Jeremiah Windfarm EPBC Act Referral - Supporting Documentation

CWP Renewables on behalf of Jeremiah Wind Farm Pty Ltd

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DOCUMENT TRACKING

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Template 2.8.1

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List of Figures

See Appendix D Attachment.

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1. Section 1 - Introduction

1.1. Project Industry Type

Energy Generation and Supply – Renewable.

1.2. Provide a detailed description of the proposed action, including all proposed activities

The proposed action is comprised of the following (Appendix D, Figure 1 Page 1):

- approximately 65 Wind Turbine Generators (WTGs) to maximum tip height of 300 m
- a total generating capacity of approximately 400 MW
- provision for an Energy Storage Facility (ESF) (capacity and type yet to be determined)
- permanent ancillary infrastructure including site offices, internal roads, hardstands, underground and overhead cabling, wind monitoring masts, substation, a battery and a switching station
- temporary facilities including site compounds, laydown areas, stockpiles, rock crushing and concrete batch plants, temporary roads and up to 12 temporary monitoring masts.

The Referral utilises the following terminology:

- **Project Site:** The land required for the Project as shown in blue (Appendix D, Figure 2, Page 2), and includes Crown Land, Crown waterways, Crown roads and Council roads.
- **Proposed Development Area:** The area shown in red (Appendix D, Figure 2, Page 2), within the Project Site, which project infrastructure is proposed.

The Proposed Development Area includes a 100 m radius around the current Project layout. Potential impacts to biodiversity will only occur within the Proposed Development Area (with some exceptions which will be outlined in detail in the Environmental Impact Statement (EIS) to be prepared in accordance with the NSW *Environmental Planning and Assessment Act* 1979 (EP&A Act) (e.g. external road upgrades and some monitoring masts). The Proposed Development Area will be subject to detailed surveys and assessment as part of the EIS such that the project's development footprint can be located anywhere within the Proposed Development Area, with the layout refined post-consent (the EIS will outline the approach to micro-siting the development footprint in more detail).

The proposed action is to construct, operate, and ultimately decommission and a rehabilitate a commercial-scale wind farm indicatively producing 400 MW of clean energy to power the equivalent of approximately 200,000 average NSW households each year. The proposed action would connect to the existing 330 kV transmission line running approximately north-south within the project site. The inclusion of an ESF will allow the wind farm to store and dispatch scheduled and reliable energy to and from the wind farm or the National Electricity Market (NEM).

The electricity generated and dispatched by the wind farm would provide significant carbon emission savings relative to the electricity from NSW coal powered generation. Detailed descriptions of each component of the proposed windfarm is provided in Appendix A.

The potential biodiversity impacts associated with the proposed action, within the Proposed Development Area, will include:

- Excavation and native vegetation clearing for the construction of access roads, WTGS and ancillary infrastructure.
- Impacts to Threatened Ecological Communities (TECs) and threatened species habitat.
- Indirect impacts to threatened fauna species such as short-term construction noise, lighting and potential bird and bat strike.

Impact areas associated with the above are further detailed in Section 2.4.

Wind Turbine Generators

The proposed action is generally comprised of approximately 65, three-bladed WTGs of up to 300 m in height and varying in generation capacity. Final numbers and power output will be dependent on the final geographic footprint as well as outcomes of the various engineering, environmental and social studies and is subject to change. A WTG is made up of the foundation, tower, nacelle, rotor, blades and a generator transformer (Appendix E, page 54).

Energy Storage Facility

An ESF is designed to store and discharge energy. Storage of energy can add significant benefits to renewable energy generation because it allows for the dispatch of energy in accordance with market demand and overcomes potential issues associated with intermittency of output. The ESF will consist of buildings, shipping containers, or other infrastructure and will connect to the WTGs and substations via underground and/or overhead cables.

Ancillary Infrastructure

Ancillary infrastructure refers to all permanent wind farm infrastructure (except the WTGs and ESF) and includes substations, operations and maintenance compounds (including offices and car park), underground and overhead electricity transmission lines, permanent meteorological masts, hardstand and internal roads. The purpose of the meteorological masts is to provide necessary information on the performance monitoring of the WTGs.

Hardstand refers to the area required adjacent to each WTG location for the assembly, erection, maintenance, repowering and/or decommissioning of a WTG. Surrounding the hardstand is an area of disturbance which is not a hardstand area but will be used for WTG component laydown and crane structure assembly (among other WTG erection and construction related activities) as well as cut and fill (Appendix E, page 54).

Temporary Facilities

Temporary facilities will consist of site offices and compounds, rock crushing facilities, concrete or asphalt batching plants, stockpiles and materials storage compounds, temporary field laydown areas, minor work front construction access roads and temporary meteorological masts. All temporary facilities will be rehabilitated once they are no longer required in accordance with detailed measures to be defined in the Environmental Management Plan (EMP).

Electrical connection

A series of underground and overground transmission lines are proposed to transmit electricity generated by the WTGs with the 330 kV transmission line transecting the project site from the south to the north east. The preliminary electrical layout includes both underground and overhead reticulation connecting the WTGs, the ESF and Substations to the existing transmission network.

1.3. What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action

To be completed in the portal.

1.4. Upload images of the proposed action area (including disturbance footprint, avoidance footprint (if relevant) and MNES habitat area/s) and if available, a compliant GIS file. The accepted file types are: zip, .kml, .kmz, .shp or .pdf. Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

To be completed in the portal.

1.5. Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for offshore actions, shortest distance to mainland)

The Project Site is situated in Adjungbilly, a small rural town within the Cootamundra-Gundagai Regional Council Local Government Area (LGA). Adjungbilly is a small rural community on the north-western edge of the Snowy Mountains, 29 km south east of Gundagai and 35 km north east of Tumut. The closest major centre is Canberra, which is 100 km to the south east of the project site (Appendix D, Figure 1, page 1). A number of other rural communities are present within a 10 km radius of the Project Site including:

- Burrinjuck
- Kangaroo Mount
- Gobarralong
- Bundarbo
- Childowla

The topography of the Project Site is characterised by steep to rolling hills, located between 357 m AHD to 814 m AHD and is predominantly located on agricultural land that has been used for cattle and sheep grazing and cropping with some remnant patches of native vegetation.

The Project Site contains numerous tributaries of the Murrumbidgee River and is adjacent to Bungongo State Forest, Old Jeremiah Flora Reserve and Red Hill State Forest.

1.6. What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

- **Project Site:** Approximately 7,055 ha in size (shown in blue Appendix D, Figure 2, page 2).
- **Proposed Development Area:** Approximately 2,327 ha in size (shown in red Appendix D, Figure 2, page 2).

Please note, the Proposed Development Area described in this referral is indicative only and subject to further assessment and detailed design. Note that areas external to the Project Site that may require ground disturbance to facilitate road upgrades along the route have not been included in the Proposed Development Area stated above because those detailed assessments are not finalised, however they will be assessed in the EIS.

