ridgelines make an irreplaceable contribution to the character and quality of Irasburg’s natural and working landscape and should be treated as a whole, rather than as a series of separate viewsheds. These areas are largely undeveloped and must be preserved and protected. This plan strongly opposes development in these areas. Appropriate uses include forestry, sugaring, woodlots, hunting camps and recreation. This Plan protects these areas from utility-scale renewable energy projects and all similarly-scaled development. All development projects that trigger Act 250 review and permitting, any Section 248 proceeding related to a Certificate

of Public Good, and all construction projects occurring in the Mountain, Hills, and Ridgelines Area (see map in Appendix A) that change the visual character and quality of Irasburg must be evaluated by a Visual Impact Assessment, carried out according to best

professional practice as described in the “Aesthetics” section on pages 18 and 19.

Barren Land

Land-intensive operations, such as earth extraction and a landfill, have left these areas barren. It will take many years for future re-vegetation. Many barren areas are near transmission lines and often have road access.

Purpose: Barren land areas are appropriate locations for larger renewable energy projects, such as large-scale solar arrays. They have limited functional capability for other purposes.

Present Land Use: These areas include a former landfill and former gravel pits.

Future Land Use: These areas are not suitable for residential development. Future uses of these areas include utility-scale solar energy projects or

other earth extraction operations. Commercial developments of an appropriate nature—sawmills, gravel pits, and other enterprises that don't require significant resources—may be sited here, but on-site septic capacity is minimal. Proposed projects that trigger an Act 250 review or a Section 248 proceeding require a Visual Impact Assessment.

Flood Hazard Areas Overlay

Overlay areas are intended to provide additional protections on land to which they apply without changing the characteristics of the underlying area. Flood Hazard Areas are those susceptible to flood inundation as delineated on Flood Hazard Boundary Maps from FEMA.

Purpose: This area is intended to provide increased safety and security to protect life, property, and infrastructure from risk of flooding. This plan strongly discourages residential or commercial development in these areas. Appropriate uses of flood hazard areas include agriculture, recreation and open space.

Aesthetics

Citizens cite the beauty of the town's rural setting as a primary reason for living in Irasburg. More than 95 percent of surveyed residents cited Irasburg's beautiful rural setting as an asset, the highest percentage for any town attribute. They believe these aesthetic qualities should be preserved.⁴ Visual aesthetics are also protected by Vermont statute, as

⁴ See Appendix B, "Survey Results"

⁵ From 30 V.S.A § 248:

b. Before the Public Utility Commission issues a certificate of public good as required under subsection (a) of this section it shall find that the purchase, investment or construction:

(5) With respect to an in-state facility, will not have undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources and the public health and safety, with due consideration having been given to the criteria specified in 10-V.S.A §§ 1424 a(d) and 6086 (a)(1) through (8) and (9)(K), impacts to the primary agricultural soils as defined in 10 V.S.A. § 6001, and greenhouse gas impacts.

From 10V.S.A. § 6086 (a):

Before granting a permit, the District Commission shall find that the subdivision or development:

(8) Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas.

set forth in 30 V.S.A. § 248: and 10 V.S.A. § 6086 (a) (8)⁵ which provides that a board, agency or court must determine whether a proposed project has an "undue adverse effect on the scenic or natural beauty of the area, aesthetics."

Citizens cite the beauty of the town's rural setting as a primary reason for living in Irasburg.

While we do not mean to suggest that other impacts of development projects, cited elsewhere throughout this plan—most notably impacts on natural resources, water quality, wildlife, economics and social fabric—are of any less concern, we do find that aesthetic impacts on landscape

and scenic resources need to be addressed on their own merits.

Irasburg citizens place a high value on the visual character and quality of Irasburg's landscape. Development along Irasburg's ridgelines, for example, would likely have a high visual impact. Well-respected and widely used systematic procedures and methods, outlined on pages 18 and 19, exist to objectively assess potential impacts to a scenic and visual resource.

Therefore this plan requires that all development projects that trigger Act 250 review and permitting, any Section 248 process related to a Certificate of Public Good, and all construction projects occurring in the Mountain, Hills and Ridgelines Area (see map in Appendix A) that change the visual character and quality of Irasburg be evaluated by a Visual Impact Assessment, carried out

according to best professional practice. The VIA standards set forth in this section of the plan and the results of the VIA will constitute a clear written community standard intended to preserve the aesthetics and scenic beauty of Irasburg.

Visual Impact Assessment

Visual aesthetics often have a lower priority than other criteria in development review and siting decisions, perhaps because they are assumed to be based on subjective factors. However, investigation reveals that this is not the case:

“(Those) who may have little knowledge or experience in the field of scenic conservation... may falsely assume that scenery is simply ‘in the eye of the beholder’ and lacks measurable objective criteria. This is not the case....

