Level 3, 500 Hay Street
Subiaco, WA 6008
T +61 8 9211 1111

Our ref: EP1749.004 Tilt Waddi Wind Farm Clearing permit

Date: 16 November 2023

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

Dear Sir/Madam,

Clearing permit application: Waddi Wind Farm project, WA

On behalf of Waddi Wind Farm Pty Ltd (the Proponent), please find attached a purpose permit clearing application to clear approximately 5.5 hectares (ha) of native vegetation within a larger footprint of 1,227.0 ha (the Indicative Works area).

The purpose for the proposed clearing is to develop the Waddi Wind Farm and associated infrastructure, including an overhead 132 kilovolt (kV) transmission line (the project). The native vegetation proposed to be cleared is situated within the wind farm to create internal access tracks, install electrical underground cabling, hard stand areas and a viewing area. Native vegetation will also be cleared along the transmission infrastructure, which will connect the project's on-site substation to the Western Power's existing transmission network located to the west of the wind farm.

To facilitate the submission of a new purpose permit clearing application, the project's clearing permit (CPS 8449/1) was surrendered on 17 October 2023.

1 Background

The Proponent, a subsidiary of a portfolio of companies that are trading as Tilt Renewables, is proposing to develop the project. The project is generally located approximately 12 kilometres (km) north-west of Dandaragan town site, approximately 150 km north of Perth, in the Shire of Dandaragan (Attachment 1 WDWF-Infrastructure Map_2023).

The project will consist of the following components:

- Wind farm
  - Eighteen wind turbines, with a maximum turbine blade tip height of 180 metres (m). The wind turbines will have a total installed indicative capacity of up to 108 megawatts (MW)
  - On-site electrical underground cabling
  - On-site substation
  - Operations and Maintenance (O&M) facility
  - Temporary infrastructure including batch plant, construction compound and laydown areas
  - Borrow pits

  - Internal access tracks, hardstand areas and other associated on-site infrastructure
  - Wind Farm viewing area
- Transmission line infrastructure
  - Approximately 8 km of overhead 132 kV transmission line from the on-site substation into Western Power's existing transmission network (South West Interconnected System (SWIS)), west of the Brand Highway, just north of the Cataby substation
  - Cut-in/cut-out connection arrangements to the Pinjar – Eneabba/Emu Downs Transmission Line (PJR-ENB/EMD 81) at the point of connection to the SWIS
  - 1.5 km of buried optic fibre cabling from the point of connection at the SWIS to the existing Cataby Substation
- Solar farm
  - The solar farm is located within the boundary of the project, as shown in Attachment 2 WDWF-Solar Map_2023. The Waddi Solar Farm will include a number of arrays consisting of either static or single axis tracking photovoltaic panels, covering an area of approximately 150 ha.

The project will be developed in a staged manner, commencing with the wind farm and transmission line, with the potential to develop the solar farm later, subject to a separate financial investment decision. Once the transmission line is constructed, it will be handed over to Western Power and become a public asset for the state government.

As illustrated in Attachment 2 WDWF-Solar Map_2023 and Attachment 7 Figures A to F_2023, the project area (10,490.8 ha) follows the tenure boundaries for the wind farm and solar farm components and closely follows the transmission line infrastructure component. It contains all project elements within the local area.

The Indicative Works area (1,227.0 ha ha) is a polygon within which the wind farm and transmission line infrastructure components are located. The Indicative Disturbance area (134.0 ha) represents the physical footprint of the wind farm and transmission line components. The project is predominantly located within private rural properties and minor extents within state and local government managed lots and road reserves. However of these large areas, the development of the project will only require approximately 5.5 ha of native vegetation and 0.3 ha of plantation to be cleared. The 0.3 ha of plantation does not require approval to be cleared under the *Environmental Protection Act 1986* (EP Act) as it is does not meet the native vegetation definition. However it is referred to in this purpose permit clearing application as it provides potential foraging habitat for Carnaby's black cockatoo.

The project's Indicative Disturbance area does not include the solar farm area (approximately 150 ha). The solar farm will be sited to avoid any native vegetation removal and therefore has not been considered further in this clearing permit application.

The location of the borrow pits is yet to be defined. The borrow pits will likely be sited within the project area and within areas surveyed and confirmed not to contain native vegetation or cultural heritage. If the borrow pits cannot be sited within surveyed areas, pre-clearance surveys will be undertaken to confirm there will be no impacts to native vegetation or cultural heritage from the borrow pits.

1.1 Key design changes to the project

The project is related to two previously proposed actions under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and their associated clearing permits granted under the EP Act, which reflect the project background of the currently proposed project.

Due to significant advancements in wind turbine technology, the proposed Waddi Wind Farm will have the same installed capacity with fewer wind turbines. Refinement of the Wind Farm Civil Balance of Plant design has occurred following detailed and ecological investigations, with the aim of minimising impacts to native vegetation, extensive consultation with Western Power to meet its design specifications for the overhead 132 kV transmission line and discussions with landholders regarding the preferred siting of infrastructure on their properties.

Since the project was referred under the EPBC Act in 2018 and submitted under Part V of the EP Act in 2019, the area of native vegetation proposed to be cleared has increased from 1.4 ha to 5.5 ha.

The increased area of native vegetation to be cleared has primarily been required to meet the operational and maintenance specifications for the transmission line infrastructure identified during recent consultation with Western Power.

Key design outcomes from consultation with Western Power have included:

- Adjusting the transmission line heights so that sufficient clearance between the vegetation and the electrical conductors is provided to meet Western Power's requirements without the need to clear any vegetation underneath the transmission line conductors
- Increasing the pad size of the transmission poles in line with Western Power's operational requirements
- Increasing the width of all access tracks to the transmission line to ensure that the structures are all trafficable by Western Power's heavy fleet vehicles.

The project's access track to the west of Brand Highway, and partially within the Conservation Park (Crown Reserve 41986), was selected through consultation with Main Roads Western Australia in order to mitigate safety concerns from increased vehicle movements.

1.2 Commonwealth EPBC Act environmental approvals

The Dandaragan Wind Farms project was referred to the (then) Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) in June 2011. DSEWPaC determined on 9 September 2011 that the project was "Not a Controlled Action" (EPBC 2011/6006) (DSEWPaC 2011)[1].

The Waddi Wind and Solar Farm project was referred to the (then) Commonwealth Department of the Environment and Energy (DEE) in December 2018. DEE determined on 27 February 2019 that the project was "Not a Controlled Action" (EPBC 2018/8352) (DEE 2019a)[2].

A new referral has been prepared to replace the project's existing "Not a Controlled Action" decision (EPBC 2018/8352) under the EPBC Act. The key design changes to the project's infrastructure since this referral decision are summarised in Attachment 6 Key design changes_2023, and the project infrastructure is shown in Attachment 1 WDWF-Infrastructure Map_2023. The EPBC Act referral was submitted to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) in August 2023 and a referral number has been issued to the Proponent, EPBC 2023/09639. On 13 November 2023, the referred project was determined by the Commonwealth to be controlled action requiring assessment and approval under the EPBC Act. Details on the DCCEEW determination are included in Attachment 29 Application for a clearing permit (purpose permit)_2023.

The proponent is seeking an assessment of the project through a state accredited process with this clearing permit application.

[1] Department of Sustainability, Environment, Water, Population and Communities. 2011. Notice of Referral Decision – not controlled action. https://epbcpublicportal.awe.gov.au/all-referrals/project-referral-summary/project-decision/?id=302bc78c-8667-e511-b4b8-005056ba00ab. Accessed 29 August 2023.

[2] Department of the Environment and Energy. 2019a. Notification of Referral Decision – not controlled action. https://epbcpublicportal.awe.gov.au/all-referrals/project-referral-summary/project-decision/?id=98bc 451-8b29-e911-931a-00505684324c. Accessed 29 August 2023.

