Sitka Investigative Plan

1.0 Background

1.1 Project Overview

Boralex Inc. is applying for an Investigative Licence (IL) to investigate the wind resource to support development, construction, and operation of a 200MW+ wind project, the Sitka Wind Project. The proposed Sitka Wind Project is on northern Vancouver Island, south of the town of Sayward. Under the term of the IL, Boralex intends to install one to three meteorological (met) towers to collect wind data (five preliminary locations are identified), conduct field surveys to assess topography and access, and initiate environmental and archaeological field work. The work completed under this tenure will support the submission of an application for an Environmental Assessment (EA) Certificate and a proposal to a forthcoming BC Hydro Call for Power. Access to the site during the term will be by pick-up truck, helicopter, quad, and by foot as required. Installation of the met tower(s) will require minimal tree clearing (120m x 110m (1.32 ha)) and minor ground disturbance for installing the anchors.

1.1.1 Land Management Plans and Regional Growth Strategies

Boralex consulted the Vancouver Island Summary Land Use Plan, Adam & Eve Landscape Unit Plan, and the Strathcona District Strategic Plan, to confirm there are no plans, strategies, or use restrictions that could limit or prevent this activity. In fact, in the Strathcona Regional District Strategic Plan, climate resiliency is an area of focus, and some of the goals include: “Support climate resiliency efforts and mitigation of climate change through local and subregional initiatives” and “Explore opportunities to reduce our carbon footprint in the delivery of services.” These align with the development of new wind projects such as this one.

The project is within mule deer herd ranges. The project area overlaps with a legally established Ungulate Winter Range (UWR) for mule deer. The activities proposed under this IL are investigative and do not include significant tree removal or ground disturbance. Therefore, the potential to impact the above species or their habitat is minimal, and the environmental field work conducted under this IL will contribute to a full EA, including an assessment of risk to these species and habitat and proposing mitigations, as necessary. Potential impacts to these species during the investigation stage are from aerial or ground disturbance during access and/or conducting surveys. To avoid and minimize these potential impacts, Boralex will provide the attached “Appendix A – Wildlife Guidelines” to all employees and contractors working onsite during the investigation phase.

1.2 Seasonal Expectations of Proposed Use

The proposed activities under this IL will primarily occur between spring and fall, with some environmental field work occurring in the winter, as needed. Met tower maintenance will be preferentially scheduled for spring and fall.

Activity	Brief Description	Season/ Timing	Comments
Investigative field work	Field reconnaissance to verify engineering assumptions by walking the project area	Spring through fall	Primary access will be via existing resource roads and by foot
Met tower installation	Installation of one to three 60m guyed met towers; includes site visits to confirm location, tree clearing, and installation	Spring through fall	Access will be by existing resource roads to the extent feasible. Helicopters may be used as necessary. Minor tree removal
Met tower maintenance	Annual tower maintenance to check loggers and installation	Spring through fall	Access will be by existing resource roads to the extent feasible. Helicopters may be used as necessary.
Vegetation and wildlife surveys	Field work to document wildlife, wildlife habitat, and vegetation	Primarily spring through fall, with some surveys occurring in winter	Access will be by existing resource roads to the extent feasible. Helicopters may be used as necessary.
Archaeology surveys	Field work to document archaeological potential	Spring through fall	Access will be by existing resource roads
Geotechnical surveys	Geotechnical drilling and/or seismic surveys may be considered to support final engineering	Spring through fall	Access will be by existing resource roads to the extent feasible. Helicopters may be used as necessary.

1.3 Engagement with First Nations

2.0 Location

2.1 Description

The Sitka Wind Project area is 4933.91 hectares located in the Adam & Eve Land District. The elevation of the location of the met towers ranges from roughly 762m to 1325m. There are 5 met tower locations, each measuring approximately 120m x 110m (1.32 ha). Final tower locations and orientation will be determined following site reconnaissance visits. Areas and coordinates shown on the Sitka Site Plan (submitted separately) are preliminary; final locations will be provided once confirmed.

The project is in the vicinity of the town of Sayward (4.14 km). The nearest First Nation is the K'omoks First Nation, located in the Salmon River 1 Indian Reservation, separated by 2km between the nearest edges of the reservation and the project area.

As shown in the attached maps, the project is in the direct vicinity of Highway 19 and Sayward Road. The project area is crossed by several small roads (eg. Lower Adam Road, M20 Road) and several logging roads that can be used for access during the investigation phase. The area is generally characterized by recent forestry activities.

The project area is not within the area of any reserves (s.15), withdrawals (s.16), or conditional withdrawals (s.17). However, the project is close to the Great Bear Rainforest Special Protection Area, on the opposite side of the Johnstone Strait, in Mainland BC. There are some nearby Mineral and Coal Land Reserves, the nearest (Site #1003423) being 930 m from one edge of the project boundary.

