

1. One dictionary defines aesthetics as appreciation *of what is pleasurable to the senses.*¹ The senses most likely to be impacted by industrial wind turbines are sight and hearing.
2. Vermont statutory requirements and interpretation
 - 2.1. Under Vermont statute a developer (including a wind energy developer), who seeks to win approval for a project under Act 250 or Section 248, is required to demonstrate that a proposed project “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.”
 - 2.2. This statutory requirement, as it relates to visual aesthetics, has been interpreted by various state agencies, boards, and commissions as well as the Supreme Court of Vermont. The precedent that has emerged is to evaluate “undue adverse impact” using the two-part “Quechee Test:”
 - 2.2.1. First, will a proposed project have an adverse impact on aesthetics and the scenic and natural beauty of an area because it would not be in harmony with its surroundings?
 - 2.2.2. Second, the adverse impact is undue if any of the three statements is true:
 - 2.2.2.1. The project violates a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area.
 - 2.2.2.2. The project offends the sensibilities of the average person.
 - 2.2.2.3. The applicants have failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings.
3. Many towns are writing new municipal plans that create clear, written community standards that explicitly state that the impacts of industrial wind turbines are unduly adverse. Some of these town plans address both the visual and noise impacts of turbines.
 - 3.1. Brighton (2013)

At nearly 500 feet, they (turbines) dwarf even the tallest trees, and dominate the ridgelines, which are for many people a defining characteristic of Vermont. The towers are so tall that the FAA requires them to be lit at night with blinking red lights. Much of the village, lakeshore homeowners, and properties throughout the region could have their view changed from scenic vista to 500-foot tall towers lit up at night by red blinking lights.

Brighton’s economy is basically a tourism-based economy that is dependent on its reputation as unspoiled mountainous and forested landscape, and we can say without ambiguity that large-scale development that is not in harmony and in character with the scenic and environmental quality of the area is a serious risk to that economy.

¹ merriam-webster.com/dictionary

3.2. Westmore (2013)

Not surprisingly, survey respondents cherished the rural ambiance of the community. "Peace and quiet" was the most defining attribute of quality of life, yet all other factors ranked high as well. One of the important features of living on a rural lake is the opportunity to be able to enjoy the moon from a canoe, to look out from your dock and see the stars and night sky, to feel like you live in a quiet remote area.

A number of respondents had much to say regarding impacts from existing wind developments in nearby towns of Sheffield and Lowell, both of which can be seen heading west from Hinton Hill toward Lake Willoughby, and both of which add flashing red lights to Westmore's otherwise dark night skyline. Other threats to Willoughby's rural ambiance include runoff and loss of active farming and its associated working landscape.

While scenic natural beauty is a hallmark of life in the Northeast Kingdom, Westmore's iconic viewshed of Willoughby defines the community both culturally and economically. Westmore's identity is tied to a landscape that has served as inspiration for artists and writers and has made the community a destination for more than a century. The lake area draws visitors worldwide, who spend on recreation, dining, and entertainment establishments all over the Northeast Kingdom. While the NNL designation can and should be taken into account for all federal permitting process, it should be a critical factor in local land use decisions as well, including Act 250 and Section 248. Given the significance of this designation, the Westmore Town Plan asserts that any development of 100 feet or higher that can be viewed from any point in the NNL designation area be considered a development of substantial regional impact.

Any development on or near ridgelines should employ landscaping screening techniques to prevent undue adverse impact to Westmore's scenic ridgelines, as viewed from any public right of way, body of water, known hiking trails, or any vantage point in the National Natural Landmark Area.

3.3. Sutton (2013)

Recreation in Sutton should be considered a core "resource-based industry." The Town should preserve natural beauty and scenic areas, which are critical assets for the region's tourism and hospitality industries. Visitors to the Kingdom have come to expect an "authentic" experience, one that is best depicted in Sutton's unspoiled natural resources and scenic viewsheds.

The scenic beauty of our forested ridgelines, highlands, and vistas has been maintained (with the exception of the Sheffield Wind Project, the ridgeline for which is in Sheffield but which dominates the town).