1.3 State environmental approvals

1.3.1 EPA determination and public advice

Environmental Statement, Proposed Dandaragan Wind Farms, Central Midlands, Western Australia (Wind Prospect 2011)[4] was prepared to accompany a Planning Approval Application, which was submitted to the Shire of Dandaragan in February 2011 for the Dandaragan Wind Farms project. The Dandaragan Wind Farms proposal included the Waddi Wind Farm and the Yandin Wind Farm (which is not part of this clearing application).

In consideration of the environmental issues outlined in the Planning Approval Application, the Dandaragan Wind Farms project was referred to the Environmental Protection Authority (EPA) for assessment under Section 38 of the EP Act.

The EPA considered that the likely environmental impacts of the Dandaragan Wind Farms project were not so significant as to warrant formal environmental assessment and subsequently determined that the proposal should be treated as "Not Assessed – Public Advice Given" (Attachment 3 EPA historical determination and public advice_ 2011). The public advice issued by the Office of the EPA in October 2011 identified that the key environmental factors requiring management were limited to clearing of vegetation, fauna and noise.

1.3.2 Clearing permits (CPS 4608/2 and CPS 8449/1)

A clearing permit (CPS 4608/2) for 1.07 ha was previously granted for the project by the (then) Department of Environment and Conservation (DEC) (Attachment 26 DEC CPS 4608_2 clearing permit). However, CPS 4608/2 included the previous 19 km southern grid connection within its approved clearing area and the duration of CPS 4608/2 elapsed on 13 February 2017. CPS 4608/2 also included areas within the project that have subsequently been avoided through further detailed planning.

A clearing permit (CPS 8449/1) for 1.358 ha was previously granted for the project by the Department of Water and Environmental Regulation (DWER) (Attachment 27 DEC CPS 8449_1 clearing permit). However, the native vegetation clearing area has increased in the project's current design.

1.4 Shire of Dandaragan planning approval

The Shire of Dandaragan granted the Planning Approval for the Waddi Wind Farm, as part of the combined Dandaragan Wind Farms project on 11 January 2012 (Attachment 4 Shire of Dandaragan historical planning approvals_ 2012–2019). The Planning Approval allowed for the Waddi Wind Farm to be developed separately to the Yandin Wind Farm.

The Shire of Dandaragan have subsequently granted amendments to the Waddi Wind Farm Planning Approval, including (Attachment 4 Shire of Dandaragan historical planning approvals_ 2012–2019):

- An extension of substantial commencement time frame to 10 January 2020 on 28 April 2015
- An 8 km overhead 132 kV transmission line connection, additional access tracks and a revised on-site substation location on 30 September 2016
- An increase to the maximum blade tip height of the wind turbines, hub heights and wind monitoring towers on 8 March 2019
- An extension of substantial commencement time frame to 10 January 2025 on 4 October 2019.

Given the latest design changes to the project, a minor amendment to the Planning Approval is being arranged with the Shire of Dandaragan under the *Planning and Development Act 2005* and primarily includes:

[4] Wind Prospect. 2011. Environmental Statement, Proposed Dandaragan Wind Farms, Central Midlands, Western Australia. Christies Beach: South Australia.

- Removal of 39 wind turbines (from 57 to 18)
- Revision to the project area to correctly capture the transmission line
- Revisions to the Indicative Works area and Indicative Disturbance area
- Avoidance of impacts to the Mullering Brook, as there will be no longer be an access track crossing over the creek line or Transmission Line infrastructure sited within the Mullering Brook
- Update reference to recent background noise levels undertaken for the project.

2 Clearing permit application context

2.1 Requirement for clearing permit

Most of the project has been historically cleared for agricultural purposes, however minor clearing works are required to facilitate installation of the wind farm and transmission line infrastructure. To comply with the provisions of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004, and Condition 19 of the Shire of Dandaragan's Planning Approval, a clearing permit is required to facilitate the removal of native vegetation. The existing CPS 8449/1 approved the clearing of native vegetation up to 1.358 ha in August 2019, however the proposed native vegetation clearing area has increased to 5.5 ha in the project's current design. The proposed increase has primarily been required to meet the operational and maintenance specifications for the transmission line infrastructure identified during recent consultation with Western Power.

Guidance was sought from DWER to confirm if the existing CPS 8449/1 could be amended to reflect the project's current design, who provided the following advice in April 2023:

- A new clearing permit application should be submitted instead of an amendment application for CPS 8449/1. This is required to ensure the project's state-based clearing requirements are appropriately regulated. This application is provided as Attachment 29 Application for a clearing permit (purpose permit)_2023.
- To use a state accredited assessment pathway for the EPBC Act referral, the proposed action will need to be determined as a controlled action prior to submitting a clearing permit application. The EPBC Act referral was submitted in August 2023 and a referral number has been issued, EPBC 2023/09639. The Commonwealth determined the referred action to be a controlled action on 13 November 2023 (Attachment 28 DCCEEW determination_2023). The proponent is seeking an assessment of the project through a state accredited process with this clearing permit application. An Annex C7 form is included as Attachment 30 Assessment bilateral agreement (Annex C7)_2023.
- CPS 8449/1 will need to be surrendered for a new clearing permit application to be submitted. This application was submitted to DWER on 17 October 2023.

The flora and vegetation survey reports undertaken for the project have informed the preparation of this clearing permit application, as listed in Table 1. The flora and vegetation survey extents across the project are illustrated in Figures A and A-1 (Attachment 7 Figures A to F_2023).

Table 1: Flora and vegetation survey reports

Survey report	Survey extent (ha)	Description	Attachment name
Targeted Level 1 Vegetation and Flora Assessment Waddi (Outback Ecology 2010)[5]	519.8	• Undertook two visits for a Level 1 flora and vegetation survey between November 2008 and January 2009 for a previous design of the project • Included a targeted declared rare and priority flora search • Methods adopted were consistent with state guidance	Attachment 13 Targeted Level 1 Vegetation and Flora Assessment Waddi_2010
Waddi Wind Farm Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey (Outback Ecology 2014)[6]	97.7	• Undertook a Level 1 spring flora and vegetation survey for a previous design of the overhead transmission line alignment extending west of the Wind Farm to the Cataby substation and alternative substation options • Included a targeted spring flora search to fulfil Condition 8 of CPS 4608/2 within previous designs of the Wind Farm (Attachment 26 DEC CPS 4608_2 clearing permit) and overhead transmission line alignment • Methods adopted were consistent with state and Commonwealth guidance	Attachment 14 Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey_2014
Waddi Wind Farm project – Cataby Supplementary Flora, Vegetation and Fauna Survey (*ecologia* 2016)[7]	13.6	• Undertook a spring flora and vegetation survey for additional portions of a previous design of the overhead transmission line alignment not covered by Outback Ecology (2014) • Included a targeted spring flora search within the additional areas of a previous design of the overhead transmission line alignment • Methods adopted were consistent with state and Commonwealth guidance.	Attachment 15 Supplementary Flora, Vegetation and Fauna Survey_2016
Reconnaissance flora and vegetation assessment, Waddi Wind Farm (RPS 2023)[8]	1,450.69	• Undertook two visits for a reconnaissance flora and vegetation between 29 September and 7 October 2021 (by Ecoedge) and between 7 and 9 September 2022 (by RPS) for a previous extent of the Indicative Works area • Included a targeted spring flora search within a previous extent of the Indicative Works area • Methods adopted were consistent with state guidance.	Attachment 16 Reconnaissance Flora and Vegetation Assessment_2023

2.2 Supporting information

The following attachments have been provided to support the purpose permit clearing application (Table 2). The attachment naming system is consistent with the attachment naming system applied to the EPBC Act referral. This was done to minimise uncertainty regarding the two sets of attachments in the event that the clearing permit application and EPBC Act referral are assessed under a state accredited process.

