

WHMPS and WHLUB Amendment Request: Wind Farm Policies Decision Request Report

Planning and Heritage Advisory Committee (PAC/HAC)

December 14, 2023



Application

- Completed application received from Steven Hart of Vaughan on November 7, 2023
- Request to amend WHMPS Section 4.24 to further evaluate wind farm development proposals within the Municipality

Application Cont.

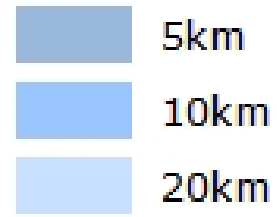
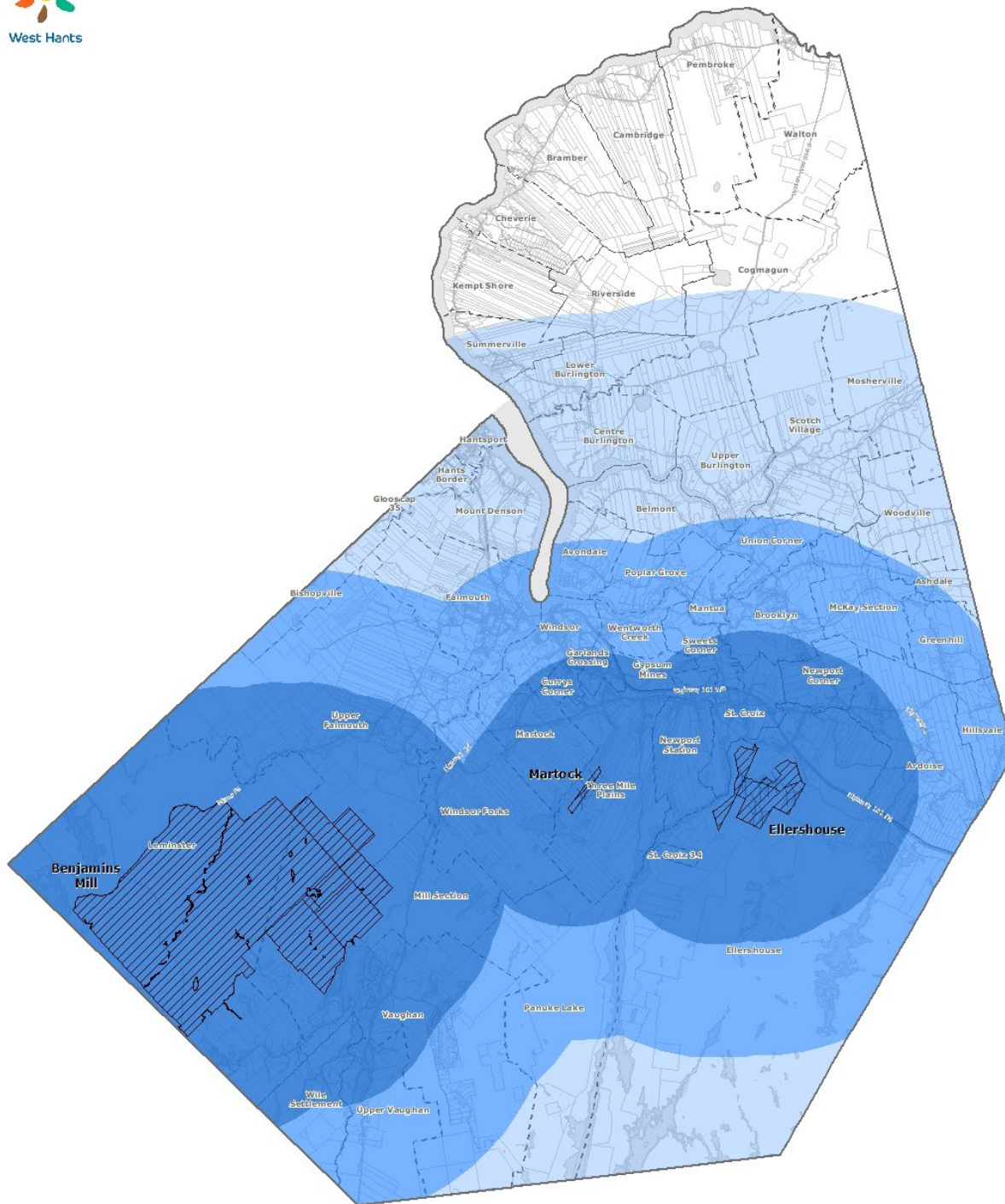
- *“to ensure that no large wind turbine or wind farm shall be considered inside a 20km radius from an existing or under construction large wind turbine or wind farm, or an approved development agreement for a large wind turbine or wind farm, until all large wind turbines or wind farms falling within the 20km radius have operated at project capacity for a minimum of 24 months.”*
- *“due to the potential environmental consequences that could arise from such projects, including but not limited to: bird migration, sight and sound effects, property values, localized weather pattern changes, and general quality of life for affected residents. It is important to ensure that these factors are considered prior to the commencement of any new projects.”*

Decision Request

- Staff require direction from Council on whether amendments to the WHMPS and WHLUB should be drafted in response to this application and the extent of those amendments

