

## PROJECT INFORMATION

The Aulds Cove Wind Project (the Project) is proposed by Green Current Renewable Energy Development Inc. (GCRED), a Nova Scotia-based company with decades of experience in wind energy. The Project will be in Guysborough County, near Aulds Cove, Mulgrave, Grosvenor, and Frankville (Drawing 1, attached), with the Project's centre located at UTM coordinates (zone 20N) 45.62278 -61.46889. The Project is primarily on private land, with about 13% of the Project's total footprint planned for Crown land including new roads, turbines, and associated electrical infrastructure. It will include up to 21 wind turbines with a total generating capacity of up to 147 megawatts that will go to the Nova Scotia power grid and is enough to power upwards of 50,000 homes with clean energy. The Project will include access roads, electrical lines, a substation, an operations building, and a laydown yard for construction materials. Construction is expected to start in late 2026, with operations beginning in 2027 and continuing for at least 25 years.

## PROJECT CONSTRUCTION, OPERATION, AND DECOMMISSIONING

Construction will take about 15 months and involve clearing land, building roads, preparing turbine pads, installing electrical systems, and assembling turbines. Heavy equipment and trucks will be used, and although it is not anticipated, the possibility for blasting cannot be ruled out. During operations, the turbines will generate clean electricity and require regular maintenance. At the end of the Project's life (about 2052), the turbines and infrastructure will be removed, and the land will be restored. Most turbine components, including steel and fiberglass, can be recycled or reused.

## PROJECT BENEFITS

The Project supports Nova Scotia's Clean Power Plan, which aims for 80% renewable electricity by 2030 and a 90% reduction in greenhouse gas emissions from electricity compared to 2005 levels. By replacing coal and other fossil fuels, the Project will reduce emissions by about 294,000 tonnes of CO<sub>2</sub> each year. It will also improve air quality, create local jobs, generate tax revenue, and strengthen energy security by providing a stable, fuel-free power source. GCRED is committed to maximizing local economic benefits, including hosting job fairs and using local contractors where possible.

## MI'KMAQ OF NOVA SCOTIA

The Project is located within Mi'kmaq traditional territory. GCRED has engaged with Mi'kmaq communities, including Paqtnekek and We'koqma'q First Nations, and the Kwilmu'kw Maw-klusuaqn Negotiation Office. A Mi'kmaq Ecological Knowledge Study is underway to document traditional land use and species of cultural importance. GCRED is committed to ongoing engagement, offering site visits, and developing communication and complaint resolution plans. GCRED will also develop a Mi'kmaq Communications Plan prior to construction that outlines future actions to ensure timely information sharing and equitable Mi'kmaq access to jobs and training through the Project.

## POTENTIAL EFFECTS ON THE ENVIRONMENT

### Air Quality, Sound, and Shadow Flicker

Construction will create dust and exhaust emissions from equipment, but these will be temporary and controlled through measures like wetting roads and limiting idling. During operation, turbines do not produce air emissions. Noise and shadow flicker were modeled for nearby homes and found to meet provincial standards: noise below 40 dBA (similar to a quiet library) and shadow flicker less than 30 hours per year. Turbines will use special blade designs to reduce noise.

### Geology and Groundwater

The Study Area has sedimentary bedrock and some karst risk. There are no sulphide-bearing slates, but arsenic and manganese can occur naturally in groundwater. There are 92 wells within 2 km of the site, with four within 800 m. If blasting is required, pre-blast surveys will be conducted. An Erosion and Sediment Control Plan will be developed to protect soil and water.

### Surface Water, Fish, and Fish Habitat

The Project avoids most watercourses, but some road crossings are needed. These will follow best practices to maintain natural flow and fish passage. Surveys found brook trout and Atlantic salmon in nearby streams. Work near water will occur during low-flow periods and outside sensitive fish spawning times any alterations will follow the provincial watercourse alteration approval process. A Surface Water Management Plan and Contingency Plan will be developed and implemented, including fish rescue if needed.

### Wetlands

Wetlands provide important habitat and water storage. The Project will affect about 6.6 hectares (ha) of wetlands, mainly for roads and turbine pads. GCRED will minimize impacts, maintain buffers where possible, and follow provincial wetland alteration approval processes, including compensating for the loss of wetland habitat and function required to complete the Project.