The attachments unique to the clearing permit application start from Attachment 26 DEC CPS 4608_2 clearing permit_2012.

[5] Outback Ecology. 2010. Targeted Level 1 Vegetation and Flora Assessment Waddi. Report prepared for RPS.

[6] Outback Ecology. 2014. Waddi Wind Farm Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey. Report prepared for RPS.

[7] Ecologia. 2016. Waddi Wind Farm Project – Cataby Supplementary Flora, Vegetation and Fauna Survey. Report prepared for Waddi Wind Farm Pty Ltd.

[8] RPS. 2023. Reconnaissance flora and vegetation assessment, Waddi Wind Farm. Report prepared for Tilt Renewables.

The majority of the attachments in the clearing permit application are unchanged from the EPBC Act referral's attachments, exceptions of Attachment 1 WDWF-Infrastructure Map_2023 and Attachment 7 Figures A to F_2023:

- Figure B-16 has been updated to include additional Department of Biodiversity Conservation and Attractions (DBCA) listed Priority flora records which were not shown in the figure. However, all conservation significant flora records were illustrated in the Reconnaissance Flora and Vegetation Assessment (RPS 2023), specifically Figure F (Sheet 9 of 10), which is unchanged since its submission with the EPBC Act referral.
- The Indicative Works Area has been updated to encompass the viewing platform section of the Indicative Disturbance area and native vegetation clearing area. This resulted in updates to Attachment 1 and Attachment 7's Figures A, B, B-2, B-3, C, C-2, C-3, D, D-2, D-3, E and F.

The supporting information for the clearing permit application is summarised in Table 2.

Table 2: Supporting information for the clearing permit application

Attachments provided with the EPBC Act referral and clearing permit application	Attachments provided with the clearing permit application
• Attachment 1 WDWF-Infrastructure Map_2023 • Attachment 2 WDWF-Solar Map_2023 • Attachment 3 EPA historical determination and public advice_ 2011 • Attachment 4 Shire of Dandaragan historical planning approvals_2012-2019 • Attachment 5 DPLH historical licence approval_ 2018 • Attachment 6 Key design changes_2023 • Attachment 7 Figures A to F_2023 • Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017 • Attachment 9 Significance of impacts assessment_2023 • Attachment 10 Consultation summary_2023 • Attachment 13 Targeted Level 1 Vegetation and Flora Assessment Waddi_2010 • Attachment 14 Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey_2014 • Attachment 15 Supplementary Flora, Vegetation and Fauna Survey_2016 • Attachment 16 Reconnaissance Flora and Vegetation Assessment_2023I • Attachment 17 Key flora and fauna findings_2010 – 2023 • Attachment 20 Fauna Assessment_2014 • Attachment 21 Black-Cockatoo habitat assessment_2022 • Attachment 22 Native vegetation and plantation descriptions_2010–2023 • Attachment 23 Review of unsurveyed planted trees_2023 • Attachment 24 Aboriginal Cultural Heritage Inquiry System results_2023 • Attachment 25 PMST report_2023	• Attachment 26 DEC CPS 4608_2 clearing permit_2012 • Attachment 27 DWER CPS 8449_1 clearing permit_2019 • Attachment 28 DCCEEW determination_2023 • Attachment 29 Application for a clearing permit (purpose permit)_2023 • Attachment 30 Assessment bilateral agreement (Annex C7)_2023 • Attachment 31 Landowner and easement interest holder consents_2023 • Shapefile data; including the project, Indicative Works area, Indicative Disturbance area and native vegetation clearing area

2.3 Exclusions for clearing permit application

Not all of the EPBC Act referral's attachments are provided with this clearing permit application, as they are more relevant to the EPBC Act referral. However they can be made available to DWER on request. These attachments included:

- Attachment 11. This is the Powering Australian Renewables' Environmental Policy. Tilt Renewables is a part of the PowAR group, and as such its business activities are subject to the PowAR's Environmental Policy.
  - It was not attached as the clearing permit application does not ask for context on the corporation's environmental policy.
- Attachment 12. This is a list of all lots and reserves intersected by the Project's Indicative Disturbance Area.

  - It was not attached as these details were included in Table 4 of the clearing permit application cover letter.
- Attachment 18. This is a summary of the conservation significant flora records from the four flora and vegetation survey reports relevant to the Project.
  - It was not attached as these details were included in Table 7 of the clearing permit application cover letter.
- Attachment 19. This is the Avifauna Assessment Proposed Wind Farm Development Dandaragan Shire (RPS 2010).
  - It was not attached as this report is included as Appendix 3 of the Attachment 20 Fauna Assessment_2014.

It is noted that sections of the proposed clearing may be exempt under the Regulation 5, Item 1 – Clearing to a building, as the purpose of clearing includes hard stand areas and a viewing area for the wind farm. However, the Proponent is not seeking to apply an exemption to part of the nominated clearing area (5.5 ha; Native vegetation clearing area) as:

- The time frame for arranging a valid Development Approval and Building Licence for the viewing area, for example, is not known and may not be in place prior to clearing activities progressing under a clearing permit approved in the future.
- The Proponent is seeking to be accepted by DWER under the Assessment Bilateral Agreement. The footprint for both the EPBC Act referral and clearing permit application need to align for it to be assessed under the accredited assessment pathway.

3 Landholder context

3.1 Landowner consent and support

Table 3 identifies the landholdings and the ownership status within which native vegetation clearing is proposed to be undertaken. The landholders and responsible agencies (private landholders, DBCA, Department of Planning, Lands and Heritage [DPLH], Main Roads Western Australia and Shire of Dandaragan) have been consulted regarding the proposed clearing of native vegetation within their landholdings. The landholders and responsible agencies (except DBCA) have provided written consent to clear native vegetation within their lots and road reserves (Attachment 31 Landowner and easement interest holder consents_2023).

The DBCA has been consulted on the proposed clearing of native vegetation within the Conservation Park (Crown Reserve 41986) and the process of seeking its consent to clear is underway (Attachment 31 Landowner and easement interest holder consents_2023). DBCA has indicated that it may need to seek authorisation from the Conservation Commission prior to providing its consent for the proposed clearing. This is expected to be progressed during the assessment phase of the clearing permit application.

The project's Indicative Disturbance area intersects several clearance zones of electrical infrastructure, whose interest holder is Western Power (Western Power 2023)[9]. It also intersects several easements that relate to the Dampier Bunbury Natural Gas Pipeline and the Parmelia Gas Pipeline corridors, whose interest holders are the DPLH (2022)[10] and the APA Group. The interest holders for the easements in which native vegetation clearing is proposed have been consulted (APA Group and Western Power). Western Power have provided written consent to clear native vegetation within its easements, and this process is underway with APA Group (Attachment 31 Landowner and easement interest holder consents_2023).

[9] Western Power. 2023. Clearance Assessment Mapping Tool. https://westernpower.maps.arcgis.com/apps/webappviewer/index.html?id=356f52f16f394417aa1cc486a569dc1d. Accessed 1 September 2023.

[10] Department of Planning, Lands and Heritage. 2022. Dampier to Bunbury pipeline. https://www.wa.gov.au/government/document-collections/dampier-bunbury-pipeline. Accessed 1 September 2023.

It is acknowledged that a clearing permit approval will not be granted by DWER unless the DBCA provides its consent for the proposed clearing within the Conservation Park and APA Group provides its consent within its easement.

