

## Wind Turbine Bylaw Recommendations Draft- Protect Wentworth Valley Response

May 5- 2022

Protect Wentworth Valley commends the Cumberland Council for enacting the current 6-month moratorium to review land use bylaws, and specifically wind turbine by-laws.

We are a volunteer committee who have been researching the impacts of wind energy and related policy and by-laws since fall 2021. We have several hundred supporters. We are empathetic to the limited resources Cumberland has available to address these bylaws, the complexity of the issues and impacts from numerous perspectives. We are providing several links to papers and publications in our response that may help in better understanding our responses. We hope you will take the time to read them.

Protect Wentworth Valley is concerned about the impact of wind turbine projects on this environmentally, ecologically, and culturally sensitive area. Issues related to wind turbines are numerous, but most importantly, these projects will change the landscape and the communities in Cumberland forever.

We are thankful for the opportunity to have met with Nelson Bezanson to review the draft of the amended by laws. There are some very positive changes suggested:

- Business development agreements
- Protected overlay for Wentworth Valley
- Decommissioning requirements

However, we are extremely concerned by the 750 M setback that Mr. Bezanson is recommending to Council. He explained this recommendation is based on a lack of evidence for larger setbacks. Even in 2011, setbacks of 1km or more were standard in many jurisdictions. Setbacks must also be from property lines and not just receptor sites. Summary of 2011 setbacks by country: Please click on this link to read more: Summary of Wind Policies and Recommendations by Country.

We have reviewed the literature and have found jurisdictions in Ontario, Australia, Denmark, Sweden, and Germany with setbacks of 1-2Km. The evidence is changing rapidly; what were accepted practices in early to mid 2000, is no longer acceptable. Evidence is mounting and expanding regarding the impact of turbine noise and flicker on quality of life, as well as the surrounding eco-system. Please see this link: <a href="Energy Policy">Energy Policy</a> as well as this: <a href="Brief Review of Wind Power: Denmark, Germany, Swedan, Vermont, Maine">Brief Review of Wind Power: Denmark, Germany, Swedan, Vermont, Maine</a>

We also are providing more links to references that support our stand that setbacks of 750 M are obsolete, and that 2 Km is becoming today's best practice given the degree of flicker, noise, and impact on the environment attributable to these large structures There is a direct co-relation of the degree of impact of flicker and noise based on the setback distances. The Council currently has the opportunity to prevent undue distress to it's constituents by putting in place a suitable setback distance that would help in preventing stressors on it's constituents.

Please click on these reference links:

**Potential Impacts of Wind Turbine Noise** 

# Onshore wind energy use in spatial planning—a proposal for resolving conflicts with a dynamic safety distance approach

The information included about Dutton Dunwich Ontario is relevant given similar population size, environmental and cultural interests to Cumberland County in Nova Scotia. See attached report. Also note that in March 2022, Dutton Dunwich County adopted a 2 km setback, consistent with Bavaria, Germany, Poland and Scotland where setbacks are between 1-2 km.

Reference Links: Municipalities of OntarioRe: Setbacks for industrial-scale wind turbines

## Assessing socially acceptable locations for onshore wind energy using a GIS-MCDA approach

We would recommend reviewing the literature we have attached that discusses the need to consider factors such as population density, cultural sensitivity, rurality, environment, and geography in establishing appropriate setbacks for individual areas. An important principle is the need for the community to be heard and to benefit from the projects, and that these projects are consistent with community planning and development.

Regarding Shared Economic Benefits- we request

- -A socio-economic impact study shall be completed prior to a development agreement
- -Shared Economic benefits require reporting, monitoring and to be to a development agreement
- If a development agreement is supported by a socio-economic impact study, a development agreement shall determine what the Community Benefits will be.
- Property Value decreases have been found in areas of Industrialized wind farm development. Has a study been done to determine if the loss of such property tax will be offset by the income from these wind turbine farms? Please see this reference: Ontario court says wind turbines reduce property values

In Response to Regulatory Requirements-

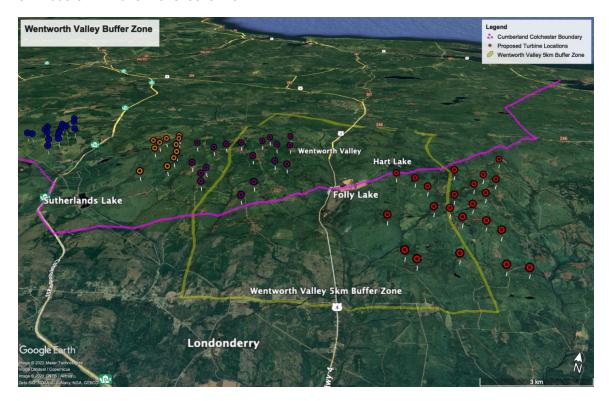
We request that a review on bylaws initially be done in 2 years following the current changes being implemented and then every 5 years thereafter. The technology is swiftly changing- we have seen the necessary size of turbines almost triple for energy requirements in just the past 10 years.

#### Operations and Maintenance

- That council require a reporting and monitoring system for projects 15mw or more
- That Council define a thorough complaint process including pre-installation and road building and turbine location site confirmation. Please review this reference: <u>Wind Turbine Incident/</u> <u>Complaint Reports in Ontario, Canada: A Review—Why Are They Important?</u>

#### Adding Wentworth to Restricted Overlay

Wentworth needs a Restricted Overlay of approximately 5km east and west of Hwy 4.See this Map Link of what a 5 KM Buffer Zone looks like:



We must also take into account the topography of this buffer zone- slope and topography can greatly effect the symmetry of the buffer zone- visual impact analysis of receptor locations must be performed to determine the ideal boundaries for the restricted overlay.