1.7. Is the proposed action a street address or lot?

Lot	DP	Lot	DP	Lot	DP	Lot	DP
170	DP750978	255	DP750978	103	DP750987	44	DP750978
120	DP750979	221	DP750978	4	DP795719	4	DP1080337
74	DP750979	207	DP750978	11	DP1107266	101	DP750978
128	DP750978	16	DP750978	3	DP795719	1	DP1054976
73	DP750979	13	DP750978	232	DP750987		
133	DP750978	14	DP750978	18	DP750987		
83	DP750979	12	DP750978	13	DP750987		
2	DP1054976	28	DP750978	12	DP750987		
76	DP750978	220	DP750978	2	DP1221748		
134	DP750978	20	DP750978	B	DP28959		
2	DP732741	110	DP750978	179	DP750987		
82	DP750979	70	DP750978	1	DP1234100		
22	DP750978	71	DP750978	3	DP1124734		
21	DP750978	225	DP750978	1	DP773318		
5	DP750979	A	DP28959	119	DP750978		
4	DP750979	219	DP750987	118	DP750978		
159	DP750979	104	DP750987	127	DP750978		
206	DP750978	160	DP750987	97	DP750978		
208	DP750978	3	DP1063043	126	DP750978		
15	DP750978	208	DP750987	218	DP750978		

1.8. Primary Jurisdiction

NSW.

1.9. Has the person proposing to take the action received any Australian Government funding to undertake this project?

No.

1.10. Is the proposed action subject to local government planning approval?

No. The proposed action is a State Significant Development (SSD) consistent with Clause 20 of Schedule 1 of the *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*. Therefore, the proponent is seeking consent from the NSW Department of Planning, Industry and Environment (DPIE) under division 4.7, part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.11. Provide an estimated start and estimated end date for the proposed action

It is anticipated that works will commence within one to five years of Development Consent being granted (approximately 2023-2028). The timing of construction will principally be driven by additional permits and authorisations, post-Development Consent tender, contractor selection, optimisation, detailed design and procurement processes and a final investment decision. Indicative Project timeframes are summarised below:

- Pre-construction: 24 months
- Construction: 24 – 30 months
- Operation: 30 years
- Maintenance: Annual and ongoing
- Decommissioning: At completion of Project life

1.12. Provide details of the context, planning framework and State and/or Local government requirements

Numerous acts and planning instruments, other than the EPBC Act, are relevant to the proposed action, including:

Commonwealth legislation:

Native Title Act 1993 (NT Act)

The NT Act recognises the rights and interests of Indigenous people to land and aims to provide for the recognition and protection of common law native title rights. Areas of land within the project site where native title may exist include public road reserves and other Crown land.

A search of the National Native Title Tribunal Register was undertaken in June 2021. There were no native title applications, determinations of native title, or Indigenous Land Use Agreements existing over the project site.

NSW legislation:

Environmental Planning and Assessment Act 1979 **(EP&A Act)**

The EP&A Act is the principal planning legislation for NSW, and it provides a framework for the overall environmental planning and assessment of proposals in NSW. The proponent is seeking consent under

Division 4.7 of Part 4 of the Act for the Project as a SSD. For SSD, under the provisions of section 4.15 of the EP&A Act, the consent authority (DPIE) is required to consider several matters pertaining to the relevant Plans and Policies that apply to any development application for SSD. These matters will be identified and assessed through the preparation of an Environmental Impact Statement (EIS).

State Environmental Planning Policy (State and Regional Development) 2011 **(State and Regional Development SEPP)**

The State and Regional Development SEPP states that development for the purpose of electricity generating works using wind power, that has a capital investment value of more than $30 million is declared as an SSD according to Clause 20 of Schedule 1. As the proposed action exceeds the capital investment value of $30 million, the proposed action is declared an SSD and will be assessed accordingly.

State Environmental Planning Policy (Infrastructure) 2007 **(ISEPP)**

The ISEPP was introduced to facilitate the effective delivery of infrastructure across NSW. The ISEPP provides the permissibility and development assessment provisions which apply across NSW for infrastructure sectors.

Part 3, Division 4 of the ISEPP applies to the proposed action as it is 'electricity generating works' which is defined as a building or place used for the purpose of making or generating electricity. Pursuant to Clause 34(1b) of the ISEPP, development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. The prescribed zone relevant to the proposed action is RU1 (Primary Production). The other zones within the project site are not prescribed zones. This is discussed further below within the Local Planning Instruments section.

Biodiversity Conservation Act 2016 **(BC Act)**

The BC Act provides protection and conservation of biodiversity in NSW through the listing of threatened species and communities and key threatening processes. The BC Act also sets up a framework for assessing and offsetting impacts to biodiversity through the Biodiversity Assessment Methodology (BAM).

An assessment under the Biodiversity Offset Scheme (BOS) using the BAM will be undertaken and a Biodiversity Development Assessment Report (BDAR) will be prepared to address impacts to threatened ecological communities and species listed under the BC Act. The BDAR would be submitted with the EIS.

Local Planning Instruments

Gundagai Local Environmental Plan 2011 (Gundagai LEP)

The Project Site is located within the Cootamundra-Gundagai Regional Council LGA. The Cootamundra-Gundagai Regional Council was formed in 2016 through a merger of the Cootamundra and Gundagai Shires. The land on which the proposed action is to be located is within the former Gundagai LGA to which the Gundagai LEP applies.

The Project Site is situated on land zoned as RU1 (Primary Production) and adjacent to land zoned as RU3 Forestry. Wind energy systems are permitted with consent in the RU1 zone and prohibited in the

RU3 zone under the LEP. As above, pursuant to clause 34(1b) of the ISEPP, development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone, which in this case is the RU1 (Primary Production) zone.

Given that the proposed action is located on prescribed rural land (RU1), and the proposed activity is to generate electricity from wind, the proposed action is permissible with consent.

The Project Site is not subject to a Development Control Plan (DCP). Currently, Cootamundra-Gundagai Regional Council has a DCP that applies only to the area covered by the Cootamundra LEP 2013. The area covered by the Gundagai LEP 2011 (and including the Project Site) does not have a DCP, however a single comprehensive DCP for the entire LGA will be developed once a single LEP is developed.

Section 3.42 (1) of the EP&A Act states the principal purpose of DCPs is to provide 'guidance' to development proponents and consent authorities and to assist 'facilitating development that is permissible'. Accordingly, local provisions under the relevant DCP are not statutory requirements. Should a DCP come into effect over the Project Site prior to lodgement of any State Significant Development Application (SSDA), it should be consulted to provide guidance.

1.13. Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

Community and stakeholder consultation has commenced as part of the proponent's (Jeremiah Wind Farm Pty Ltd's) community engagement strategy (CES). The community and stakeholder consultation strategy has been prepared to be consistent with the Wind Guideline (DPE, 2016a), NSW Visual Assessment Bulletin (DPE, 2016b) and Draft Social Impact Assessment Guidelines (DPIE, 2020). The aim of the community and stakeholder strategy is to:

- facilitate meaningful information exchange and involvement of stakeholders in the assessment process
- ensure that social impacts are effectively integrated in the project planning and design
- maintain and enhance existing relationships between CWPR and stakeholders
- engage with a diversity of people, including vulnerable and marginalised groups
- use appropriate and specific levels and techniques of engagement based on analysis of the community and how the community is best engaged.