Table 4 identifies the landholdings, ownership status and description of land within the Indicative Disturbance area (134.0 ha), which represents the physical footprint of the wind farm and transmission line. The Proponent is proposing to clear 5.5 ha (or 4%) of native vegetation and 0.3 ha (or 1%) of plantation vegetation and to disturb 128.3 ha (or 95%) of cleared areas in order to construct the project.

Table 3: Landholder context and clearing extents

Lot and reserve details	Project area	Zoning / reservation status	Landholder	Clearing extent (ha)	Abridged native vegetation unit	Condition	Area (ha)	Figure reference
Lot 2 on Deposited Plan 8424 (Volume: 1747; Folio: 835)	Wind Farm	Rural	Privately owned	0.0002	Proteaceous Heath (RPS 2023)	Degraded	0.0002	Figure B-8
Lot 3 on Deposited Plan 8424 (Volume: 1604; Folio: 69)	Wind Farm	Rural	Privately owned	0.04	*Eucalyptus todtiana* Woodland (RPS 2023)	Completely Degraded	0.02	Figure B-9
					Eucalyptus todtiana Woodland (Inferred WD; RPS 2023)	Completely Degraded (Inferred)	0.02	
Lot 3 on Deposited Plan 408189 (Volume: 2906; Folio: 375)	Transmission Line infrastructure	Rural, Bassendean Sands Special Control Area 1 (SCA 1)	Privately owned. Overlapped by a live mining lease (M 70/1398) for the Cooljarloo Mine held by Tronox Management Pty Ltd.	0.2	*Banksia* Low Open Woodland (*ecologia*, 2016)	Excellent	0.001	Figure B-16
					Banksia Low Open Woodland (Outback Ecology 2014)	Good to Very Good	0.2	
Lot 101 on Diagram 72336 (Volume: 1780; Folio: 891)	Wind Farm	Rural	Privately owned	0.2	Proteaceous Heath (Inferred HL; RPS 2023)	Excellent (Inferred)	0.02	Figure B-3
					Proteaceous Heath (Outback Ecology 2014)	Very Good to Excellent	0.1	
					Proteaceous Heath (RPS 2023)	Very Good	0.03	
Lot 105 on Deposited Plan 59027 (Volume: 2685; Folio: 985)	Transmission Line infrastructure Wind Farm	Rural	Privately owned	0.2	*Corymbia calophylla* Woodland (Outback Ecology 2014)	Degraded	0.2	Figure B-2
					Proteaceous Heath (RPS 2023)	Completely Degraded	0.02	Figure B-13
Lot 3805 on Deposited Plan 209083 (Volume: 1888; Folio: 114)	Wind Farm	Rural	Privately owned	0.0002	Proteaceous Heath (RPS 2023)	Good	0.0002	Figure B-9
Lot 3897 on Deposited Plan 209569 (Volume: 1834; Folio: 391)	Wind Farm	Rural	Privately owned	0.1	*Banksia* Low Open Woodland (RPS 2023)	Good	0.1	Figure B-5 Figure B-6
Lot 3899 on Deposited Plan 209567 (Volume: 1780; Folio: 892)	Wind Farm	Rural	Privately owned	0.02	*Eucalyptus todtiana* Woodland (Inferred WD; RPS 2023)	Completely Degraded (Inferred)	0.02	Figure B-1 Figure B-2
					Proteaceous Heath (RPS 2023)	Excellent	0.00004	
					Proteaceous Heath (RPS 2023)	Good	0.003	
Lot 3901 on Deposited Plan 209568 (Volume: 3141; Folio: 872)	Transmission Line infrastructure	Rural Crown Reserve 27216	Responsible agency is DPLH	1.8	*Banksia* Low Open Woodland (RPS 2023)	Excellent	0.7	Figure B-13 Figure B-14 Figure B-15 Figure B-16
					Banksia Low Open Woodland (Inferred W1; RPS 2023)	Excellent (Inferred)	0.1	
					Banksia Low Open Woodland (Outback Ecology 2014)	Excellent	0.1	
					Banksia Low Open Woodland (Outback Ecology 2014)	Very Good to Excellent	0.3	
					Banksia Low Open Woodland (RPS 2023)	Very Good	0.07	
					Banksia Low Open Woodland (Outback Ecology 2014)	Good to Very Good	0.004	
					Melaleuca Low Open Woodland (Outback Ecology 2014)	Very Good to Excellent	0.03	
						Good	0.1	
					Proteaceous Heath (RPS 2023)	Excellent	0.3	
					Proteaceous Heath (Outback Ecology 2014)	Excellent	0.1	
Lot 3903 on Deposited Plan 209569 (Volume: 1859; Folio: 822)	Wind Farm	Rural	Privately owned	0.1	Proteaceous Heath (RPS 2023)	Degraded	0.1	Figure B-7
Lot 4134 on Deposited Plan 240347 (Volume: 3089; Folio: 642)	Wind Farm	Public Purposes: Camping and Conservation of Flora reserve Crown Reserve 41986	Conservation Park; Responsible Agency is DBCA	2.3	Banksia Low Open Woodland (RPS 2023)	Excellent	2.0	Figure B-16
					Banksia Low Open Woodland (Inferred W1; RPS 2023)	Excellent (Inferred)	0.04	
					Banksia Low Open Woodland (*ecologia* 2016)	Excellent	0.1	
					Banksia Low Open Woodland (RPS 2023)	Very Good	0.1	
					Banksia Low Open Woodland (Outback Ecology 2014)	Very Good to Excellent	0.0004	
						Good to Very Good	0.02	
					Proteaceous Heath (Outback Ecology 2014)	Excellent	0.002	
P Road (Land ID 3182207) – Waddi Road	Wind Farm	Local Road	Shire of Dandaragan	0.2	Proteaceous Heath (RPS 2023)	Excellent	0.1	Figure B-9
						Good	0.05	
P Road (Land ID 3608624) – Brand Highway	Transmission line infrastructure	Local Road	Main Roads Western Australia	0.1	Banksia Low Open Woodland (RPS 2023)	Excellent	0.1	Figure B-16
P Road (Land ID 3608625) – Mullering Road	Wind Farm	Local Road	Shire of Dandaragan	0.2	Proteaceous Heath (RPS 2023)	Excellent	0.1	Figure B-2
						Very Good	0.00003	
						Good	0.1	
						Completely Degraded	0.02	
Total				**5.5**			**5.4**	

Table 4: Landholder context and description of land within the Indicative Disturbance area