Existing Wind Farms

	Martock	Ellershouse	Benjamins Mill
Development Agreement Registration (year)	2014	2014	2023
Number of Turbines Permitted	3	10	24
Total Project Capacity	6 MW	16.1 MW	150 MW
Status	Operational	Operational	Under Construction; Operational by 2025



Siting Considerations

- Department of Natural Resources and Renewables staff highlighted considerations for wind turbine siting in Nova Scotia:
 - available land that is cleared and accessible by road (commonly forestry land),
 - proximity to transmission lines,
 - proximity to load centre (i.e., HRM), and
 - availability of consistent, non-turbulent wind
- These considerations position WHRM as an attractive location for further development of wind turbines

Provincial Environment Goals

- phase out coal power;
 - reach 80% renewable energy within the electrical grid by 2030; and
 - reduce GHG emissions from electricity by more than 90% from 2005 levels by 2030.
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- Increase onshore wind generation from 20% to 50%+ of the overall proposed renewable energy mix
 - 12% to be produced from wind farms currently under construction (370 MW)
 - 25-30% of energy to be produced by new wind farms in 2030 (1000+ MW)

Wind Farm Regulations

- Municipal - regulates the use of land
 - Determines which zones may be appropriate for wind farms and determines setback requirements for the wind turbines from other types of land uses (i.e., residential)
- Province – regulates environmental matters
 - Wind energy projects over 2MW in size must go through the Provincial Environmental Assessment process
 - In EA project submission proponents must describe the biophysical environment (i.e., geology, surface water, habitat, etc.) and socioeconomic conditions (i.e., property values, human health, etc.)

Provincial Environmental Assessment

- Numerous terms and conditions are included in an EA approval:
 - timelines for commencement,
 - shadow flicker assessments and noise modeling,
 - setbacks from watercourses,
 - a wildlife management plan,
 - a bat study and monitoring program,
 - an adaptive management plan,
 - a complaint resolution plan,
 - a contingency plan, and
 - a decommissioning and site reclamation plan two years prior to the end of operation.

Provincial Environmental Assessment Cont.

- Provincial EA process currently under review for modernization by the end of 2024
- Includes review of the evaluation of cumulative effects of wind farms

West Hants Municipal Planning Strategy

- Section 4.24 establishes policies for wind turbines
- Require standards to be established in the WHLUB for the development of small wind turbines including minimum lot size, setback, height and similar requirements to ensure public safety and minimize the potential for land use conflicts
- Temporary large wind turbines for exploration or test purposes are permitted outside the Growth Centre, Village and Hamlet designations as-of-right
- Permanent or long-term installations of wind farms outside the Growth Centre, Village and Hamlet designations are considered by development agreement

West Hants Land Use By-law

- Section 5.52 outlines the regulations for wind turbines:
 - zones where wind turbines are permitted, required setbacks, and max. height and min. lot area for small wind turbines
- For large-scale wind farms: regulations in the WHLUB, the Provincial EA approval and previous DAs are used to negotiate the parameters of a proposed DA
 - All approved DAs for wind farms require a min. setback of 1,000 m. from the base of the tower to any dwelling, hotel, motel, or apartment hotel existing as of the date of the DA, and a min. setback of 550 m. from the base of the tower to any woods camps existing as of the date of the DA

Other Jurisdictions

East Hants

- Allows micro-scale and small-scale wind turbines as-of-right
- Large-scale wind turbines by site plan approval outside growth areas
- Setbacks for large-scale wind turbines at least 4 times the height of the turbine, unless an adjacent property owner agrees to a reduction of the setback
- Requires the site plan to be circulated to all properties within 1,000 m

Other Jurisdictions

Kings County

- Accessory wind turbines as an accessory use in all zones
- Small-scale wind turbines as an accessory use in all rural zones
- Identifies a “Large Scale Wind Turbine Overlay” area where large-scale wind turbines are permitted
- Overlay primarily consists of Crown lands and the boundaries are a min. of 3 km from dwellings existing on November 15, 2018
- Specific requirements for finish of turbine, lighting, signs and advertising

Other Jurisdictions

Colchester County

- Wind Turbine Development By-law
- Min. setback
 - from an external property line is 1 time the height of the turbine, and
 - 1 km from an existing dwelling on a neighbouring property if the wind turbine is 100 meters in height or less, or 2 km for wind turbines greater than 100 meters
- Requirements for finish of turbine, lighting, signs and advertising, access and safety, and outdoor storage
- Notification of public meeting to land owners within 2 km of the proposed project

Staff Considerations

- Provincial environmental goals = increase wind generation by 2030
- For consideration based on request:
 1. 20 km distance excludes almost $\frac{3}{4}$ of WHRM. Amending the policies for the entire Municipality would be more feasible to interpret and administer, than using a distance from existing wind farms.
 2. The Provincial EA approval will outline items that require a monitoring plan such as a bat monitoring program and a wildlife management plan. On the Municipal level it would be difficult to evaluate and enforce these items based on current staff capacity and training.

Staff Considerations Cont.