Beginning primarily in the 1960s, landscape architects in the UK, US, Canada and Australia began developing the modern system of scenic resource assessment, which later became folded into environmental impact analysis. This has become a largely objective technical field, albeit with some subjective judgement applied strategically. These systems are rooted in a deeper history of aesthetics including both cultural and scientific analysis that shed light on how people view

landscape and why. Though imperfect, they provide a good basis for understanding scenery and scenic impacts.”⁶

How can we determine what constitutes an undue adverse effect on the “...scenic or natural beauty of the area, aesthetics”? Research reveals well-respected and widely used systematic procedures and methods to consistently assess potential impacts to a scenic and visual resource. Collectively, these procedures and methods constitute a Visual Impact Assessment. A VIA is not subjective but rather is based on a set of objective methods that have been in use for over 30⁷ years and that courts have determined to be a valid approach to determining visual impacts.

These objectives are outlined on pages 18 and 19, “Visual Impact Assessment.”

Aesthetic Impact in Irasburg

It is not within the scope of a Town Plan to carry out a Visual Impact Assessment. However, even a brief consideration of the visual impact of development along Irasburg’s ridgelines, for example, according to the criteria on the following pages, makes clear that such development would very likely have a high visual impact.

This plan designates the Visual Impact Assessment process as outlined in this chapter to serve as a “clear written community standard to preserve the aesthetics or scenic beauty” of Irasburg’s landscape.

6 Apostol, Dean, James Palmer, Martin Pasqualetti, Richard Smardon and Robert Sullivan. 2017. *The Renewable Energy Landscape: Preserving Scenic Values in our sustainable Future*. 1:11 Routledge, New York and London

7 The National Environmental Policy Act (NEPA) of 1969 establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. For decades, the Bureau of Land Management of the US Department of the Interior, the Federal Highway Authority of the Department of Transportation, and the Department of Energy, among other federal agencies, have used the tools of Visual Impact Assessment to yield consistent results in characterizing the visual impacts of proposed federally funded projects.

The Vermont Supreme Court has adopted the three-part “Quechee Test” to determine whether a proposed project has an undue adverse effect on aesthetics.

The “Quechee Test” asks:

Does the Project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?

Does the Project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area?

Has the Applicant failed to take generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings?

The first prong of the Quechee test asks, “Does the Project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?” This Plan designates the Visual Impact Assessment process as outlined in this chapter on pages 18 and 19, to serve as a “clear written community standard to preserve the aesthetics or scenic beauty” of Irasburg’s landscape.

Visual Impact Assessment

Visual Impact Assessment uses methodology,^{8,9} summarized below to assess the visual impact of proposed projects:

Visual resources are defined by assessing **visual character** and **visual quality**. Resource change evaluates the visual character and quality of a landscape before and after proposed project construction.

Changes in **visual character** are determined by how visually compatible a proposed project would be with existing conditions by using the following visual attributes as indicators:

- **Form:** Visual mass or shape (hill, mountain, lake)
- **Line:** Edges or linear definition (horizon, ridgeline)
- **Color:** Reflective brightness and hue
- **Texture:** Surface coarseness
- **Dominance:** Position, size, or contrast
- **Scale:** Apparent size as it relates to its surroundings
- **Diversity:** A variety of visual patterns
- **Continuity:** Uninterrupted flow of form, line, color, or textural pattern

The degree of **visual quality** in a scenic resource is evaluated by:

- **Vividness:** The power or memorability of landscape components as they combine in distinctive visual patterns.
- **Intactness:** The visual integrity of the natural and built landscape and its freedom from encroaching elements.
- **Unity:** The visual coherence and harmony of the landscape considered as a whole.

Viewer response measures viewers' reaction to changes in the visual environment based on **viewer exposure** and **viewer sensitivity**.

Viewer exposure measures the viewer's ability to see a project, based on location, quantity and duration.

- **Location** relates the position of the viewer to the project.
- **Quantity** means how many people see a project.
- **Duration** describes how long a viewer can keep a project in view.

In general, the closer the position of the viewer to the project, the more people who see it, and the longer it can be kept in view, the greater the exposure.

Viewer sensitivity has three components: **activity**, **awareness** and **local values**.

- **Activity** measures how closely a viewer observes the surroundings.
- **Awareness** relates to the focus of the view.

8 National Research Council (NRC). 2007. Environmental Impacts of Wind-Energy Projects. Appendix D, A Visual Impact Assessment Process for Evaluating Wind-Energy Projects. Washington, DC: National Academy Press.

9 Apostol, Dean, James Palmer, Martin Pasqualetti, Richard Smardon and Robert Sullivan. 2017. The Renewable Energy Landscape: Preserving Scenic Values in our sustainable future. 1:11 Routledge, New York and London

- **Local values** predict how sensitive viewers will be to visible changes.

