

# Welcome to the **Outlaw Trail Open House**

Please sign in at the front desk and provide your contact information if you would like to receive Project updates.

We invite you to walk around and look at the displays. If you have questions or comments, please ask one of our representatives.

Thank you for attending!





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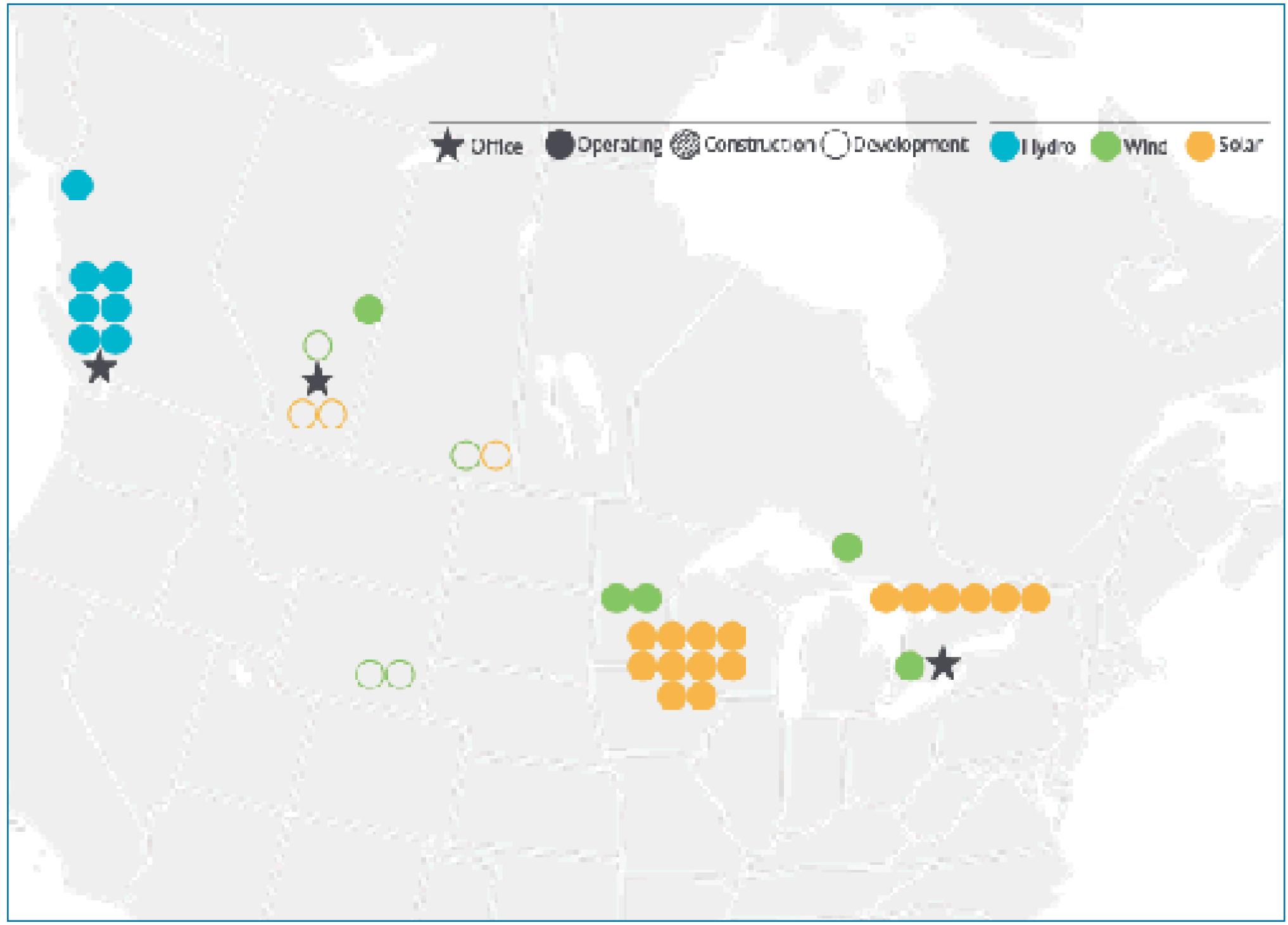


#### BluEarth Renewables

BluEarth Renewables brings together extraordinary people with the power to change the future<sup>™</sup> by delivering renewable energy to the power grid every day. Headquartered in Calgary, we are a leading, independent, power producer that acquires, develops, builds, owns and operates wind, hydro and solar facilities across North America. Our portfolio includes 333 MW net (405 MW gross) of nameplate capacity in operation and under construction and over 1,000 MW under development.