The strategy is a live document and will be updated through the life of the proposed action, from scoping phase through to post approvals, construction, and operations. As part of this strategy, some community consultation has occurred to date, namely:

- Face to face meetings, phone calls and emails.
- Introductory letters and maps.
- Community flyers and newsletters (provided as hardcopy and via email).
- Community values survey (provided as hardcopy and via email).
- Public drop in session held at the Adjungbilly Community Hall in March 2021.
- Website.
- E-newsletter subscription available via website.

As part of the strategy, a scoping meeting was held with DPIE on 16 March 2021. DPIE requested a discussion on the following topics:

- Nature and scale of the development in a regional context.
- Assessment pathway.
- Engagement approach in accordance with the NSW draft Social Impact Assessment guidelines for proponents of SSD projects.
- Level of assessment required.
- Forecast date for the Scoping Report submission.

DPIE also requested the following figures be presented:

- Preliminary WTG layout, Proposed Development Area and potential site access locations
- Sensitive receivers and land uses located in proximity to the Project Site
- Any key constraints already identified
- LBB monitoring for over 1 year (potentially presented on a map)
- Constraints map.

A stakeholder analysis has also been undertaken to identify communities and stakeholders who have an interest in the proposed action (draft CWPR, 2021). Table 1-1 (Appendix A, page 8) categorises stakeholders including any group or individual that might have an interest and/or be impacted by the proposed action construction, operations or decommissioning. This includes people and groups:

- that are impacted by possible construction, maintenance or operational activities
- with an interest in policy or operational decisions
- with an interest in major project development proposals.

Table 1-1: Identified stakeholders (AAP Consulting 2021)

Stakeholder Group	Stakeholder
Host Landholders	Properties that will host infrastructure related to the proposed action
Neighbours	Landholders and residents residing adjacent to the Project Site
Government-elected representatives	NSW Premier NSW Minister for Planning and Public Spaces NSW Minister for Energy and Environment Federal Member for the Riverina State Member for Cootamundra Mayor and Councilors, Cootamundra-Gundagai Regional Council
Government - State	NSW DPIE including: • Biodiversity, Conservation and Science Directorate • Water Group • WaterNSW • Heritage NSW Department of Primary Industries NSW Environment Protection Authority Transport for NSW

Stakeholder Group	Stakeholder
	Crown Lands Regional NSW – Mining, Exploration and Geoscience (MEG) Local Lands Services – Riverina region Department of Finance, Services and Innovation – Telco Authority Fire and Rescue NSW Commonwealth Department of Defence Civil Aviation Safety Authority; and Airservices Australia
Local Council	Cootamundra-Gundagai Regional Council Yass Valley Council (adjacent to Project Site)
Projects / Industry	NSW Farmers Association State Forest NSW National Parks & Wildlife Service NSW Forestry Corporation
Emergency Services	NSW Police, 101 Cooper Street, Cootamundra NSW Police, 16 Byron Street, Gundagai NSW Fire Service, 14-16 Adams Street Cootamundra NSW Fire Service 30 Otway Street, Gundagai NSW Ambulance, Parker Street, Cootamundra NSW Ambulance, Tor Street, Gundagai NSW Rural Fire Service Units at 52 Redhill Road, Adjungbilly State Emergency Services – Gundagai and Cootamundra
Utilities and Service providers	TransGrid / Humelink Goldenfields Water Telstra Optus
Local Community	Property owners, tenants and real estates in the localities of: • Adjungbilly • Gobarralong • Bongongo
Local business and industry	Local businesses (most likely in Gundagai and Tumut) including: Accommodation, retail, food and beverage and entertainment providers; medical services, fuel/vehicle maintenance services; as well as a range of business geared to servicing large civil construction projects Coolac Store Eulonga Quarries The Junction Air Strip
CWP Renewables	Direct Employees Consultants engaged by CWP Renewables to conduct work
Community interest groups and community services	Adjungbilly to Batlow Humelink Action Group Adjungbilly Cooperative Wild Dog and Fox Management Adjungbilly Hall – run by Bongongo P&C

Stakeholder Group	Stakeholder
	Landcare
	Bongongo Public School
	Puggles Mobile Preschool
	Church of St Patrick, Adjungbilly
	Gundagai Anglers Club
	Gundagai Community Environment Impact Group
	Muttama Creek Regeneration Group
	Cootamundra Tourism Action Group
	Brungle-Tumut Local Aboriginal Land Council
	Onerwal Local Aboriginal Land Council
	Wiradjuri Traditional Owners Central West Aboriginal Corporation
	Gundagai Historical Museum
	Wires
	Gundagai Youth Council
Road Users	Road users using the existing local roads
	Local taxi, bus, tour and transport operators
Media	Tumut and Adelong Times
	Gundagai Independent
	Twin Town Times
Regional Community	Larger regional centres close to the Project, including Gundagai, Cootamundra and Tumut

1.14. Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

To date, no other environmental impact assessments have been submitted to a consent authority for the proposed action. However, the proponent has submitted a Scoping Study to DPIE to request Secretary's Environmental Assessment Requirements (SEARs). A BDAR will subsequently be submitted as part of the EIS to DPIE. The following tasks have been undertaken as part of the preparation of the BDAR.

LITERATURE AND DATA REVIEW

A literature and data review were completed to determine the environmental values either known or considered likely to occur within the Project Site. A search of the BioNet Atlas of NSW Wildlife and the EPBC Act Protected Matters Search Tool was completed using a 10 km radius around the coordinates -35.01192, 148.38728. The literature and data review identified three (3) threatened ecological communities (TECs), 30 threatened fauna (including migratory species) and seven (7) threatened flora species either known or predicted as potential to occur within the Project Site. Of these, one (1) TEC, 10 fauna and nine (9) flora were considered likely to occur in the proposed development area (Appendix A, Table 1-2, 11).

FIELD METHODOLOGY

VEGETATION VALIDATION

Surveys undertaken by Dr. Matthew Dowle and Clare Duck were conducted across a broad study area on 8 - 11 October 2019 to inform potential project locations / sites and preliminary biodiversity constraints.

Surveys were again undertaken by Dr. Matthew Dowle and Keegan Jones to validate and stratify vegetation on 26 – 28 October 2020. Survey was undertaken to determine the vegetation communities present and their extent (known as Plant Community Types). Vegetation validation was completed by taking rapid vegetation points to document the dominant flora species in each structural layer and whether native or exotic species were dominant in cover for each structural layer.

Detailed vegetation integrity plots were then conducted by Dr Matthew Dowle and Keagan Jones, and Meredith Cosgrove and Janene Devereux, respectively on 29 October – 6 November 2020 and 24 – 28 May 2021 to determine Plant Community Type condition and assign vegetation zones. Vegetation Integrity Plots were completed across the Project Site to collect more detailed data about species composition, structure and function of the native vegetation present.

A habitat assessment and consideration of potential habitat for threatened flora and fauna species listed as a Matter of National Environmental Significance was conducted simultaneously. For example, during the vegetation validation, species habitat polygons were mapped from observed Yass Daisy locations to be included in the targeted species surveys.