### Habitat, Plants, and Lichens

The Study Area comprises 1416.7 hectares including a range of mixed forests and wetlands. Direct disturbance of vegetation is expected within the 95.5 ha Clearing Footprint, and 64.1 ha of this area will become part of the Project Footprint for the life of the Project. Surveys within the Study Area identified rare plants and lichens, including black ash (Threatened) and blue felt lichen (Special Concern). Through iterative Project design, including relocating infrastructure, the Project Footprint minimizes impacts to Species at Risk (SAR), Species of Conservation Interest (SOCI), and sensitive habitats. The Project avoids all direct impacts to identified SAR with legislative protection under either the federal *Species at Risk Act* or the provincial *Endangered Species Act*.

**Wildlife**

Wildlife such as deer and small mammals are confirmed to use the Study Area, while the presence of mainland moose is suspected though could not be confirmed through a variety of active and passive monitoring over a year of study. Clearing and construction may temporarily disturb habitat, but effects are not expected to be significant. GCRED will implement a Terrestrial Habitat and Wildlife Management Plan to minimize effects on wildlife, including developing procedures for potential wildlife encounters throughout the Project's lifespan.

**Birds and Bats**

Bird and bat surveys were completed in 2024 and 2025, and observed avian SAR such as Canada warbler, olive-sided flycatcher, and common nighthawk. Most birds detected by radar flying through the Study Area were flying either above or below the height of turbine blades. Bat activity was recorded within the Study Area through bat acoustic monitors. The iterative Project Footprint has optimized the turbine and infrastructure layout to avoid key habitat to the degree possible, including observed bat maternity roosting in the eastern Study Area. Mitigation measures including vegetation clearing and construction timing and minimizing non-essential light usage will reduce risks to birds and bats, in addition to mortality monitoring and adaptive management if post-construction monitoring identifies significant injury or mortality rates. Bird and bat habitat loss is minimal, and some habitat types for both may increase after construction. GCRED will follow best practices to minimize collision risk. Both birds and bats will be included in the Terrestrial Habitat and Wildlife Management Plan.

**Socioeconomic Environment**

The Project will create jobs and economic benefits for local communities. Visual changes will occur, as turbines will be visible from some viewpoints, but photo simulations show limited impact due to topography. Studies indicate property values near wind farms are generally unaffected. GCRED will establish a community liaison committee and a complaint resolution process.

**Archaeological Resources**

Qualified archaeologists conducted a thorough desktop and field assessment of the Project. They found two areas of elevated potential for Mi'kmaq archaeological significance, though no subsurface testing was conducted to verify the potential. Results were submitted for approval to Nova Scotia Communities, Culture, Tourism, and Heritage (NSCCTH) as an Archaeological Resource Impact Assessment. GCRED will conduct shovel testing in areas of elevated potential according to the archaeologist's recommendations, if accepted by NSCCTH, and will develop a chance find procedure related to the potential unexpected discovery of archaeological items or sites, or human remains, during construction.