#### For more information, visit bluearth.ca

#### **Our Portfolio**



# Power to Change THE FUTURE™





#### Prairie Resilience

#### Saskatchewan's Climate Change Strategy

Electricity generation is the third largest source of emissions in Saskatchewan, responsible for 19% of total provincial emissions in 2015.

SaskPower is taking important steps toward the development of renewable energy projects in the province. In 2015, SaskPower set a target of having 50% of its electrical generation capacity come from renewable sources by 2030. That's double today's installed capacity of 25%. This ambitious goal will be achieved by a major expansion in wind power, augmented by other renewables, such as solar, biomass, geothermal and hydro.

BluEarth intends to bid the project into SaskPower's renewable energy procurement process, which would award long-term generation contracts for wind energy projects. This a competitive procurement process based on power price, so it will encourage competition among developers that will ultimately result in lower power prices from renewable energy projects.







### Background

Development work on the Outlaw Trail Wind Project has been underway since 2016.

BluEarth Renewables first began outreach efforts on this Project in 2016. Over the last year, our team has been working to obtain approval from the Ministry of Environment, consulting with stakeholders and completing further technical and environmental studies

as part of the development process.

We plan to submit the Project in the upcoming SaskPower renewable energy procurement, awarding long-term generation contracts for wind energy in Saskatchewan.

If offered a contract and the Project obtains the necessary approvals from the Ministry of Environment, Outlaw Trail could begin construction as early as 2022 to meet the required commercial operation date of late 2023.