Lot and reserve details	Project area	Zoning / Reservation status	Ownership status	Description of land
Lot 2 on Deposited Plan 8424 (Volume: 1747; Folio: 835)	Wind Farm	Rural zoning	Privately owned	• 0.0002 ha of native vegetation • Cleared areas
Lot 2 on Deposited Plan 408189 (Volume: 2906; Folio: 375)	Transmission Line infrastructure	Rural zoning, Bassendean Sands Special Control Area 1 (SCA 1)	Privately owned	• Cleared areas
Lot 3 on Deposited Plan 8424 (Volume: 1604; Folio: 69)	Wind Farm	Rural zoning	Privately owned	• 0.04 ha of native vegetation • Cleared areas
Lot 3 on Deposited Plan 408189 (Volume: 2906; Folio: 376)	Transmission Line infrastructure	Rural zoning, Bassendean Sands Special Control Area 1 (SCA 1)	Privately owned	• 0.2 ha of native vegetation • Cleared areas
Lot 101 on Diagram 72336 (Volume: 1780; Folio: 891)	Wind Farm	Rural zoning	Privately owned	• 0.2 ha of native vegetation • 0.05 ha of plantation • Cleared areas
Lot 105 on Deposited Plan 59027 (Volume: 2685; Folio: 985)	Transmission Line infrastructure Wind Farm	Rural zoning	Privately owned	• 0.2 ha of native vegetation • 0.007 ha of plantation • Cleared areas
Lot 3805 on Deposited Plan 209083 (Volume: 1888; Folio: 114)	Wind Farm	Rural zoning	Privately owned	• 0.0002 ha of native vegetation • Cleared areas
Lot 3846 on Deposited Plan 209083 (Volume: 1604; Folio: 70)	Wind Farm	Rural zoning	Privately owned	• Cleared areas
Lot 3897 on Deposited Plan 209569 (Volume: 1834; Folio: 391)	Wind Farm	Rural zoning	Privately owned	• 0.1 ha of native vegetation • 0.03 ha of plantation • Cleared areas
Lot 3899 on Deposited Plan 209567 (Volume: 1780; Folio: 892)	Wind Farm	Rural zoning	Privately owned	• 0.02 ha of native vegetation • 0.02 ha of plantation • Cleared areas
Lot 3901 on Deposited Plan 209568 (Volume: 3141; Folio: 872)	Transmission Line infrastructure	Rural zoning Crown Reserve 27216	Responsible agency is DPLH	• 1.8 ha of native vegetation • Cleared areas
Lot 3903 on Deposited Plan 209569 (Volume: 1859; Folio: 822)	Wind Farm	Rural zoning	Privately owned	• 0.1 ha of native vegetation • Cleared areas • 0.1 ha of plantation
Lot 4134 on Deposited Plan 240347 (Volume: 3089; Folio: 642)	Wind Farm	Public Purposes: Camping and Conservation of Flora reserve Crown Reserve 41986 (Conservation Park)	Conservation Park; Responsible agency is DBCA	• 2.3 ha of native vegetation • Cleared areas
P Road (Land ID 3182207) – Waddi Road	Wind Farm	Local Road reserve	Shire of Dandaragan	• 0.2 ha of native vegetation • Cleared areas
P Road (Land ID 3608624) – Brand Highway	Transmission line infrastructure	Local Road reserve	Main Roads Western Australia	• 0.1 ha of native vegetation • Cleared areas
P Road (Land ID 3608625) – Mullering Road	Wind Farm	Local Road reserve	Shire of Dandaragan	• 0.2 ha of native vegetation • 0.04 ha of plantation • Cleared areas

3.2 Licence to occupy Crown land

To enable construction and operation of the overhead 132 kV transmission line over Crown Land Reserves 27216 and 41986, a licence under Section 91 of the *Land Administration Act 1997* was sought from the DPLH. The licence was granted on 8 April 2018 for a period of five years (Licence 02804/1991_A9222973) (Attachment 5 DPLH historical licence approval_2018). The approval of the licence confirmed land access and use; however it did not exempt the Proponent from a requirement to obtain a clearing permit to facilitate the installation of the overhead transmission lines.

As the licence is no longer active and the alignment of the overhead 132 kV transmission line over Crown Land reserves has changed in the project's current design, a new licence under the Section 91 of the *Land Administration Act 1997* is being sought by the Proponent.

In line with the previous licence, it is expected that the new licence will require that a native vegetation clearing permit is obtained and a hygiene protocol is prepared and implemented to prevent the introduction of pathogens and weeds within Crown Reserve 41986. The requirement for a hygiene protocol for the new licence will be addressed by utilising the hygiene protocols from the Hygiene Protocol letter (RPS 2019)[11], that was prepared to address Condition 2a) of Annexure B – Additional Conditions from the licence to occupy Crown Land (Licence 02804/1991_A9222973).

The Hygiene Protocol letter was provided to DBCA's Ecosystem Health Branch for review, and it advised that the proposed hygiene protocols were adequate (B. Ho, personal communication, 26 March 2019). The DBCA's main concern was that the area surrounding Conservation Park 41986 has a history of soil borne pathogen occurrences, mainly due to the historic mineral sand mining activities in the area. The project is adjacent to Tronox Management Pty Ltd's current mining area on the western side of the park. DBCA was concerned that soil borne pathogens could be spread into the park. DBCA recommended that mapping for soil borne pathogens is undertaken by the Proponent to better understand the risk of spread and inform the proposed hygiene protocols. This outcome has been agreed to by the Proponent with the updated Hygiene Protocol letter, dated 3 April 2019, which was supplied to the DBCA (RPS 2019).

3.3 Consent for access under CALM Act

A portion of the native vegetation clearing area occurs within the Conservation Park (Crown Reserve 41986), which is managed by the DBCA. The Proponent has met with the DBCA several times to discuss the extent of works within the Conservation Park. DBCA advised that the applicable mechanism for seeking approval for accessing and constructing the overhead 132 kV transmission line through the Crown Reserve 41986 is to submit a Regulation 4 for consent for access under the *Conservation and Land Management Act 1984* (CALM Act) to DBCA for assessment (B. Chapple, personal communication, 25 July 2023). The Proponent will prepare a request for a Regulation 4 consent for access under the CALM Act separately to this clearing permit application.

4 Native vegetation context

4.1 Proposed clearing area

Figures B-1 to Figure B-16 (Attachment 7 Figures A to F) show the spatial extent of the 5.5 ha of native vegetation proposed to be cleared and details the vegetation units identified by the three flora and vegetation surveys within the Indicative Disturbance area (i.e. Outback Ecology 2014, *ecologia* Environment 2016 and RPS 2023). A summary of the purpose permit clearing application is provided below in Table 5.

[11] RPS. 2019. Hygiene protocol for Crown Reserve 41986: Waddi Wind Farm

Table 5: Proposed clearing summary

Location	The native vegetation proposed to be cleared is located with the following lots and reserves: • Lot 2 on Deposited Plan 8424 • Lot 3 on Deposited Plan 8424 • Lot 3 on Deposited Plan 408189 • Lot 101 on Diagram 72336 • Lot 105 on Deposited Plan 59027 • Lot 3805 on Deposited Plan 209083 • Lot 3897 on Deposited Plan 209569 • Lot 3899 on Deposited Plan 209567 • Lot 3901 on Deposited Plan 209568 • Lot 3903 on Deposited Plan 209569 • Lot 4134 on Deposited Plan 240347 • P Road (Land ID 3182207) – Waddi Road • P Road (Land ID 3608624) – Brand Highway • P Road (Land ID 3608625) – Mullering Road
Clearing area	The purpose permit clearing application area is 1,227.0 ha (Indicative Works area), within which 5.5 ha of native vegetation is proposed to be cleared.
Timing	Clearing will occur as one action between Q1 2024 and Q4 2026.
Clearing method	The native vegetation will be cleared mechanically.
Purpose of clearing	To create internal access tracks, install electrical underground cabling, hardstand areas and a viewing area for the Wind Farm and to construct the Transmission Line, which will connect the project's on-site substation to the Western Power's existing transmission network.
Vegetation proposed to be cleared	A high-level summary of the native vegetation units, and their respective vegetation conditions, identified within the project's Indicative Disturbance area is provided below: • Approximately 4.0 ha of Banksia Low Open Woodland in Good to Excellent condition (Figures B-5, B-6, and B-13 to B-16) • Approximately 0.2 ha of *Corymbia calophylla* Woodland in Degraded condition (Figure B-13) • Approximately 0.1 ha of *Eucalyptus todtiana* Woodland in Completely Degraded condition (Figures B-1 and B-9) • Approximately 0.1 ha of *Melaleuca* Low Open Woodland in Good to Excellent condition (Figure B-13) • Approximately 1.1 ha of Proteaceous Heath in Completely Degraded to Excellent condition (Figures B-2, B-3, B-7 to B-9, B-14 to B-16)

Table 3 identifies the vegetation units mapped by the three flora and vegetation surveys within the Indicative Disturbance area (i.e. Outback Ecology 2014, *ecologia* Environment 2016 and RPS 2023), the condition of the vegetation units and the extent of the various units proposed to be cleared. The vegetation unit descriptions are detailed in Attachment 22 Native vegetation and plantation descriptions_2010–2023.