The Planning Commission discourages industrial and commercial development that would impact Sutton's scenic vistas.

From the point of view of visual impacts, wind turbines greatly exceed the impact of cell towers. The Sutton Zoning Bylaw should be revised to insure that any wind turbines that are not connected to the grid are erected in such a manner as to not negatively impact the Town's scenic vistas.

Scenic protection areas shall include all lands above 2,000 feet elevation – specifically Norris Mountain and adjacent summits and high elevation ridgelines and summits in the Willoughby State Forest. While the Town of Sutton will welcome small, suitably sited domestic wind turbines, the Town shall, nevertheless, preserve its undeveloped high land and its time honored natural horizons as a birthright for our children. Therefore, this plan recommends that any development above 2,000 feet in elevation not exceed 50 feet in height and strongly discourages the erection of wind turbines on lands above 2,000 feet.

If any industry should develop, great care should be taken to safeguard the environment and rural quality of life - including quiet and peaceful night skies.

Wind energy development is a potential industrial activity for high elevation ridgelines in the northern portion of the Town (Norris Mountain and adjacent summits and the higher elevation summits and ridgelines in the Willoughby State Forest). As the Sheffield Wind Project has demonstrated, such developments because of their visual impact, their accompanying noise, their potential impact on wildlife and the environment, and their impact on property values are not appropriate for these areas or in adjacent areas in other towns where Sutton's viewshed is affected.

In 2005 Sheffield approved plans for the siting of 16 industrial-scale wind towers on Granby Mountain, Libby Hill, and northeast along the unnamed summit to the south-southwest of Norris Mountain. While largely unseen from populated areas in Sheffield, this development is having a significant adverse visual impact on the Towns of Sutton and Barton and specifically to properties within sight of the project. In addition, the lights, noise, and visual impacts from the project disturbs the peace and tranquility of the neighborhood from the West Ridge to the Sutton/Sheffield town line.

3.4. Newark (2012)

Newark residents have expressed concern over the impact of industrial development, fearing that it could destroy the character of the town. Therefore, industrial-scale power generation and transmission facilities are inappropriate in the town. This includes, but is not limited to, industrial-scale wind turbines and their associated transmission facilities. Development of industrial wind turbines generally occurs at higher elevations—often along ridgelines. In Newark, these areas are among the town's most sensitive ecological

areas; most wild and unfragmented lands; and most prominent aesthetic landmarks, highly visible from conservation lands, scenic roads, and dwellings. Such facilities are inconsistent with the town's vision and goals.

Newark is quiet due to its sparse population, its lack of industrial development, and the absence of major throughways. Noise that negatively affects the quality of life in Newark and any proposed land use that would generate excessive noise should be discouraged.

Visitors are often overwhelmed by the clear view of the night skies that Newark residents enjoy. Poorly designed outdoor lighting can obscure the night sky. The town encourages residents to meet their outdoor lighting requirements in ways that do not interfere with viewing the night sky. An Internet search for [how to reduce light pollution](#) will provide a wealth of information on how to improve the effectiveness outdoor lighting systems while reducing their costs.

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

While it is the intention of the citizens of Newark to preserve the scenic beauty and quality of wildlife habitat in all areas of the town, lands that the town places special value upon for scenic, wildlife, and recreational importance include:

- The ridgeline historically known as Hogback Mountain, which consists of Walker Mountain, Hawk Rock, and Packer Mountain*
- The high-elevation areas along Newark Street, Abbott Hill Road, Pinnacle Road, Spruce Ridge Road, Maple Ridge Road, and Kinney Hill Road*
- The town's ponds including Newark Pond, Center Pond, Beck Pond, Walker Pond, Sawdust Pond, and Brown Pond*
- The towns rivers and streams including the East and West Branch of the Passumpsic, Bean Brook, Sleeper Brook as well as the smaller tributaries, wetlands, and vernal pools.*

3.5. Charleston (2013)

These natural resources provide economic, recreational, and aesthetic benefits to both residents and visitors. Development that would compromise these benefits is inappropriate and inconsistent with the town's vision and goals.