Visual Impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes:

Resource Change + Viewer Response = Visual Impact.

The levels of **visual impact** are:

- **Low:** Minor adverse changes to the existing visual resource with low viewer response to a change to visual environment
- **Moderate Low:** Moderate adverse change to the visual resource, low viewer response to a change to visual environment
- **Moderate:** Moderate adverse change to the visual resource with moderate viewer response
- **Moderate High:** Moderate adverse change to the existing visual resource with high viewer response, or high adverse change with moderate viewer response
- **High:** Excessive adverse visual change to the existing visual resource or a high level of viewer response to change in the visual environment such that architectural design and landscape treatment cannot mitigate the impacts.

Goals

In accord with the principles of respect for the environment, sound economics and regard for community values, Irasburg retains and strengthens its distinctive character as an iconic Northeast Kingdom village:

- A lively and prosperous historic village center attracts and serves not only Irasburg residents but neighbors and visitors.
- Healthy intact forests support wildlife, silviculture, sugaring, clean air and water, and recreation.
- Strong and diversified agriculture supports a resilient local economy and food security.
- Development preserves historic settlement patterns; keeps pace with municipal services; and conserves ridgelines, forests and agricultural land.
- Development preserves Irasburg's unique landscape character and landscape quality.
- Renewable energy generation makes productive use of unused landfills, gravel pits and barren lands and has, at least in part, local and regional benefits.

Actions

- Encourage a vibrant village center:
 - ◊ Pursue Irasburg's designation as a Designated Village Center.
 - ◊ Support Fire District #1, the municipal organization that operates and maintains the water supply for the village center.
 - ◊ Continue to encourage and support a strong program of after-school educational enrichment activities held in historic buildings in the village center.
 - ◊ Promote the use of the refurbished Town Hall for social and civic functions.
 - ◊ Encourage wider use of the Common, e.g. for a farmers' market, skating rink, band concerts, festivals. Encourage upkeep and improvements such as pedestrian/bike crossings, gazebo preservation, pedestrian lighting.

- ◊ Collaborate with the Selectboard to develop a village center Park & Ride location.
- ◊ Work with the Vermont Preservation Trust, the Council for the Arts and other organizations to gain support for renovation projects for historic buildings.
- ◊ Work with citizens to devise and develop events and programs (an annual Howard Mosher Literary Festival, a pop-up University of Irasburg....) to bring Irasburg citizens and tourists to the village center.
- Protect and preserve ridgelines, forests and agricultural lands.
- Encourage growth that preserves traditional settlement patterns in the historic center and along routes radiating from the center; and that preserves forests, ridgelines, water sources and agricultural lands.
- Continue and strengthen the exemplary practice of the Current Use Program that currently enrolls the majority of forested land in Irasburg under forest management.
- Use tools such as the Vermont Land Trust, the Vermont Housing and Conservation Board, and similar tools and programs to preserve undeveloped land.
- Prohibit utility-scale energy projects in the Forest or Rural/ Agriculture Areas. At the same time, encourage the development of renewable energy projects in areas such as on existing structures, on closed landfills or in gravel pits. Work with Efficiency Vermont and others to strongly promote energy efficiency and conservation to meet energy goals without the need for development on ridgelines, forests or agricultural lands. Work with the Vermont Electric Co-op and other utilities to increase distributed generation.
- Encourage silvicultural practices that promote climate resilience. Keep forests forests by maintaining working forests, promoting healthy forests and maintaining diversity within forests. Working with Efficiency Vermont and the Department of Forests, Parks and Recreation, promote the use of Advanced Wood Har

(wood pellets and wood chips) as a renewable energy source.

- Discourage road construction (with the exception of truck roads used in forestry operations) in forest tracts.
- Develop a culture of appreciation and respect for Irasburg's geology, wildlife, forests, rivers and streams, wetlands and other natural resources through the Irasburg student enrichment program and the Lake Region Vocational Agricultural Program. Work with organizations such as the Vermont River Conservancy; the Memphremagog Watershed; the Department of Forests, Parks and Recreation; Fish and Wildlife to develop other community-wide programs and activities.
- Promote locally made maple syrup and other specialty products.
- Protect and preserve Irasburg's landscape character and landscape quality by requiring an independent Visual Impact Assessment carried out according to best professional practice, for any development that triggers an Act 250 or Section 248 process and all construction projects occurring in the Mountain, Hills and Ridgelines Area (see map in Appendix A) that change the visual character and quality of Irasburg .
- Make productive use of barren lands.
- Encourage the development of renewable energy projects on closed landfills, in gravel pits or other barren lands.