Where vegetation has been proposed to be cleared and has not been surveyed, the vegetation unit has been inferred using the closest extent of surveyed vegetation and a comparison of aerial imagery. A section of planted trees within the Indicative Disturbance area that had not been surveyed was reviewed and found to be primarily planted pine trees and one planted non-endemic Eucalypt tree (Attachment 23 Review of unsurveyed planted trees_2023).

To simplify the assessment of the proposed clearing across the vegetation units described in the three flora and vegetation surveys, RPS has condensed the various vegetation units mapped by the surveys into abridged vegetation units (Table 6 and Attachment 22 Native vegetation and plantation descriptions_2010–2023).

Table 6: Abridged vegetation units for the proposed clearing area

Lot number	Project area	Abridged native vegetation unit	Condition	Area (ha)
Lot 2 on Deposited Plan 8424	Wind Farm	Proteaceous Heath	Degraded	0.0002
Lot 3 on Deposited Plan 8424	Wind Farm	*Eucalyptus todtiana* Woodland	Completely Degraded	0.04
Lot 3 on Deposited Plan 408189	Transmission Line infrastructure	*Banksia* Low Open Woodland	Excellent	0.001
			Good to Very Good	0.2
Lot 101 on Diagram 72336	Wind Farm	Proteaceous Heath	Excellent	0.02
		Proteaceous Heath	Very Good to Excellent	0.1
		Proteaceous Heath	Very Good	0.03
Lot 105 on Deposited Plan 59027	Transmission Line infrastructure	*Corymbia calophylla* Woodland	Degraded	0.2
	Wind Farm	Proteaceous Heath	Completely Degraded	0.02
Lot 3805 on Deposited Plan 209083	Wind Farm	Proteaceous Heath	Good	0.0002
Lot 3897 on Deposited Plan 209569	Wind Farm	Banksia Low Open Woodland	Good	0.1
Lot 3899 on Deposited Plan 209567	Wind Farm	*Eucalyptus todtiana* Woodland	Completely Degraded	0.02
		Proteaceous Heath	Excellent	0.00004
			Good	0.003
Lot 3901 on Deposited Plan 209568	Transmission Line infrastructure	Banksia Low Open Woodland	Excellent	1.0
			Very Good to Excellent	0.3
			Very Good	0.1
			Good to Very Good	0.004
		Melaleuca Low Open Woodland	Very Good to Excellent	0.03
			Good	0.1
		Proteaceous Heath	Excellent	0.4
Lot 3903 on Deposited Plan 209569	Wind Farm	Proteaceous Heath	Degraded	0.1
Lot 4134 on Deposited Plan 240347	Wind Farm	Banksia Low Open Woodland	Excellent	2.1
			Very Good to Excellent	0.0004
			Very Good	0.1
			Good to Very Good	0.02
		Proteaceous Heath	Excellent	0.002
P Road (Land ID 3182207) – Waddi Road	Wind Farm	Proteaceous Heath	Excellent	0.1
			Good	0.1
P Road (Land ID 3608624) – Brand Highway	Transmission Line infrastructure	Banksia Low Open Woodland	Excellent	0.1
P Road (Land ID 3608625) – Mullering Road	Wind Farm	Proteaceous Heath	Excellent	0.1
			Very Good	0.00003
			Good	0.1
			Completely Degraded	0.02
Total proposed clearing area				**5.5**

4.2 Vegetation and flora

The 5.5 ha clearing area is a subset of the three flora and vegetation survey areas and comprised of inferred areas. The surveyed areas account for approximately 5.2 ha (or approximately 96% of the total clearing area), whilst the inferred areas account for 0.2 ha (or approximately 5% of the total clearing area) (Table 6).

The majority of the vegetation was surveyed in 2021 and 2022 (RPS 2023), approximately 4.0 ha (or approximately 73% of the total clearing area), while a minor extent of the vegetation was surveyed in 2013 and 2016 (Outback Ecology 2014 and *ecologia* 2016), approximately 1.2 ha (or approximately 22% of the total clearing area). The inferred areas includes native vegetation observed beneath established planted pine trees during a site inspection on 12 July 2023 (0.051 ha) (Attachment 23 Review of unsurveyed planted trees_2023).

The key findings of the three flora and vegetation surveys of relevance to the clearing area are summarised as follows:

- Abridged vegetation units within the clearing area are
  - Banksia Low Open Woodland
  - *Corymbia calophylla* Woodland
  - *Eucalyptus todtiana* Woodland
  - *Melaleuca* Low Open Woodland
  - Proteaceous Heath
- Approximately 0.5 ha of native vegetation within the clearing area is in Completely Degraded to Degraded condition, whilst 5.0 ha of native vegetation is in Good or better condition (Table 6; Figures C-1 to C-3, C-5 to C-9, and C-13 to C-16) (Attachment 7 Figures A to F)
- The Banksia Woodlands TEC was recorded within the clearing area, which is listed as an Endangered TEC under the EPBC Act and is a DBCA listed Priority 3 PEC (DBCA 2023a)
  - There was 0.3 ha of Banksia woodland vegetation identified by Outback Ecology (2014) and *ecologia* (2016) within the native vegetation clearing area. The vegetation was in Excellent to Good to Very Good condition and within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) bioregion. It is considered to be representative of part of a larger patch or patches of the Banksia Woodlands TEC. Approximately 0.1 ha was mapped in Excellent condition and approximately 0.2 ha was mapped in Good to Very Good and Very Good to Excellent condition
  - This extent of Banksia woodland vegetation to be cleared (0.3 ha in Good to Very Good, Very Good to Excellent and Excellent condition) would not meet the minimum patch size for the Banksia Woodlands TEC by itself (DEE 2016)[12]. However, this extent is adjacent to larger areas of Banksia woodland vegetation in Very Good or better condition mapped by Outback Ecology (2014) and *ecologia* (2016). Therefore, it is considered to represent part of a larger patch or patches of the Banksia Woodlands TEC.
- No Threatened flora species listed under the BC Act or any species protected under the EPBC Act were recorded in the native vegetation clearing area (Table 7).
- There are four DBCA listed Priority flora species (38 records) within the native vegetation clearing area (Table 7). Figures B-2, B-14, B-15 and B-16 show the location of these records (Attachment 7 Figures A to F_2023). Impacts to Priority flora species have been minimised as much as practicable, resulting in 6% of priority flora records (or 5% of individual plants) are proposed to be cleared and 94% of priority flora records (or 95% of individual plants) are proposed to be retained.

The inferred areas of native vegetation (0.2 ha) encompass native vegetation beneath established planted pine trees observed during a site inspection (0.051 ha), and three abridged vegetation communities; Banksia Low Open Woodland (0.15 ha), *Eucalyptus todtiana* Woodland (0.03 ha) and Proteaceous Heath (0.01 ha). Table 7 identifies that priority flora species have been primarily recorded within the Banksia Low Open Woodland and Proteaceous Heath abridged vegetation communities (where known).

[12] Department of the Environment and Energy. 2016. Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community. http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf. Accessed on 29 August 2023.

Given that only 0.01 ha (or 6% of the inferred native vegetation) is representative of the Proteaceous Heath, and only 0.15 ha (or 59% of the inferred native vegetation) is representative of the Banksia Low Open Woodland, it is considered that the potential risk to priority species from the removal of this native vegetation which has not been surveyed is low.