Regarding the hydrography, the preliminary evaluation does not show any major waterways in the project area. Some wetlands are expected to be present. The investigation phase will include an evaluation of the hydrography of the project.

There are no parks or protected areas in the project area. The closest parks are Lower Tsitika River Provincial Park (58km W) and Schoen Lake Provincial Park (50.6 km SE).

2.2 Location Justification

This area has been identified for potential wind energy development based on the anticipated wind resource, topography, proximity to Highway 19, presence of existing and decommissioned forestry roads, and reasonable distance to the BC Hydro transmission system where capacity to interconnect may exist.

2.3 Historical Use

The project area contains several active and retired forest harvest authorizations. The project area falls entirely within a current tree farm licence, TFL 64. Several forest cover reserves remain in the project area.

3.0 Infrastructure & Improvements

3.1 Facilities

The project area contains active and retired forest activities, including active and decommissioned forestry roads. No other facilities occur in the project area. During the investigation phase Boralex will install one to three met towers, which are 60m guy wire towers, typically anchored with a concrete anchor. If the project continues to construction and operation the project area would host upgraded and new roads, approximately 20 - 30 wind turbines, a buried collector system, project substation, and a transmission line connecting the project to the BC Hydro transmission system.

3.2 Infrastructure/Access

The proposed IL is approximately 2.6 km from Highway 19 and can be accessed by existing forestry and recreation roads, including Lower Adam Road and M20 Road. During the investigation period access will most often by done by pick-up truck along the existing roads followed by foot and/or ATV if needed. Access by helicopter may also be required for certain activities, which may include installation and/or maintenance of the met tower(s), and tree clearing for met tower installation. Access will primarily occur between spring and fall and be minimal and sporadic. If the project proceeds to construction and operation the area would experience significant traffic for approximately 18 months during construction. During operation access would be minimal and be completed with pick-up trucks for maintenance crews.

3.3 Utility Requirements and Sources

There are no utility requirements during the Investigation Phase.

3.4 Water Supply

No water use is intended during the Investigative Phase.

Appendix A – Wildlife Guidelines

Wildlife Guidelines – Investigation Phase

The following Wildlife Guidelines provide the employees and contractors of Boralex with clear procedures to follow when conducting investigative fieldwork. The objective of these guidelines is to avoid and minimize the disruption to wildlife and their habitats by Boralex-related activities to the greatest extent possible. While these guidelines aim to limit disruption to wildlife and wildlife habitat, the health and safety of Boralex employees and contractors is the highest priority. These guidelines will be adapted from time to time based on feedback received from First Nations, government agencies, and/or stakeholders.

General provisions

The following apply to all investigative field work by Boralex employees and contractors:

- Record wildlife encounters, actions taken, and responses of animals.
- Do not harass wildlife.
- Obey all applicable signs and area closures.
- Focus activities in areas and times of year when wildlife is least likely to be disturbed, to the extent practicable.
    - Critical timing window for elk, mule deer, and mountain goat: May 15-July 15[1,2,3]
- When encountering animals, yield to wildlife on trails and roads.
- Stay at distances sufficient to prevent changes to the behaviour of animals.
- Leave gates as they are found.
- Avoid known nesting/calving sites.
- Do not damage wildlife trees.
- Do not harass, feed or handle wildlife.
- Do not allow dogs to be at large and harass wildlife.
- Pack out all garbage.
- Use existing roads and wide trails.
- Remain on established trails or in areas of high visibility where no wildlife is present.
- Use existing bridges and structures to cross streams.
- Remain still or retreat when animals are encountered and react to human presence.

Aerial-specific provisions

Along with the general provisions above, these apply to all investigative field work that includes use of helicopters or planes:

- Take immediate action to increase separation distances when animals react to aircraft.

[1] EIMS, 2018
[2] EIMS, 2018
[3] EIMS, 2018

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- Use consistent flight paths, preferably in the center of valleys, or the valley side opposite key wildlife habitat. If key wildlife habitats are in the center, fly on one side of the valley rather than the center.
- Do not intentionally engage in “flight-seeing” of wildlife during calving/ denning/nesting periods.
- Avoid flying or landing near known calving/ denning/ nesting habitat.

References

1. Environmental Information Management System (EIMS). (2018, June 18). *Species | M-ODHE - Mule Deer*. https://eims.bc-er.ca/eims/wildlife/species/M-ODHE
2. Environmental Information Management System (EIMS). (2018, June 18). *Species | M-CEEL - Elk*. https://eims.bc-er.ca/eims/wildlife/species/M-CEEL
3. Environmental Information Management System (EIMS). (2018, June 18). *Species | M-ORAM – Mountain Goat*. https://eims.bc-er.ca/eims/wildlife/species/M-ORAM