**Cumulative Effects**

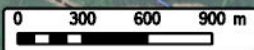
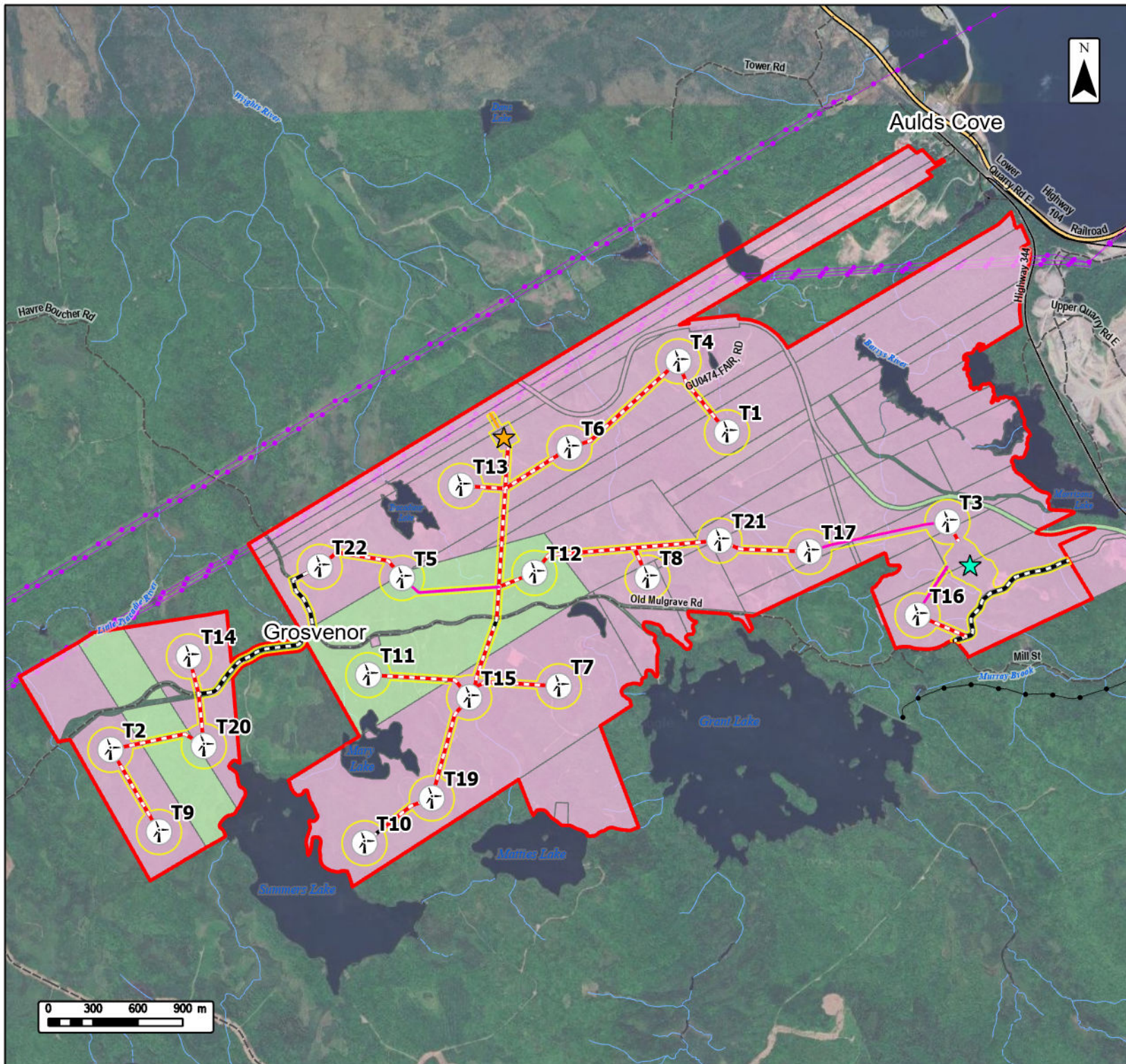
An analysis of the potential for cumulative effects examined the nature of nearby projects including other wind developments, transmission lines, quarries, and more, focusing on three

nearby wind projects. The Mulgrave Community Wind Project, Goose Harbour Lake Wind Farm Project, and Setapuktuk Wind Project all have existing turbines or are under construction or planned with an approved environmental assessment. No significant cumulative effects are expected on wildlife whereas there is adequate remaining undisturbed habitat. Potential cumulative effects on avifauna remain uncertain due to limited regional mortality data, but post-construction monitoring requirements will provide a mechanism to detect and respond to any emerging cumulative effects.

## **CONCLUSION**

The Aulds Cove Wind Project will provide significant environmental and economic benefits by generating clean energy and reducing greenhouse gas emissions. While there are potential impacts on wetlands, wildlife, and local habitats, these will be minimized through careful planning and mitigation measures. Overall, the Project is expected to have positive long-term effects on Nova Scotia's environment and economy while supporting the province's transition to renewable energy.





## Aulds Cove Wind Project

Site Overview

**GREENCURRENT**  
Renewable Energy Development Inc.

Study Area	Utilities (line)	
Assessment Area	Existing Pipeline	
Proposed Turbine Location		Existing Transmission Lines
Laydown Area		<b>Transportation</b>
Substation Location		Trans-Canada Highway
Crown Land		Road
Private Land		Unpaved Road
Collector Line		<b>Water Features</b>
Transmission Line		Mapped Stream
Existing Road		Mapped Indefinite Stream
Proposed New Road		



Coordinate System: NAD 1983 CSRS UTM Zone 20N  
Source: © OpenStreetMap (and) contributors, CC-BY-SA, GeoNOVA, SNSIS, NSNRR, ACCDC, IBA, Canada, CNVI, HERE, Garmin, USGS

Date:	2025-12-08	Project #:	24-10440
Scale:	1:35,000	Drawing #:	1
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CONSULTING