Furthermore, there is 0.03 ha (or approximately 6% of the inferred native vegetation) representative of the *Eucalyptus todtiana* Woodland in Completely Degraded condition. The understorey of this community is comprised of agricultural weed species including *Bromus diandrus* (great brome), *Hordeum leporinum* (barley grass), *Malva pseudolavatera* and *Raphanus raphanistrum* (wild radish) (RPS 2023). There is 0.051 ha (or approximately 21% of the inferred native vegetation) which represents native flora species observed beneath pine tree canopy, including yellow flowering prickly moses (*Acacia pulchella*), grass tree (*Xanthorrhoea preissii*) and a proteaceous shrub possibly a *Petrophile*. This native understorey is in a degraded condition. A lack of potential habitat (intact understorey in Good or better condition) within these inferred areas coupled with the historical extent of clearing and existing agricultural land use within the project reduces the already low risk that the biological diversity and / or ecological integrity of any priority species would be significantly diminished by the proposed clearing.

Table 7: Conservation significant flora species recorded in historical flora and vegetation surveys

Species	Conservation code		DBCA priority level	Survey	Abridged native vegetation unit	Number of records (number of individuals)	Number of records proposed to be cleared within the project (number of individuals)	Number of records proposed to be retained within and proximate to the project (number of individuals)
	EPBC Act	BC Act						
Threatened species under the EPBC Act and BC Act								
Thelymitra stellata	Endangered	Endangered		RPS 2023	Proteaceous Heath	16 (37)	0	16 (37)
Anigozanthos viridis subsp. *terraspectans*	Vulnerable	Vulnerable		RPS 2023	Banksia Low Open Woodland	1 (number of individuals is unknown)	0	1 (number of individuals is unknown)
Hakea megalosperma	Vulnerable	Vulnerable		RPS 2023	Proteaceous Heath	4 (4)	0	4 (4)
Subtotal of Threatened flora species records						**21 (42)**	**0 (or 0%)**	**21 (or 100%) (42 or 100%)**
DBCA listed priority species								
Hypocalymma sp. Cataby			Priority 1	Outback Ecology 2010	Abridged vegetation community unknown	1 (number of individuals is unknown)	0	1 (number of individuals is unknown)
Anigozanthos humilis subsp. ?Badgingarra (S.D. Hopper 7114)			Priority 2	Outback Ecology 2014	Proteaceous Heath	3 (3)	0	3 (3)
Stylidium diplotrichum			Priority 2	RPS 2023	Proteaceous Heath	1 (1)	0	1 (1)
Acacia plicata			Priority 3	Outback Ecology 2010	Melaleuca Low Open Woodland	2 (number of individuals is unknown)	0	2 (number of individuals is unknown)
Arnocrinum gracillimum			Priority 3*	Outback Ecology 2014	Proteaceous Heath, Banksia Low Open Woodland	5 (8)	0	5 (8)
Banksia fraseri var. *crebra*			Priority 3	Outback Ecology 2010	Proteaceous Heath	3 (number of individuals is unknown)	0	3 (number of individuals is unknown)
Isopogon autumnalis			Priority 3	RPS 2023	Proteaceous Heath, Banksia Low Open Woodland	51 (107)	0	51 (107)
Lepidobolus quadratus			Priority 3	RPS 2023	Proteaceous Heath	25 (33)	0	25 (33)
				Outback Ecology 2014	Proteaceous Heath	1 (1)	0	1 (1)
Leucopogon foliosus			Priority 3	RPS 2023	Proteaceous Heath	3 (4)	0	3 (4)
Stylidium hymenocraspedum			Priority 3	RPS 2023	Banksia Low Open Woodland	41 (264)	0	41 (264)
Synaphea endothrix			Priority 3	RPS 2023	Proteaceous Heath	11 (17)	0	11 (17)
Tetratheca angulata			Priority 3	RPS 2023	Proteaceous Heath	6 (8)	0	6 (8)
				Outback Ecology 2014	Proteaceous Heath	7 (8)	0	7 (8)
				Outback Ecology 2010	Abridged vegetation community unknown	1 (number of individuals is unknown)	0	1 (number of individuals is unknown)
Banksia chamaephyton			Priority 4	RPS 2023	Banksia Low Open Woodland	3 (21)	1 (1)	2 (20)
Conostephium magnum			Priority 4	RPS 2023	Banksia Low Open Woodland	325 (566)	26 (42)	299 (524)
				ecologia 2016	Banksia Low Open Woodland	24 (33)	0	24 (33)
				Outback Ecology 2014	Proteaceous Heath, Banksia Low Open Woodland,	61 (130)	0	61 (130)
				Outback Ecology 2010	Banksia Low Open Woodland and Abridged vegetation community unknown	4 (number of individuals is unknown)	0	4 (number of individuals is unknown)
Eucalyptus macrocarpa subsp. *elachantha*			Priority 4	Outback Ecology 2010	Abridged vegetation community unknown	2 (number of individuals is unknown)	0	2 (number of individuals is unknown)
Grevillea saccata			Priority 4	Outback Ecology 2010	Abridged vegetation community unknown	1 (Number of individuals is unknown)	0	1 (number of individuals is unknown)
Hypolaena robusta			Priority 4	RPS 2023	Banksia Low Open Woodland	28 (88)	7 (21)	21 (67)
Regelia megacephala			Priority 4	Outback Ecology 2010	Abridged vegetation community unknown	1 (number of individuals is unknown)	0	1 (number of individuals is unknown)
Stylidium aeonioides			Priority 4	RPS 2023	Proteaceous Heath, Banksia Low Open Woodland	3 (3)	0	3 (3)
				Outback Ecology 2014	Proteaceous Heath	17 (50)	4 (6)	13 (44)
Subtotal of priority flora species records						**630 (1361)**	**38 (or 6%) (70 or 5%)**	**593 (or 94%) (1,291 or 95%)**
Other significant flora								
Thomasia cognata				RPS 2023	Proteaceous Heath	1 (1)	0 (or 0%)	1 (or 100%) (1 or 100%)

Note: Where the number of individuals were unknown, it was assumed that the number of individuals matched the number of records.

4.3 Significant fauna and fauna habitat

The project has been extensively investigated through historical fauna surveys, which have informed the preparation of this clearing permit application, as listed in Table 8. The fauna survey extents across the project are illustrated in Figures A and A-1 (Attachment 7 Figures A to F_2023).

Key habitat types that occur within the proposed clearing area include (RPS 2010[13] and Outback Ecology 2014):

- Open pasture / cultivation area, often with scattered trees
- Remnant heathland vegetation
- Woodland remnants / elements
- Areas where various combinations of heathland and/ or woodland are associated with areas dominated by open pasture / cultivation habitats
- Aerial habitats above land for avifauna.

The key habitat types are corroborated by the vegetation types and open pasture recorded during the project's most recent flora and vegetation survey (RPS 2023).

Table 8: Fauna survey reports

Survey report	Survey extent (ha)	Description of survey	Attachment name
Waddi Wind Farm Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey (Outback Ecology 2014)	97.7	Undertook a black cockatoo habitat assessment within a previous design of the overhead transmission line alignment extending west of the Wind Farm to the Cataby substation and alternative substation options	Attachment 14 Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey_2014
Fauna Assessment Waddi Wind Farm (RPS 2014)	12,962.1	• Undertook a study of fauna species likely to be present in the project and the likely impacts of the proposed development, informed by previous flora and vegetation and fauna surveys. • Undertook a site inspection in 2013 to support a revision of the data from the 2008 survey and to inspect any areas that fall outside the original footprint of the proposed development. • Included the Avifauna Assessment Proposed Waddi Wind Farm Development (RPS 2010) as Appendix 3, which involved: – A site survey (12 and 13 November 2008) and a second site visit (27 November 2013) for a Level 1 reconnaissance fauna survey – A bat survey over two separate periods (between October and November 2008 and in May 2009) – A targeted avifauna field surveys over three separate periods (29 October–7 November 2008, 18–26 November 2008 and 15–16 January 2009)	Attachment 20 Fauna Assessment_2014
Waddi Wind Farm project – Cataby Supplementary Flora, Vegetation and Fauna Survey (*ecologia* 2016)	13.6	Undertook a black cockatoo habitat assessment within the additional areas of a previous design of the overhead transmission line alignment not covered by Outback Ecology (2014).	Attachment 15 Supplementary Flora, Vegetation and Fauna Survey_2016

[13] RPS. 2010. Avifauna Assessment Proposed Waddi Wind Farm Development. Report prepared for Waddi Wind Farm Pty Ltd.