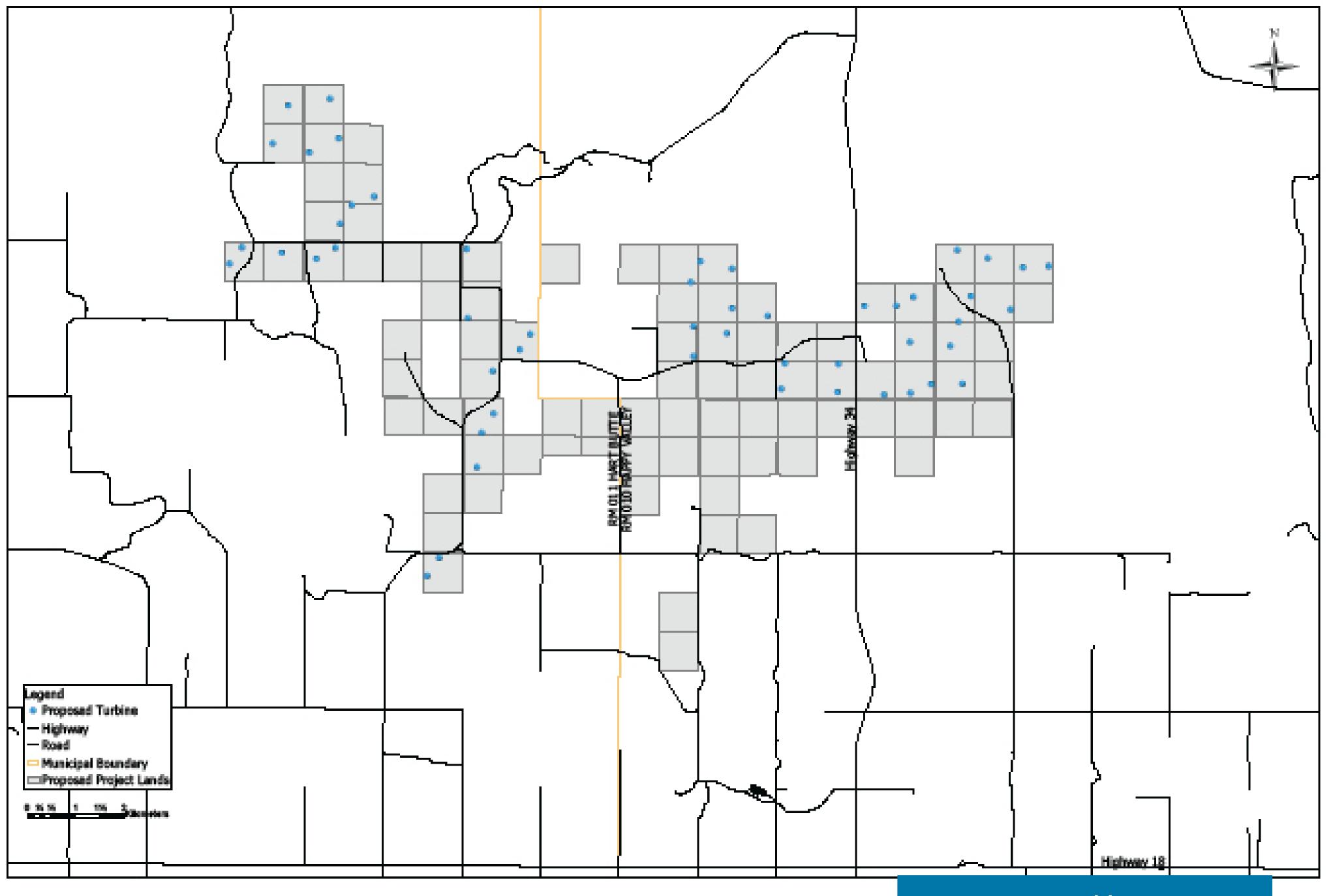
### Project Description

The Outlaw Trail Wind Project would have a capacity of up to 230 MW, which is enough energy to power up to 100,000 homes annually with clean, renewable power. The Project would consist of up to 51, 3.8 -5.8 MW turbines located on private and Crown lands.

If the Project is successful in securing a power purchase agreement, we anticipate that construction could begin as early as 2022.

#### The Project facilities will include:

- 34.5kV electrical collector system
- 34.5kV to 230kV Project substation
- 230kv transmission line from Project substation to the SaskPower point of interconnection to the west, to be constructed by SaskPower
- An operations and maintenance building
- A concrete batch plant during construction
- Temporary and permanent access roads
- SCADA communications
- Other associated facilities



Proposed layout





### Why Here?

We consider several factors when choosing sites for wind projects.

The Outlaw Trail Project location was chosen for the following reasons:

- Excellent wind resource
- Close to existing power line infrastructure with enough capacity to take electricity
  - generated from the Project
- Limited environmental constraints
- Compatible with existing land uses
- Suitable terrain with limited physical constraints
- Supportive landowners
- Good access options from highway
- Willing host communities with an appetite for energy generation







## **Environmental Approval Process**

As part of the environmental approval process, a Technical Project Proposal (TPP) was submitted to the Environmental Assessment Branch (EAB) in 2018.

The next step is to prepare and submit an Environmental Impact Statement (EIS) that will be made available for the public to review and comment on prior to the ministerial decision.



#### The Outlaw Trail EIS will include:

- Information about BluEarth Renewables and the Outlaw Trail Wind Project
- Where, when, and how the Project will be constructed
- Results of consultation with the public and other parties
- Results of field surveys and expected effects to the environment, including mitigation to avoid those effects
- Results of predicted noise and visual assessments
- Commitments to monitor the Project for effects during and after construction

Following approval by the EAB, municipal development permits and other permits will be applied for.





### **Environmental Surveys**

As part of the TPP / EIS development, the following environmental surveys have been completed to assess the area and identify sensitive features or species.

• Desktop Analyses: explored existing databases to identify historical records of rare plants, sensitive wildlife and heritage resource finds in the area.



- Land Cover: described what the land is being used for and what kind of plant communities are found on it (i.e. native grassland, cropland, hayland, pasture, wetlands, forest, etc.). Completed in 2016.
- **Raptor Nests:** surveyed the entire Project area in 2015 and 2017 for hawk, owl, and falcon nests.
- Sharp-tailed Grouse Leks: surveyed all suitable habitat within the Project area for grouse breeding leks in 2016 and 2017.
- **Breeding Birds:** communities of breeding birds were surveyed and described in the different land cover types in 2016 and 2017.
- Burrowing Owls: surveyed for the nest sites of burrowing owls in 2016 and 2017.
- Vegetation Community and Rare Plant Surveys: surveys to describe the plant community were completed in 2017 and follow-up rare plant surveys were completed

in 2019 to determine the presence of rare or endangered plant species.