Charleston's aesthetics and scenic beauty are unparalleled in the Northeast Kingdom. Charleston's mountain ridgelines and high elevation areas contribute substantially to the scenic beauty of our area. It is the Town's policy that any development is prohibited in Charleston's mountain ridgelines and high elevation habitats as these are included within Charleston's natural areas that are to be preserved in their natural condition.

It is the Town's policy that construction of any commercial facility for the generation, transmission or distribution of electrical energy, including construction of meteorological towers that collect wind data, is prohibited upon ridgelines and mountain areas within the Town of Charleston.

Northeast Kingdom ridgelines and high elevation areas are particularly vulnerable to development for wind generation projects. Modern commercial wind turbines are massive industrial machines that are out of character with Charleston's unspoiled natural environment. Development of Charleston's mountain ridgelines and high elevation habitats would result in an undue adverse impact on the aesthetics and scenic beauty of our Town. The construction and siting of an electrical generation facility on Charleston's unspoiled ridgelines and mountain areas would be so out of character with our surroundings as to offend the sensibilities of the average person. Charleston's economic future is tied inextricably to our ability to preserve our natural environment. Industrial scale facilities for the generation, transmission or distribution of energy located on Charleston's ridgelines or mountain areas would unduly interfere with the orderly development of Charleston and the surrounding region. The societal benefits attained by preserving the aesthetics and scenic beauty of our area, protection of our natural resources and maintenance of our rural character outweigh any potential economic gain or amount of energy that may be produced by commercial development of Charleston's ridgelines and mountain areas.

Charleston's prohibition against construction of any commercial electric generation facilities upon the Town's ridgelines or mountain areas is a clearly written community standard intended to preserve the aesthetics and scenic beauty of Charleston, and is a land conservation measure intended to protect and regulate the orderly development of Charleston and the region. This prohibition shall be construed by local and state regulatory bodies to achieve its full intended purpose

4. The town plans of the two Kingdom towns in which industrial turbines are located do not address the aesthetics of turbines at all.
 - 4.1. Lowell's 2009 town plan includes the following passages that relate to aesthetics:

Route 58 from the top of Lowell Mountain to Hazen's Notch is one of the most varied and beautiful six miles in Vermont. Therefore, this plan encourages the establishment of this stretch of road as a scenic corridor. While it is not the Town's intention to prohibit or unduly restrict development on this road the Planning Commission feels it is in the best interests of everyone in Lowell, those who own property on this road and those who do not, to be very sensitive to its scenic quality and the pride and benefit it gives the Town. If there ever was a road in Lowell where everyone should wish for sound aesthetic judgement to be exercised in the siting and building of structures, it is here.

Route 58 is perhaps the most scenic road in Lowell. This highway passes over some of the higher elevations in Lowell and therefore offers some spectacular views. That section of Route 58 between Irasburg and Route 100 crosses an elevation of almost 1,700 feet above sea level. The spectacular views from this section of Route 58 are to the north and west and include the ridge of mountains that make up the western wall of the Missisquoi River (East Branch) Valley. At the height of land in Hazen's Notch, about 1,900 feet above sea level, the views, although limited, are primarily to the east and west and include the Missisquoi River valley on both sides of the ridge.

Route 58 is one of the most scenic roads in Vermont and any development along this corridor should not detract from the enjoyment of views from this corridor. Therefore the Planning Commission would like to see this scenic corridors maintained for all to enjoy.

- 4.2. Sheffield's 2010 town plan does not discuss aesthetics.
5. The NVDA Wind Study Committee takes the following positions:
 - 5.1. Due to their enormous size, industrial wind turbines have an impact on aesthetics.
 - 5.2. The municipal plans excerpted here constitute clear, written community standards intended to preserve the aesthetics or scenic, natural beauty of the area.
 - 5.3. Industrial wind turbines violate the clear, written community standards established in the excerpted municipal plans.
 - 5.4. Since industrial wind turbines violate these clear, written community standards, under Vermont law they would constitute an undue adverse impact to these communities.
 - 5.5. The clear, written community standards expressed in the region's municipal plans reflect a high level of education and experience relating to industrial wind turbines.