The information from the vegetation surveys and habitat assessment will be used to inform the BDAR and EIS preparation.

THREATENED FLORA AND FAUNA

As part of the BDAR preparation, surveys have (and will) be undertaken for threatened species considered to potentially occur within the Project Site (Appendix A, Table 1-2 page 11). Previous survey effort was conducted by ELA ecologists in 2020 and 2021.

Table 1-2: MNES with potential to occur within the Project Site

Species	Common	EPBC Act	Survey timing	Survey group
	Flora			
Ammobium craspedioides	Yass Daisy	V	Sep-Nov	Flora
Eucalyptus aggregata	Black Gum	V	All year	Flora
Grevillea iaspicula	Wee Jasper Grevillea	E	All year	Flora
Grevillea wilkinsonii	Tumut Grevillea	E	Oct	Flora
Leucochrysum albicans var. *tricolor*	Hoary Sunray	E	Sep-Apr	Flora
Pomaderris cotoneaster	Cotoneaster Pomaderris	E	Oct-Nov	Flora
	Fauna			
Anthochaera phrygia	Regent Honeyeater	CE	Dec - Aug	Diurnal birds
Crinia sloanei	Sloane's Froglet	E	July - Aug	General (Amphibians)

Species	Common	EPBC Act	Survey timing	Survey group
Dasyurus maculatus maculatus	Spot-tailed Quoll	E	Jan - Dec	General (Mammals)
Falco hypoleucos	Grey Falcon	V	Jan - Dec	Diurnal birds
Grantiella picta	Painted Honeyeater	V		Diurnal birds
Lathamus discolor	Swift Parrot	CE	Feb - Aug	Diurnal birds
Litoria booroolongensis	Booroolong Frog	E	Oct - Dec	General (Amphibians)
Petauroides volans	Greater Glider	V	Jan - Dec	General (Mammals)
Phascolarctos cinereus	Koala	V	Jan - Dec	General (Mammals)
Polytelis swainsonii	Superb Parrot	V	Sep - Nov	Diurnal birds

Threatened flora

Targeted Yass Daisy counts was completed by five ELA ecologists from 23 November to 27 November 2020 for a total of 24 person days. An initial assessment of potential habitat for threatened flora was conducted simultaneously with vegetation validation and the collection of vegetation integrity plots. Targeted survey effort is shown in Appendix D, Figure 7, page7.

Following the initial habitat stratification, habitat polygons for Yass Daisy were mapped within the Project Site. Within the habitat polygons, counts of individuals along transects (typically 50m tape measure) were counted within 1 m of the transect line to obtain a density count (for example xx individuals per 0.05 ha (for 50m transect). Where multiple transects were completed in each polygon, the counts will be averaged before multiplying to obtain the estimate of individuals present. Density counts will then be extrapolated and calculated for the size of the habitat polygon and summed across all polygons to obtain an estimate of the number of Yass Daisy's in the Project Site.

Threatened amphibians

The Booroolong Frog (*Litoria booroolongensis*) were considered a potential occurrence within the Project Site. Records for the Booroolong Frog occurs within the broader locality (OEH 2021). Potential habitat for the Booroolong Frog is represented by drainage lines and streams containing rocky habitat within the Project Site.

Survey effort followed the *NSW Survey Guide for Threatened Frogs* (NSW DPIE, 2020). Four sites within the Project Site were surveyed in December 2020 and January 2021 by ELA ecologists Dr Frank Lemckert, Cassandra Holt, Clare Duck, and field assistant Jamica Kwani.

Surveys were undertaken during appropriate weather conditions (Appendix A, Table 1-3, page 13). A survey was not undertaken on December 10 as conditions were considered too windy and cold. Further detail regarding the survey effort is described in Appendix C.

Surveys at each amphibian search site included a 60-minute audio-visual survey by two observers (total 120 minutes survey effort per survey night). On each survey night, the two observers walked up to 250 m along the creek where there was potential breeding habitat (Appendix A, Table 1-4 page 13). This approach is considered an appropriate pro-rata scaling of the survey effort requirements described in

the guidelines. Two of the sites were surveyed over three nights and two were surveyed over four nights (Appendix D, Figure 8, page 8).

Each survey included listening in darkness and silence for a minimum of five minutes at several locations within each site. Torches were used to detect frog 'eyeshine'. Call-playback was also used at each site, as per the guidelines. Water was also inspected using torchlight for tadpoles. Surveys were repeated over multiple nights and months to account for climatic or cyclical variability in breeding behaviour.

Table 1-3: Weather and dates of survey for targeted Booroolong Frog survey (Weather from Burrinjuck Dam)

Date	Minimum temp	Maximum temp	Rainfall	Wind 9am
December 7 2020	11.5	20.5	0.0	15 km/h
December 8 2020	9.0	20.5	4.0	11 km/h
December 9 2020	8.0	26.0	0.0	4 km/h
January 20 2021	13.5	28.0	0.0	37 km/h
January 21 2021	14.5	32.5	0.0	Calm

Table 1-4: Amphibian survey effort at each survey site

Site	Number of survey nights
3	3
5	4
7	3
8	4

Threatened mammals

Threatened mammal survey was conducted using the following survey techniques:

- Call playback
- Spotlighting
- Remote cameras
- Hair tubes.

The remote cameras were deployed to either face a tree with a habitat feature or at the ground towards logs or dense vegetation (Appendix D, Figure 8, page 8). Appendix C contains additional detailing regarding the survey effort.

RESULTS

Vegetation validation

The field survey identified the following plant community types (PCT) within the Project Site:

- PCT 266 – White Box Grassy Woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion

- PCT 277 – Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- PCT 299 – Riparian Ribbon Gum – Robertson Peppermint – Apple Box riverine very tall open forest of the NSW South Western Slopes bioregion and South Eastern Highlands
- PCT 305 – Apple Box – Broad-leaved Peppermint – Red Stringybark shrubby hill open forest in the upper NSW South Western Slopes Bioregion and adjacent South Eastern Highlands Bioregion
- PCT 306 – Red Box – Stringybark – Nortons Box hill heath shrub – tussock grass open forest of the Tumut region.

Exotic vegetation was mapped across the majority of the Project Site. Several water bodies were also mapped within the Project Site.

Threatened ecological communities

PCTs 266 and 277 mapped in the Project Site can form part of White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Woodland) which is listed as critically endangered under the EPBC Act. An assessment of each area mapped as PCT 266 and PCT 277 was completed to determine whether the vegetation met the condition thresholds for listing under the EPBC Act using the rapid vegetation survey plots and vegetation integrity plot data.

To qualify as Box-Gum Woodland under the EPBC Act, a patch must contain a predominantly native understorey (where "50% of the perennial vegetation cover in the ground layer is made up of native species"). A 'patch', as defined in the EPBC Act guidelines (DEH 2006), is "a continuous area containing the ecological community". As PCT 266 and 277 within the Project Site does not contain a predominantly native understorey, it does not qualify as a CEEC under the EPBC Act.

