

Chalumbin Wind Farm

Ecological Assessment

February 2022

Caring for the environment

Australia's electricity market is in transition to cleaner, renewable sources of energy as a necessary strategy to reduce carbon emissions and mitigate the impacts of climate change.

Increasing renewable energy capacity and protecting local wildlife are both critically important and compatible objectives, it just requires careful planning and management, and the right approach.

Northern Queensland is blessed with national parks and wilderness, and avoiding and minimising impacts to local flora and fauna is a priority. The Chalumbin Wind Farm site is in two cattle grazing properties with existing disturbed areas and access tracks that the project can utilise. It is about 800 m west of the Wet Tropics World Heritage Area boundary and Tully Falls National Park. The project has been designed to avoid all direct impacts to the Wet Tropics World Heritage Area and will not involve any direct impacts to rainforest.

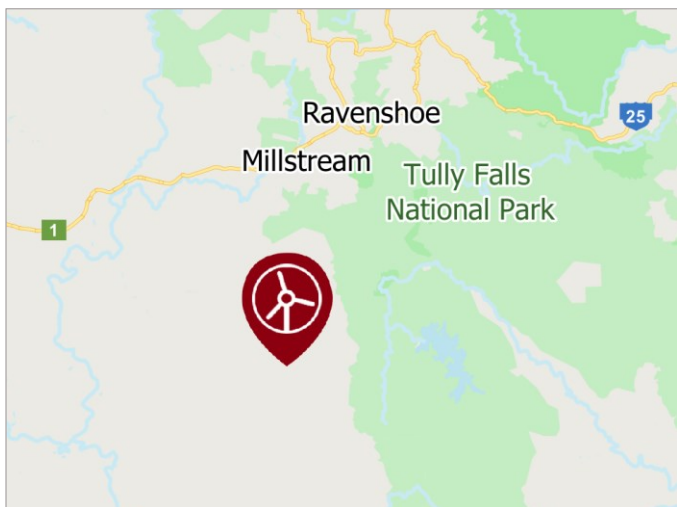
Epuron is committed to working closely with its ecology consultants and environmental scientists to develop strategies for a net positive outcome for the area's biodiversity over the longer term.

Assessment process

The proposal is subject to a rigorous and comprehensive environmental assessment process by both the Queensland and Australian Governments.

Ecological assessment requirements for the Queensland Government are outlined in *State Code 23: Wind farm development*. It includes assessment for avifauna (birds and bats), habitat and corridors, and on-site vegetation. Assessment requirements include field surveys, species-specific studies, strategies to minimise and mitigate impacts, preparation of numerous technical reports to meet the requirements of relevant state codes; and preparation of preliminary vegetation, fauna, and bird and bat management plans. State Code 23 aims to ensure wind farms preferentially avoid, minimise and mitigate adverse impacts on the natural environment (fauna and flora) and associated ecological processes. A copy of the Code can be downloaded at tinyurl.com/y3meslhf

The Australian Department of Agriculture, Water and the Environment (DAWE) has determined the project to be a 'controlled action' (Reference: 2021/8983) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This means the proposal will require controlling provisions for key species and the application must also be assessed and approved by DAWE. DAWE will assess the proposal through a Public Environment Report (PER), a process that encourages public participation. The draft PER is due to be submitted in Q1, 2022 and once accepted by DAWE it will be placed on public exhibition through the EPBC Act – Public notices portal at epbcnotices.environment.gov.au/referralslist/



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Ecological assessment work

The ecological assessment work commenced in September 2020 and has been undertaken by independent specialists and scientists.

Over the past 15 months this has included regional ecosystem mapping, field studies and surveys across multiple seasons and targeted investigations for key species.

Locally based ecologists have been involved in survey work at the site and the project team has consulted with key local stakeholders such as Wet Tropics Management Authority, the Cairns and Far North Environment Centre, Bush Heritage Australia and Terrain NRM.

The total survey effort to date adds up to 255 person days involving 15 site visits and 14 ecologists including:

- Vegetation community and protected plant surveys, October 2020.
- Fauna reconnaissance survey, October 2020.
- Wet season fauna surveys, January 2021.
- Further protected plant surveys, March 2021 and June 2021.
- Targeted surveys for magnificent brood frog, March 2021.
- Dry season fauna surveys, June 2021.
- Early dry season bird utilisation surveys, June 2021.
- Late dry season bird utilisation surveys, October 2021.
- Further targeted surveys for magnificent brood frog, December 2021 and January 2022.
- Habitat quality assessments for northern greater glider, December 2021.
- Early wet season bird utilisation surveys, January 2022.
- Further targeted protected plant surveys, February 2022.

As the assessment work has been done the project design has been refined and modified in consultation with ecology experts and key stakeholders.

The current proposal involves 94 wind turbines and would require clearing of approximately 1,132 hectares, less than 4% of the overall land area.

EPBC Act listed fauna update

Red Goshawk - No red goshawks have been observed during any surveys. In January 2021 an unoccupied nest considered to potentially belong to red goshawk was observed and photographs were shared with a number of recognised bird specialists and ornithologists. Some agreed that it could 'possibly' belong to a red goshawk.

Subsequently, areas of potential red goshawk nesting habitat were the focus of targeted surveys in October 2021. However no red goshawks were observed, no new potential red goshawk nests were identified and the previously identified nest was found to be disused.

No evidence of breeding pairs nesting within the project area or red goshawks currently using any part of the project area for foraging has been found. Regardless, the project has been designed to minimise direct impacts to potential nesting habitat for red goshawk, and this has been incorporated into the ecological constraints analysis.

Northern Greater Glider - The northern greater glider has been observed on the site during nocturnal spotlighting surveys, although the population within the project area would not be considered large. Across January 2021, March 2021 and June 2021 a total of 64 gliders were observed over a combined duration of 103 person hours.

Differences in the quality of potential northern greater glider habitat around the site have been incorporated into the project design, to minimise impacts within the lower lying areas that support the tallest trees with the highest abundance of hollows, and would be considered as the highest quality potential habitat.

Magnificent Brood Frog - Targeted searches for the Magnificent Brood Frog (MBF) were undertaken in March 2021, June 2021, December 2021 and January 2022. The total survey effort has involved 140 person hours across the project area and in December 2021 included members of the MBF Working Group.

The species has been recorded at a number of locations across the site. Data has been shared with the MBF Working Group to contribute to greater understanding of the species' distribution and habitat requirements, and findings have informed revisions to the project design.

Chalumbin Wind Farm – more information

Website: chalumbinwindfarm.com.au

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