#### Policy 4-54:

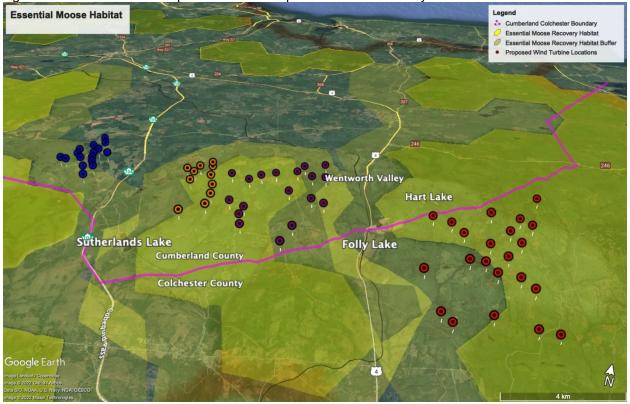
Wentworth should easily meet criteria for bird conservation areas (protected areas with SAR birds), important cultural areas, historic sites, and ecologically significant lands.

#### Policy 4-54:

While Wentworth does not have a local tourism plan, residents of Wentworth have been asking the Municipality of Cumberland County for administrative support to develop a Wentworth Community Tourism Plan for the past several years. The Wentworth Community Development Council has offered to help manage such a program with other supports. Explore Cumberland identifies Wentworth as one of Cumberland County's three core tourism regions.

Ski Wentworth is one of Nova Scotia's largest tourism operators. Based on a Technical Assessment and Master Plan by Ecosign Mountain Resort Planners, Ski Wentworth is transitioning to a four-season tourism model.

While much of Cumberland County consists of core mainland moose habitat, the Folly Lake part of the county is considered 'essential' moose habitat. The mainland moose recovery plan confirms the significance of the area. A map has been developed to show the overlay of the Moose Habitat



#### Culturally Significant Area:

Based on the recommendations and criteria for Culturally Significant Areas: We believe Wentworth matches all these criteria. Our Video that we presented to you in the body of our email and also linked here: <a href="Protect Wentworth Valley Video">Protect Wentworth Valley Video</a> shows a diverse group of citizens, each with their own view of the resilience of the users of this area.

#### To add to that:

#### Uniqueness:

- The 1st, 2nd, 3<sup>rd</sup> and 6<sup>th</sup> tallest peaks of mainland NS are centered 3-4km around Folly Lake in Cumberland County. Confirmed by Director Geographic Information Services, Internal Services, NS. This makes the area unique; for climate change adaptation/ mitigation, geographically, metrologically, for biodiversity, and recreation.
- Mountain sport hub of the Maritimes located halfway between Atlantic Canada's two largest populations. Wentworth is the oldest mountain sport recreation area in Atlantic Canada.
- Key ecological corridor/ connectivity bottleneck area between Cumberland County and western Colchester County with the rest of Nova Scotia.
- Has a significant cluster of protected areas, a provincial park, and conservation areas with more proposed.

#### Broad cultural/community resilience:

- 100,000+ visitors for mountain sports, scenery, and nature immersion.
- Ski Wentworth 1,500-acre recreation and wilderness area, 24 ski trails & 35km of trails
- Ski Wentworth entering 90th year in outdoor recreation business.
- Ski Wentworth, one of Cumberland County's largest employers
- Wentworth Hostel recreational area, 30km of trails
- Wentworth Freestyle Racing Club
- Wentworth Freestyle Airbag Association
- Wentworth Trail Running Association
- Wentworth Mountain Bike Association
- Wentworth Trails Association
- Wentworth International Hostel
- Arctic Fox X-C Ski Club
- Wentworth Recreation Centre
- Old Wentworth Schoolhouse Association
- Tiny Changes Disc Golf
- Wentworth Recreation Centre
- Fundy Snowmobile Club
- Wentworth Community Development Council

# Importance to resilience

Most groups listed above exist because the Wentworth region has some of the best mountain sport recreational terrain in the Maritimes as noted in Cumberland County Strategic Tourism Plan. More than 100 kms of trails in the immediate Wentworth area.

Home to some of Canada's hardest trail running endurance events; Beat to Snot, Breakfast Club and Wascilly Wabbit.

If the area were degraded it would be devasting to hikers, skiers, mountain bikers, fly fishers, waterfallers, birders, snowshoers, Nordic skiers, trail runners, orienteers, snowmobilers, ATV'ers and anyone seeking refuge in wild terrain and old forests.

## Degree of tradition

- Popular hiking, waterfall and lookoff area for over 100 years
- Downhill skiing in Wentworth 90+ years, one of Canada's oldest ski areas.

- Promoted as scenic area in NS Tourism and CN literature since the 1930's
- Hostel trails built in the 70's
- National orienteering events in the 1978 and 2015
- 30-year host of Spoke Bender Mountain Bike Race
- Host of Winter Special Olympics and 2011 Canada Winter Games
- Celebrated on the cover of two different NS waterfall guidebooks
- Home to some of Canada's hardest trail running endurance events; Beat to Snot, Breakfast Club and Wascilly Wabbit

We hope that Mayor, Councillors, and Staff have the opportunity to read our referenced links and understand our concerns. Destroying our environment to 'save' our environment negates any benefits of these industrialized wind farms in our area. We have confidence in our Council to set precedent and protect not just it's citizens but the ecological and biological diversity of the Wentworth Valley and surrounding areas that make us the envy of visitors from around the world.

Respectfully,

# **Protect Wentworth Valley**

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