The Project Site where PCT 266 and 277 is mapped is substantially degraded by agricultural practices, containing ground cover dominated by exotic species (pasture improved exotic grasses, weeds or cropping species). The natural soil and seed bank are highly unlikely to be intact and the vegetation is considered to have lost its natural integrity. Furthermore, the vegetation is unlikely under management to be regenerated to a condition that would represent Box-Gum Woodland listed under the EPBC Act.

The vegetation mapping presented in this referral is indicative and will be finalised during the preparation of the BDAR and the finalisation of the footprint.

Threatened flora

One threatened flora species was identified in the Project Site during survey; Yass Daisy. A total of 134.21 ha of Yass Daisy habitat within the Proposed Development Area, all of which contained Yass Daisy individuals (Appendix D, Figure 10, page 10). A large number of individuals were observed. The surveys of Yass Daisy habitat and individuals will inform project design with Yass Daisy to be avoided as far as reasonable and feasible.

No other threatened flora species were identified in the Project Site during survey and none are predicted as likely to occur.

Threatened fauna

One threatened fauna species was identified in the Project Site during survey; *Petauroides volans* (Greater Glider). This species was identified during spotlighting. This species is likely to utilise areas of PCTs 299, 305 and 306 containing a canopy in the Project Site (Appendix D, Figure 11, page 11). There is approximately 332.02 ha of potential habitat for the Greater Glider within the Proposed Development Area. Hollow bearing trees that could be utilised by this species have not been mapped.

No other threatened fauna species were identified during survey. The Project Site may provide potential foraging habitat for *Pteropus poliocephalus* (Grey-headed Flying-fox). No other threatened fauna species are predicted as likely to occur.

1.15. Is this action part of a staged development (or a component of a larger project)?

The proposed action is not part of a stage development or component of a larger project. However, the proposed action may be constructed, operated, re-powered and/or decommissioned in stages of various sizes or permutations within the parameters of the Development Consent. Staging would be determined post-Development Consent tender, contractor selection, optimisation, detailed design and procurement processes.

1.16. Is the proposed action related to other actions or proposals in the region?

No.

2. Section 2 – Matters of National Environmental Significance

2.1. Is the proposed action likely to impact on the values of any World Heritage properties?

No.

2.2. Is the proposed action likely to impact on the values of any National Heritage places?

No.

2.3. Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No.

2.4. Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes. The proposed action may impact the following MNES:

- *Ammobium craspedioides* (Yass Daisy)
- *Petauroides volans* (Greater Glider).

The proposed action may constitute a significant impact to the Yass Daisy and Greater Glider depending on the final development footprint, within the Proposed Development Area. The Proposed Development Area of the proposed action contains 134.21 ha of Yass Daisy habitat and 332.02 ha of habitat for the Greater Glider. The Proposed Development Area is a broad area representing a study area for the project. Within the Proposed Development Area, the biodiversity constraints are being mapped as part of the BDAR to inform project design avoidance of biodiversity values (including MNES) where possible.

The Significant Impact Criteria have not been applied with respect to these species (and other MNES) as the final development footprint, within the Proposed Development Area, has not been finalised. The Significant Impact Criteria would be applied within the BDAR at the EIS stage.

2.4.1. Impact table

Appendix A Table 2-1 page 17 below provides an estimate of the potential area of impact to listed threatened species that are known or have potential to occur within the Proposed Development Area (as determined through field survey undertaken to date and the Likelihood of Occurrence Assessment (Appendix B)). Impact areas are based on associated mapped PCTs within the Proposed Development Area. The PCT associations are based on the NSW Threatened Species Profile Database and the BAM calculator. All PCT associations are for foraging habitat only unless specified otherwise.

The BDAR which will form part of the EIS and will include an assessment of significance of impact to EPBC Act listed threatened species and communities and migratory species, in accordance with the *EPBC Act Policy Statement 1.1 Significant Impact Guidelines (2013): Matters of National Environmental*

Significance and the *Draft Referral Guidelines for 14 Birds Listed as Migratory Species under the EPBC Act (2015)*.

Table 2-1: Impact table

Scientific Name	Common Name	EPBC Act	Associated PCT	Area of Potential Impact within Proposed Development Area (ha)	Potential Impacts
Haliaeetus leucogaster	White-bellied Sea-Eagle	M	266, 277, 299, 305 and 306	508.67 (potential roosting habitat only, as the White-bellied Sea Eagle forages over major watercourses)	Bird strike from WTGs
Merops ornatus	Rainbow Bee-eater	M	266, 277, 299, 305 and 306	508.67	Removal of potential foraging habitat, short-term construction noise and indirect lighting.
Petauroides volans	Greater Glider	V	299, 305 and 306	332.02	Removal of potential foraging habitat, short-term construction noise and indirect lighting.
Pteropus poliocephalus	Grey-headed Flying-fox	V	266, 277, 299, 305 and 306	508.67	Removal of potential foraging habitat, short-term construction noise and indirect lighting.
Ammobium craspedioides	Yass Daisy	V	See habitat polygons (Appendix D, Figure 10, Page 10). Mostly PCT 305 and 306	134.21	Removal of individuals and potential habitat.

2.4.2. Do you consider this impact to be significant?

The BDAR which will form part of the EIS and will include an assessment of significance of impact to EPBC Act listed threatened species and communities and migratory species, in accordance with the *EPBC Act Policy Statement 1.1 Significant Impact Guidelines (2013): Matters of National Environmental Significance* and the *Draft Referral Guidelines for 14 Birds Listed as Migratory Species under the EPBC Act (2015)*.

2.5. Is the proposed action likely to have ANY direct or indirect impact on the member of any listed migratory species, or their habitat?

No.

2.6. Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No.

2.7. Is the proposed action to be taken on or near Commonwealth land?

No.

2.8. Is the proposed action taking place in the Great Barrier Reef Marine Park?

No.

2.9. Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal / gas / mining?

No.

2.10. Is the proposed action a nuclear action?

No.

2.11. Is the proposed action to be taken by the Commonwealth agency?

No.

2.12. Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No.

2.13. Is the proposed action likely to impact on any part of the environment in the Commonwealth marine area?

No.

2.14. Upload any technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral

To be completed in the portal.

3. Section 3 – Description of the Proposal area

3.1. Describe the flora and fauna relevant to the Proposal area

The Project Site contains individuals of, and habitat for the Yass Daisy and the Greater Glider. Targeted survey results also identified a range of non-threatened native fauna utilising the Project Site, including *Wallabia bicolor* (Swamp Wallaby), *Trichosurus vulpecula* (Common Brush-tailed Possum) and NSW BC Act listed birds, including *Artamus cyanopterus cyanopterus* (Dusky Woodswallow), *Petroica phoenicea* (Flame Robin) and *Callocephalon fimbriatum* (Gang-gang Cockatoo).