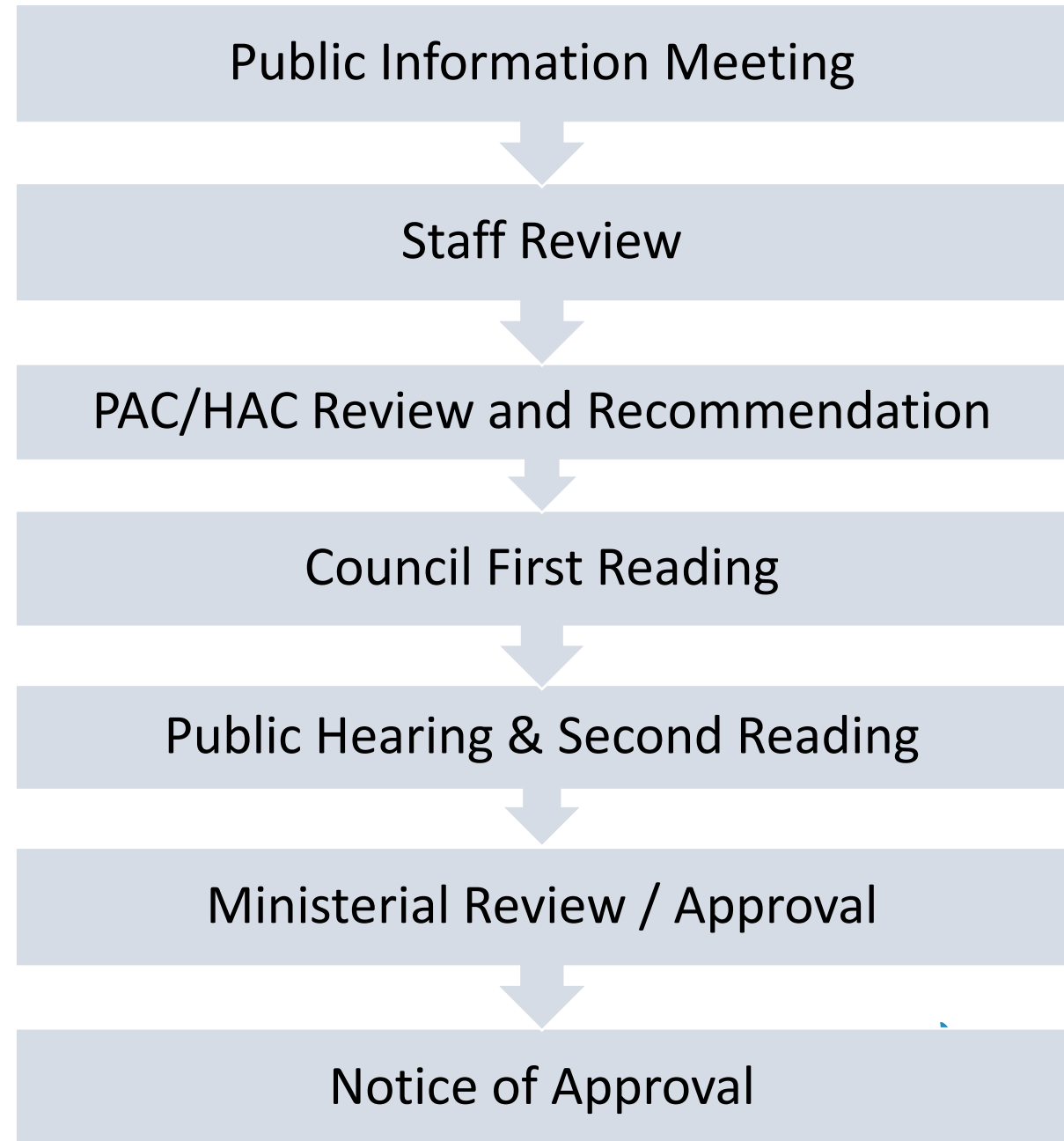
- If it is the wish of Council, in relation to this application, staff could review the current planning documents in more detail including:
 - the zones where wind farms are permitted;
 - the setback requirements for wind farms;
 - application requirements for wind farms;
 - the approval process for wind farm developments; and
 - the criteria required to be evaluated when considering an application for wind farm developments.

Staff Considerations Cont.

- Consider:
 - Expertise needed to evaluate any requirements for wind farm applications and enforcement capabilities within the current staff compliment
 - Jurisdiction
 - Financial implications associated if additional staff resources, training or specialized equipment is required to evaluate wind projects on a municipal level

Next Steps

If Council provides direction for staff to draft amendments to the WHMPS and WHLUB in response to this application, the process for the amendments would be:



Decision Request

- Staff require direction from Council on whether amendments to the WHMPS and WHLUB should be drafted in response to this application and the extent of those amendments
- The PAC/HAC recommendation will be discussed with Council in January

Alternatives

- In response, the PAC/HAC may:
 - request Council direct staff prepare draft WHMPS and WHLUB amendments based on direction from PAC/HAC;
 - recommend Council not move forward with this application or any amendments associated with the request; or
 - provide alternative direction such as requesting further information on a specific topic.



West Hants
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