- Breeding Amphibians: wetland areas where rare frogs and toads may breed were surveyed in 2017.
- Yellow Rails: wetlands with suitable habitat for breeding yellow rails were surveyed in 2016.
- Common Nighthawks and Short-eared Owls: Nighthawk and short-eared owl activity was surveyed in 2016.
- Bird Movements: surveys for bird movement rates were conducted within and outside the Project area.





### Sound

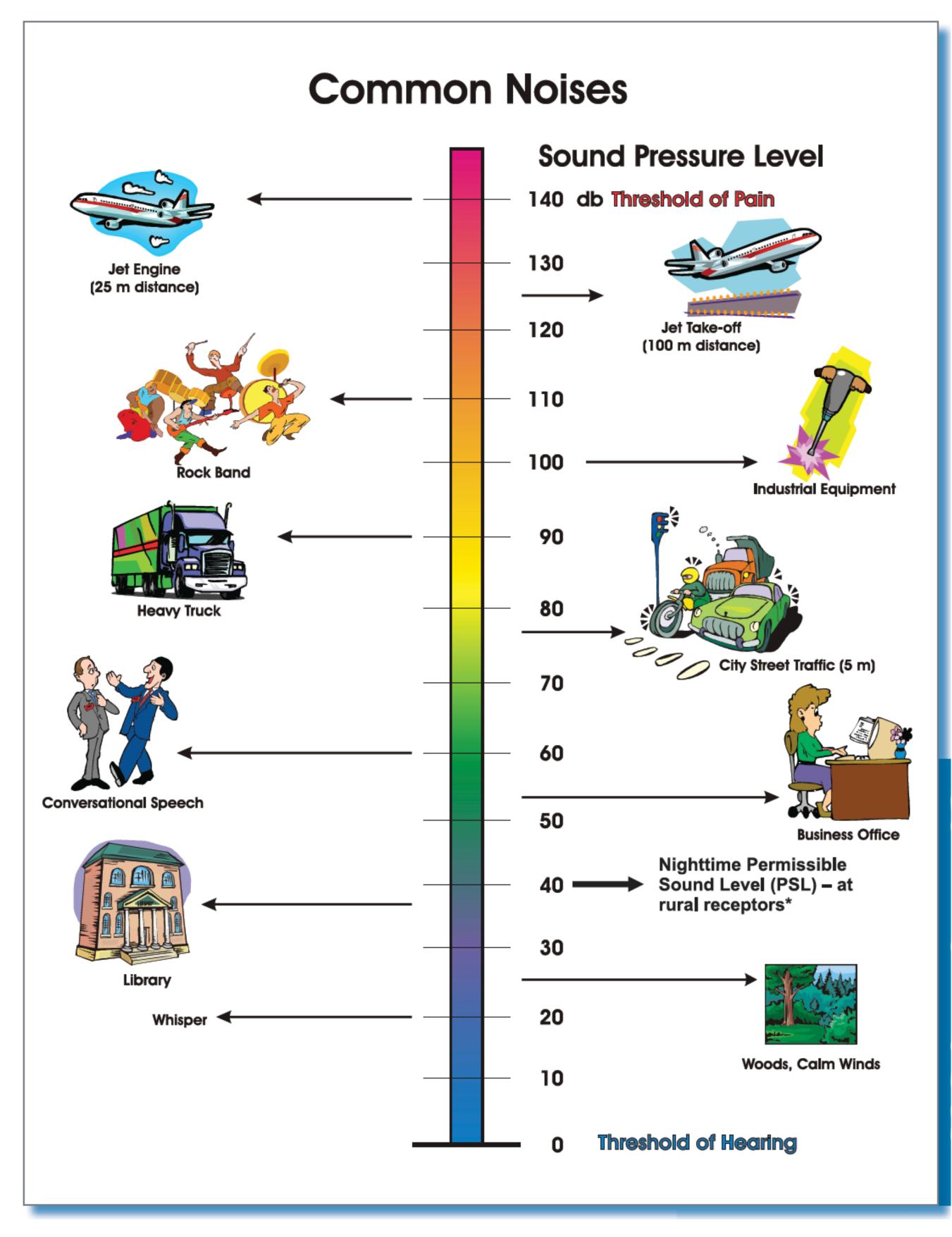
# Detailed noise modeling is undertaken to ensure sound levels do not exceed 40 dBA (night time) at residences.