3.2. Describe the hydrology relevant to the Proposal area (including water flows)

The Project Site is in the Murrumbidgee River catchment area. Stony Creek is a fourth order stream which runs through the north and eastern section of the Project Site (Appendix D, Figure, page 12 and Figure 13, page 13). Numerous first, second and third order tributaries of this creek run through the Project Site. An unnamed fifth order stream also runs through the Project Site. There are also several fourth order streams running adjacent to the Project Site, including Cart Road Creek, Mud Wall Creek and O'Briens Creek. The Strahler stream order map indicates that all of these streams either within or adjacent to the Project Site feed into Oak Creek, which is a sixth order stream adjacent to the western end of the Project Site.

3.3. Describe the soil and vegetation characteristics relevant to the Proposal area

The Project Site is comprised of remnant patches of native vegetation and large areas of land that has been previously cleared for agricultural purposes. The field survey identified five PCTs within the Project Site:

- PCT 266 – White Box Grassy Woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- PCT 277 – Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- PCT 299 – Riparian Ribbon Gum – Robertson Peppermint – Apple Box riverine very tall open forest of the NSW South Western Slopes bioregion and South Eastern Highlands
- PCT 305 – Apple Box – Broad-leaved Peppermint – Red Stringybark shrubby hill open forest in the upper NSW South Western Slopes Bioregion and adjacent South Eastern Highlands Bioregion
- PCT 306 – Red Box – Stringybark – Nortons Box hill heath shrub – tussock grass open forest of the Tumut region.

PCTs 266 and 277 can form part of the EPBC Act listed White Box – Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland. Detailed assessment determined that PCTs 266 and 277 did not meet the condition thresholds for listing under the EPBC Act (see section 1.14 for further detail). The Project Site sits adjacent to several state forests and reserves. Bungongo State Forest is to the east and north of the Project Site. Old Jeremiah Flora Reserve is located to the south of the Project Site and a portion of Red Hill State Forest directly abuts the south western corner of the Project Site.

The underlying geomorphology lies wholly in the eastern extent of the Lachlan Fold Belt, which consists of Cambrian to Early Carboniferous sedimentary and volcanic rocks. These rocks are largely comprised

of granites, often expressed as central basins surrounded by steep hills or as high plateaus with rock outcrops and tors. The soils present within the bioregion are varied, reflecting the diversity of landform features: shallow, stony soils are found on ridges and hills, whilst texture contrast soils are located on lower slopes.

3.4. Describe any outstanding natural features and/or any other important or unique values relevant to the Proposal area

There are no outstanding natural features in the Project Site.

3.5. Describe the status of native vegetation relevant to the project

Field survey identified five PCTs in the Project Site, none of which are an EPBC Act listed threatened ecological community. Two PCTs, PCT 266 and 277 form part of *White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland* which is listed as endangered under the BC Act, (as described above in Section 1.14, the EPBC listing criteria was not met for these communities).

3.6. Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the Proposal area

The Project Site is characterised by steep to rolling hills, located between 357 m AHD to 814 m AHD. The eastern end of the Project Site is the highest topography, with moderately steep elevation in the central portion of the Project Site, grading to low elevation at the western end (Appendix D, Figure 14, page 14).

3.7. Describe the current condition of the environment relevant to the Proposal area

A majority of the Project Site consists of previously cleared and grazed grasslands in poor condition. The grasslands have been planted with pasture grasses for grazing and cropping purposes. Areas of higher elevation contain remnant patches of native vegetation, mostly comprised of PCT 305 and 306. The areas of the site at a lower topography contained PCT 266 and 267 in poor condition. There was a higher proportion of weed invasion in these areas as a result of historic agricultural practices.

3.8. Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the Proposal area

A search of available heritage registers was undertaken within and surrounding the Project Site including:

- Commonwealth Heritage List
- National Heritage List
- NSW State Heritage Register (SHR)
- Gundegai LEP 2011.

There were no World, Commonwealth, National, State, or locally listed heritage items identified as being within the Project Site. The closest heritage item to the site is the Burrinjuck Dam Site (Greater) (SHR 00959), listed on the State Heritage Register and is located approximately 4 km east. The heritage

curtilage extends into the Cootamundra-Gundagai LGA; however, it is listed on the State Heritage Register only within the Yass Valley LGA. The statement of significance is as follows:

> *The Burrinjuck Dam Site is significant for its natural and cultural resources. It is the site of the first irrigation water storage in NSW. It contains many rare species of native flora and fauna, as well as many structures and artefacts (both above and under water) associated with the construction of the Burrinjuck Dam. The Site contains European archaeological Sites, and probably Aboriginal Sites. (SHR, 2013)*

Within the curtilage of Burrinjuck Dam Site (Greater) (SHR 00959), there are two additional SHR items. Burrinjuck Dam (SHR 00958) and Burrinjuck Dam Site – Barren Jack Creek Water Supply Dam (SHR 00960). On the Yass Valley LEP (2013), Burrinjuck Dam (LEP I058) also overlaps with Burrinjuck Dam Site (Greater) heritage curtilage.

Despite no items being listed in the Project Site, several archaeological assessments have identified the presence of remains from mid- and late-nineteenth century mining and settlements (Carter 2001; Smith 2002). It is possible that historical items will be present within the proposed area for the proposed action. These are most likely to be related to mid- and late-nineteenth century mining activities and associated settlements, although items or sites with agricultural and pastoral links are also likely to be present. Sites associated with mining are most likely to be present on the banks of Adjungbilly Creek and where there is a known mineral source. Sites associated with agriculture and pastoralism may be located anywhere in the landscape. If identified, historical mining and agricultural items are likely to be of local significance or will not meet the heritage criterion to be listed items.

As there is potential for historic heritage to be present within the Project Site, there may be impacts to historic heritage. Further assessment of historic heritage values will be completed as part of the EIS.

3.9. Describe any Indigenous heritage values relevant to the Proposal area

An Aboriginal Heritage Information Management System (AHIMS) database search was undertaken on 6 April 2021 for within and surrounding the Project Site. Note that areas external to the Project Site that may require ground disturbance to facilitate road upgrades along the route have not been assessed as part of this preliminary assessment but will be included in the EIS.

The AHIMS search revealed 115 Aboriginal Sites and 1 Aboriginal place recorded within the search parameters, which is inclusive of an 18 km radius from the approximate centre of the Project Site. Six AHIMS Sites are located within the Project Site (AHIMS ID 56-3-0214, AHIMS ID 56-3-0213, AHIMS ID, 56-3-0216, AHIMS ID 55-1-0047, AHIMS ID 56-3-0215 and AHIMS ID 56-3-0217), all of which are artefact sites. A further 24 sites have been recorded in the vicinity of the Project Site.

The identified Aboriginal Place ('Brungle Cemetery' – NPW Gazette No. 70) is located 18 km south-west of the study area boundary and will not be affected by the proposed action.

Searches of the Australian Heritage Database, the New South Wales State Heritage Register (SHR), and the Gundagai LEP Schedule 5 (Environmental Heritage) were also conducted on 6 April 2021 using the terms "Adjungbilly/Gobarralong". No heritage items with Aboriginal significance or Aboriginal Places were recorded within the Project Site on these databases.

A survey of the Project Site has not yet been conducted. Based on the findings of this assessment, there is potential that further Aboriginal heritage sites will be present within the Project Site. Based on the landforms and the site features of AHIMS sites in the region, the most likely Aboriginal heritage site types include low density open artefact scatters, isolated artefacts, and culturally modified or scarred trees. Sites are most likely to be present on lower slopes, ridgelines, and terraces associated with creek lines, particularly higher order watercourses such as Oak Creek, Gatleys Creek and O'Briens Creek.

Further assessment of Aboriginal heritage values will be completed as part of the EIS.

3.10. Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the Proposal area

The majority of land in the proposed action area is freehold, privately owned land. There is a small percentage of Crown land that also falls in the proposed action area.

3.11. Describe any existing or any proposed uses relevant to the Proposal area

The land is currently used for agricultural purposes, including cattle and sheep grazing and cropping.

4. Section 4 – Measures to avoid or reduce impacts

4.1. Describe the measures you will undertake to avoid or reduce impact from your proposed action

In 2005, the proponent commenced investigations into suitable areas to construct the proposed action, including landscape considerations, impacts to ecological values and social considerations. An early assessment of the wind resource identified a scoping area comprising several elevated ridgelines that had the potential for hosting WTGs. This scoping area was used as the basis for early consultation activities and to get feedback from the community and other stakeholders over the proposed action. This feedback has been considered in the design of the preliminary layout and it is likely that further project layout options and iterations will be developed based on community feedback and the results of technical impact assessments.

In 2019, ELA undertook a biodiversity constraints assessment across a larger Project Site to identify areas of high biodiversity value early on.

A preliminary project layout comprised of 65 WTGs has been developed based on feedback received on the scoping area. However, the windfarm layout will continue to be refined as more information is obtained from environmental studies, ongoing feedback from consultation and updated wind monitoring. The evolution of the design will be focused around three core principles:

- Minimising and/or avoiding negative environmental and community impacts
- Maximising positive impacts (clean energy production resulting in greenhouse gas reduction)
- Incorporating practical and economic limitations in relation to the construction and operation of the Project

EIS studies will provide further information in determining the optimised locations for the proposed action infrastructure. Additional considerations will include, but will not be limited to, the identification of any environmental constraints and the outcome of geotechnical investigations and the ongoing community and stakeholder consultation process.

Prior to the commencement of construction for each previous project, the Proponent prepares an Environmental Management Strategy (EMS) to the satisfaction of the Secretary of the DPIE for the proposed action. The construction contractor then prepares an Environmental Management Plan (EMP), which outlines environmental management measures and procedures to be implemented during construction. The EMP generally includes plans to address:

- Water quality
- Air quality
- Heritage
- Biodiversity
- Noise and vibrations
- Environmental incident response and notification
- Traffic
- Waste

- Contamination (including unexpected finds)
- Storage of chemicals, oils and fuels
- High risk activities
- Training and induction.

Prior to the commencement of commissioning of any WTG, the Proponent will prepare a Bird and Bat Adaptive Management Plan (BBAMP) to the satisfaction of the Secretary. The Proponent will retire the required biodiversity offset credits in consultation with the relevant NSW or Commonwealth Government agencies and according to the requirements of the relevant legislation. Further information on these management plans (and requirements) is provided in the sections below.

Environmental Management Strategy

The EMS will:

- provide the strategic framework for environmental management of the development;
- identify the statutory approvals that apply to the development;
- describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; and
- describe the procedures that would be implemented to inform the community, handle, manage and respond to complaints and address emergencies.

The Proponent will implement the approved EMS during construction and operation of the Project.

Biodiversity Management Plan

The BMP will be prepared in consultation with the Biodiversity Conservation and Science Directorate (BCS) within DPIE and will include a description of the measures that would be implemented for:

- minimising the amount of native vegetation clearing;
- minimising the loss of key fauna habitat and impacts on fauna on-site;
- rehabilitating and revegetating temporary disturbance areas;
- controlling weeds and feral pests; and
- a detailed program to monitor and report on the effectiveness of these measures.

The Proponent will implement the approved BMP during construction and operational phases of the Project.

4.2. For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

The Proposed Development Area of the proposed action contains approximately 134 ha of habitat for the Yass Daisy (the number of individuals is still to be calculated), and approximately 332 ha of habitat for the Greater Glider. When determining the final development footprint, the design process will aim to minimise impacts to MNES present within the Project Site during the construction and operational phases of the action. Where complete avoidance of habitat is not achievable, management and mitigation measures will be implemented. It is anticipated that offsets for impacts to MNES will be

achieved through the purchase of credits consistent with the BAM. The credit required would be determined in the BDAR which will be prepared as part of the EIS.

5. Section 5 – Conclusion on the likelihood of significant impacts

5.1.1. World Heritage Places
No.

5.1.2. National Heritage Places
No.

5.1.3. Wetlands of International Importance (declared Ramsar Wetlands)
No.

5.1.4. Listed threatened species or any threatened ecological community
Yes.

5.1.5. Listed migratory species
No

5.1.6. Commonwealth marine environment
No.

5.1.7. Protection of the environment from actions involving Commonwealth land
No.

5.1.8. Great Barrier Reef Marine Park
No.

5.1.9. A water resource, in relation to coal/gas/mining
No.

5.1.10. Protection of the environment from nuclear actions
No.

5.1.11. Protection of the environment from Commonwealth actions
No.

5.1.12. Commonwealth Heritage places overseas
No.

5.2. If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

The Proposed Development Area of the proposed action contains approximately 134 ha (number of individuals is still to be calculated) of habitat for the Yass Daisy, and approximately 332 ha of habitat for the Greater Glider. With respect to all species considered in this assessment, the significant impact criteria would be applied in the BDAR once the footprint has been finalised.

6. Section 6 – Environmental record of the person proposing to take the action

6.1. Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail

The person taking the action is Jeremiah Wind Farm Pty Ltd which does not have a history of environmental management to talk to, however as detailed in Section 4.1, the management plans strategy and approach applied on other projects developed by CWP Renewables' demonstrates robust processes in place to manage impacts to both the environment and biodiversity that will be implemented throughout the lifetime of the Project. This includes the preparation and implementation of an EMS, EMP, BMP and BBAMP.

This is evident across the numerous other projects developed by CWP Renewables, which are in varying stages of development (as detailed below). Such Projects include:

- Spicer's Creek Wind Farm (Feasibility Stage)
- Uungula Wind Farm (Recently Approved / Pre-Construction)
- Bango Wind Farm (Construction)
- Crudine Wind Farm (Construction)
- Sapphire Wind Farm (Operational)

6.2. Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

JWF Pty Ltd has no history of proceedings under Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

6.3. If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

All works will be completed with the EMS and the BMP described in section 4.1 of this referral.

6.3.1. If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework

Addressed in 4.1.

6.4. Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

No, the person taking the action has not previously referred an action under the EPBC Act.