Currently, there is no regulation for noise levels in Saskatchewan, so we complete all sound modeling to align to the Alberta Utilities Commission regulatory requirement of 40 dBA at night time at all residences. This is the strictest noise regulation in Canada.

The noise modeling considers:

- Topography (hills and slopes)
- Ground cover (trees, water, grass)
- Existing noise sources (oil and gas infrastructure, highways)

Studies of the noise conditions within the Outlaw Trail Wind Project area are an important factor in selecting the final turbines for the Project.



\* Permissible Sound Level (PSL) includes sound contribution from ambient (i.e. background) noise, other regulated facilities (e.g. oil and gas infrastructure, power/utilities infrastructure), and any newly proposed regulated facilities (i.e. the Project). Nighttime PSL at receptors in rural environments is 40 dBA.





### **Community Benefits**

The Outlaw Trail Wind Project will provide several benefits to the local community.

- Construction Employment There will be up to 120 full-time workers during peak construction and an estimated 175,000 person hours.
- Operations Employment The operations and maintenance of the facility will require a full-time, local team of six wind technicians and one site supervisor.
- New Investment In the form of local services and supplies such as infrastructure improvements, fuel, accommodation, meals and supplies for employees, construction personnel, and contractors who will spend time in the local communities.
- Landowners and Community Wind turbines are compatible with other land uses, such as farming, and can serve as a financial boost for rural economic development.
- Municipal Tax Revenues The Project will pay taxes to the rural municipalities, with an estimated annual tax revenue of \$800,000 between Happy Valley and Hart Butte. In addition, the project does not increase demand on municipal services or public works such as sewer and water upgrades.
- Clean Energy Wind energy provides societal benefits by offsetting harmful emissions such as carbon dioxide, oxides of nitrogen, and sulphur dioxides that are created through conventional, thermal power generation.
- Ongoing Community Investment Through the life-cycle of the Project, we will continue to invest in the local community through business operations and annual donations.



#### Outlaw Trail Wind Project

### Project Schedule

	Jan - March	Apri Jun		
SaskPower Renewable Energy Request for Qualifications Submission				
Application to Saskatchewan Ministry of Environment				
Ministry of Environment & Municipal Development Permit Approvals				
SaskPower Renewable Energy Procurement Contract Awarded				
Engineering				
Project Financing				
Procurement				
Project Construction				
Expected Commercial Operation Date				

#### If the Outlaw Trail Wind Project is successful in securing a contract, we anticipate that construction would begin no earlier than 2022.

20	20		2021				2022				2023			
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### Project Decommissioning

At the end of the Project life, the site will be decommissioned and reclaimed based on industry standards and best practices.

#### Decommissioning

- Wind turbine removal disconnected, dismantled and removed from site
- Substation removal components disconnected, dismantled and removed from site
- Concrete foundations (wind turbine pads, crane pads, substation) removed to a depth of 3 feet (91 cm)
- Overhead electrical cables and support structures removed and taken off site
- Underground cables removed to a depth of 3 feet (91 cm)
- Roads to be decommissioned and gravel removed\*
- Operations and maintenance building to be removed\*
- Gates and cattle guards to be removed, fence replacement\*

#### Reclamation

- Roads, turnarounds, crane pads and foundations
- Decompaction of soil
- Filling voids and excavations
- Contouring of land to match pre-construction landscape
- Reseeding with appropriate seed mix as defined by appropriate governing body

\* Unless requested by landowner to be left in place



# Thank you for attending!

Please fill out a comment form and provide your feedback on the Outlaw Trail Wind Project.

Comments must be received by December 20, 2019 for consideration in our decision-making process and for inclusion in our Ministry of Environment filing.

If you would like to receive updates, please provide us with your name and contact information.

For more information on BluEarth Renewables and the Outlaw Trail Wind Project, visit:

www.bluearth.ca projects@bluearth.ca





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