CWP Renewables in their capacity as a developer has previously referred a number of actions:

- 2017/8121 SAPPHIRE SOLAR FARM PTY LTD / Energy Generation and Supply (renewable)/Multiple/New South Wales/Sapphire Solar Farm Project, 28km east of Inverell, NSW
- 2013/7026 UUNGULA WIND FARM PTY LTD/Commercial Development/Goolma/New South Wales/Uungula Wind Farm, Goolma, NSW
- 2013/6810 BANGO WIND FARM PTY LTD/Energy Generation and Supply (renewable)/Approximately 20km north of Yass/New South Wales/Construction of the Bango Wind Farm and associated infrastructure
- 2011/6206 Wind Prospect CWP Pty Ltd/Energy Generation and Supply (renewable)/45km south of Mudgee & 45km north of Bathurst/New South Wales/Crudine Ridge Wind Farm
- 2011/5854 SWF1 OPERATIONS PTY LTD/Energy Generation and Supply (renewable)/18 km W of Glen Innes, and 28km E of Inverell/New South Wales/Sapphire Wind Farm, NSW
- 2009/4905 WIND PROSPECT CWP PTY LTD/Energy Generation and Supply (renewable)/6 km south west of Nimmitabel/New South Wales/Boco Rock Wind Farm

7. Section 7 – Information sources

7.1. List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source)

All of the references used in preparing this referral are considered to be of a high reliability and from a reliable source as most have been prepared by either the Australian or NSW Government. The resources used comprise listing information, impact assessment guidelines and/or recovery plans for MNES. The remaining references have been prepared by consultants engaged by the proponent to prepare the information necessary to complete the referral or other related reports.

BioNet 2021. NSW BioNet: Atlas of NSW Wildlife online search tool. Available: (http://www.bionet.nsw.gov.au/

BioNet Threatened Biodiversity profiles .
https://www.environment.nsw.gov.au/NSWVCA20PRapp/default.aspx

BioNet Vegetation Classification.
https://www.environment.nsw.gov.au/NSWVCA20PRapp/default.aspx

Bureau of Meteorology (2021). Past data and graphs. Available at http://www.bom.gov.au/climate/data/index.shtml?bookmark=136&zoom=3&lat=-32.5355&lon=147.74&layers=B00000TFFFFFFFTFFFFFFFFFFFFFFFFFFTTT&dp=IDC10002-d

DAWE 2021., EPBC Online Protected Matters Database Search. Available at http://www.environment.gov.au/erin/ert/epbc/imap/map.html

Department of Agriculture, Water and the Environment (DAWE) 2021. National Flying-fox monitoring viewer. Australian Government.
https://www.environment.gov.au/biodiversity/threatened/species/flying-fox-monitoring

Department of the Environment, Water, Heritage and the Arts (2008). Approved Conservation Advice for Ammobium craspedioides (*Yass Daisy*). Available at http://www.environment.gov.au/biodiversity/threatened/species/pubs/20758-conservation-advice.pdf

DPI 2021. Fisheries Spatial Data Portal. Available at https://www.dpi.nsw.gov.au/about-us/research-development/spatial-data-portal

Eco Logical Australia Pty Ltd 2019. *Jeremiah Wind Farm Biodiversity Constraints Version 1.* Prepared for CWP Renewables.

Eco Logical Australia Pty Ltd 2019. Jeremiah Wind Farm, Gundagai – Preliminary Heritage Assessment Version 1. Prepared for CWP Renewables.

Eco Logical Australia Pty Ltd 2021. Jeremiah Wind Farm microbat monitoring program – mast data update for February to September 2020. Prepared for CWP Renewables.

Eco Logical Australia Pty Ltd 2021. *Microbat survey update – November and December 2020*. Prepared for CWP Renewables.

Land and Property Information. 2015, 'SIX maps aerial imagery'.

NSW Scientific Committee 2019. White Box Yellow Box Blakely's Red Gum Woodland - Determination to make a minor amendment to Part 3 of Schedule 1 of the Threatened Species Conservation Act. Available at https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2011-2012/white-box-yellow-box-blakelys-red-gum-woodland-minor-amendment-determination

Threatened Species Scientific Committee (2006). *Commonwealth Listing Advice on White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*. Available from: http://www.environment.gov.au/biodiversity/threatened/conservation-advices/white-box-yellow-box-blakely%27s-red-gum-grassy-woodlands-derived-native-grasslands

Threatened Species Scientific Committee (2016). Conservation Advice Petauroides volans *greater glider*. Available at *http://www.environment.gov.au/biodiversity/threatened/species/pubs/254-conservation-advice-20160525.pdf*

Water NSW 2021. Hydroline Spatial Data. Available at https://www.industry.nsw.gov.au/water/licensing-trade/hydroline-spatial-data

8. Proposed alternatives

8.1. Provide a description of the feasible alternative

No.

In 2005, the proponent commenced investigations into suitable areas to construct the proposed action, including landscape considerations, impacts to ecological values and social considerations. An early assessment of the wind resource identified a scoping area comprising several elevated ridgelines that had the potential for hosting WTGs. This scoping area was used as the basis for early consultation activities and to get feedback from the community and other stakeholders over the proposed action. This feedback has been considered in the design of the preliminary layout and it is likely that further project layout options and iterations will be developed based on community feedback and the results of technical impact assessments.

In 2019, ELA undertook a biodiversity constraints assessment across a larger Project Site to identify areas of high biodiversity value early on.

A preliminary project layout comprised of 65 WTGs has been developed based on feedback received on the scoping area. However, the windfarm layout will continue to be refined as more information is obtained from environmental studies, ongoing feedback from consultation and updated wind monitoring.

8.2. Select the relevant alternatives related to your proposed action

N/A.

8.3. Do you have another alternative?

N/A.

9. Contacts, signatures and declarations

Proponent information/signatures required

9.1. Is the person proposing to take the action an Organisation or an individual?

Organisation

9.2. Organisation-

9.2.1. Job Title

Project manager

9.2.2. First Name

Jessica

9.2.3. Last Name

Petersen

9.2.4. E-mail

Jessica.petersen@cwprenewables.com

9.2.5. Postal Address

Level 2, 2 Market Street, Newcastle

NSW 2300

9.2.6. ABN/ACN

76 633 467 535

9.2.7. Organisation Telephone

(02)4013 4640

9.2.8. I qualify for exemption from fees under section 520(4c)(e)(v) of the EPBC Act because I am:

9.3. Is the proposed designated proponent an organisation or individual?

Organisation

9.4. Individual

N/A

9.5. Organisation- Jeremiah Wind Farm Pty Ltd

9.5.1. Job Title
Project manager

9.5.2. First Name
Jessica

9.5.3. Last Name
Petersen

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9.6. Is the referring party an organisation or individual?
Organisation

9.7. Individual
Not applicable.

9.8. Organisation
Eco Logical Australia Pty Ltd

9.8.1. Job title
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9.8.2. First name
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9.8.3. Last name
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Appendix A Jeremiah Windfarm EPBC Act referral – supporting documentation (ELA 2021)

This document is Appendix A.

Appendix B MNES Likelihood of occurrence assessment

Provided as a separate attachment.

Appendix C Detailed flora and fauna survey effort methodology

Provided as a separate attachment

Appendix D Figures

Provided as a separate attachment

Appendix E Images of project elements

Provided as a separate attachment.

Appendix F Jeremiah Wind Farm Scoping Report (ELA 2021)

Provided as a separate attachment.

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