Survey report	Survey extent (ha)	Description of survey	Attachment name
Black-Cockatoo habitat assessment for the Waddi Wind Farm transmission line alignment and the nominated areas in the adjacent farmland (Terrestrial Ecosystems 2022)[14]	1,450.69	Undertook a black cockatoo habitat assessment over two periods (14 and 15 October 2021 and 28 October 2022) within the wind farm and transmission line.	Attachment 21 Black-Cockatoo habitat assessment_2022

4.3.1 Conservation significant fauna species under the EPBC Act

The search of the DCCEEW's online Protected Matters Search Tool (PMST) (DCCEEW 2023b)[15] was undertaken in July 2023 inclusive of the project and a 20 km buffer. This was to identify any Threatened or Migratory fauna species or suitable habitat for Threatened or Migratory fauna species that have not been considered in previous fauna survey reports, the previous 2018 EPBC Act referral (EPBC 2018/8352) or were not listed under the EPBC Act at the time. The majority of these species are also listed as Threatened or Migratory under the BC Act.

An assessment of the likelihood of occurrence for fauna species protected under the EPBC Act (and BC Act) in the project was informed by the 2023 PMST, findings from the project's flora and vegetation and fauna surveys, findings from the Yandin Wind Farm's avifauna assessment (*ecologia* 2017)[16], and records from DBCA's threatened, specially protected and priority fauna database, including black cockatoo breeding and roosting datasets, within a 25 km radius from the project (DBCA 2023b)[17]. The likelihood of occurrence assessment for fauna species protected under the EPBC Act (and BC Act) is provided in Attachment 17 Key flora and fauna findings_2010–2023.

Most of the Threatened and Migratory fauna species were assessed as unlikely to occur within the project, whereas the Threatened Carnaby's black cockatoo (*Zanda latirostris*) is likely to occur and the Threatened chuditch (*Dasyurus geoffroii*) and Migratory fork-tailed swift (*Apus pacificus*) may possibly occur within the project. A significance of impacts assessment was undertaken for these three species, which concluded that the proposed clearing was likely to have a significant impact on habitat critical for Carnaby's black cockatoo (Attachment 9 Significance of impacts assessment_2023). Carnaby's black cockatoo potential habitat proposed to be cleared is detailed in Section 4.3.3. Impacts from proposed clearing of native vegetation on the chuditch and fork-tailed swift were considered unlikely to have a significant impact upon the species.

4.3.2 Conservation significant fauna species under the BC Act and DBCA listed priority fauna species

The search of the DBCA's threatened, specially protected and priority fauna database, including black cockatoo breeding and roosting datasets, was undertaken in August 2023 within a 25 km radius from the project (DBCA 2023b). An assessment of the likelihood of occurrence for fauna species protected under the BC Act (but not under the EPBC Act which is already considered in Section 4.3.1) and DBCA listed priority fauna species in the project was informed by the database results, findings from the project's flora and

[14] Terrestrial Ecosystems. 2022. Black-Cockatoo habitat assessment for the Waddi Wind Farm transmission line alignment and the nominated areas in the adjacent farmland. Report prepared for RPS AAP Consulting.

[15] Department of Climate Change, Energy, the Environment and Water. 2023b. Protected Matters Search Tool. https://pmst.awe.gov.au/#/map?lng=115.64346313476564&lat=-30.666561255870946&zoom=11&baseLayers=Imagery,ImageryLabels. Accessed 25 July 2023.

[16] Ecologia. 2017. Wind Prospect Pty Ltd Yandin Wind Farm–Flora, Vegetation and Avifauna Assessment. Unpublished report prepared for Wind Prospect. https://biocollect.ala.org.au/ibsa/project/index/0d7c9380-5131-4a5d-aac4-bdd6ce423bd1. Accessed on 15 August 2023.

[17] Department of Biodiversity, Conservation and Attractions. 2023. Threatened and Priority Fauna Database Search within the vicinity of Dandaragan as defined by the shapefile provided accessed on the 15 August 2023. Prepared by the Species and Communities Program for M. McCormack of RPS AAP Consulting Pty Ltd to inform the environmental setting in the project's environmental approval submissions.

vegetation and fauna surveys and findings from the Yandin Wind Farm's avifauna assessment (*ecologia* 2017). The likelihood of occurrence for fauna species protected under the BC Act and DBCA listed priority fauna species from the proposed clearing was assessed in Table 9, which found:

- One Priority 1, two Priority 3 and two Priority 4 fauna species were likely to occur.
- One Other Specially Protected and one Priority fauna species could possibly occur.
- One Conservation Dependent and one Priority 4 fauna species were unlikely to occur.

The assessment of likelihood of significant impact to these species concluded that the proposed clearing is unlikely to significantly impact the Specially Protected under the BC Act and DBCA listed priority fauna species.

Most of the project's infrastructure has been located within cleared farm land to avoid the removal or fragmentation of fauna habitat. The minor extent of native vegetation clearing proposed occurs in non-contiguous discrete patches to minimise potential impacts to fauna species from habitat loss and fragmentation.

Given the implementation of the avoidance and mitigation measures (Section 1) and the minor extent of proposed clearing (i.e. 5.5 ha), it is considered that that the overall general risk to the conservation significant and common fauna species is low.

Table 9: Specially Protected under the BC Act and DBCA listed priority fauna species and likelihood of occurrence within the project and significant impact

Species	Conservation code BC Act	 DBCA priority level	Likelihood of occurrence within the project	Likelihood of significant impact
Birds				
Falco peregrinus (peregrine falcon)	Specially Protected - Other Specially Protected	-	**Possible** The peregrine falcon is widespread in a range of environments across Australia but is often associated with cliff-lines or scattered tall trees that provide it with nest sites (RPS 2014). They prefer habitat over wooded and forested lands, open country and wetlands of tropical and temperate areas (RPS 2010) and require abundant prey. Peregrine falcons will pursue flying birds and they are able to hunt at high speeds and from great heights (Australian Museum 2019)[18]. It is essentially an aerial species and hunts above canopy vegetation where its favoured prey is medium sized birds such as Galah and Rock Doves (RPS 2010). There are two records of the peregrine falcon in DBCA's database within a 25 km radius of the project (DBCA 2023b). The records were located in the nearby Minyulo Brook approximately 700 m south-east of the project and to the south-east of the project. The peregrine falcon was observed to be scarce during field investigations with only a single bird being recorded off site within the vicinity and wider locality of the project (RPS 2010). The project is situated within large areas of agricultural land used for cropping, as such seasonal influxes of prey species (mediums sized cockatoos such as galahs and corellas) may attract predatory species (RPS 2014). Therefore, the peregrine falcon may occur within the project on at least an intermittent basis.	**Unlikely** The proposed clearing area contains Banksia Low Open Woodland, *Melaleuca* Low Open Woodland, *Eucalyptus todtiana* Woodland, and *Corymbia calophylla* Woodland (Table 6), over which the peregrine falcon may hunt for prey. However, this species is unlikely to rely on the aerial habitats over the proposed clearing area of 5.5 ha considering the range of habitats that the peregrine falcon can occupy and that they may only visit the project on an at least an intermittent basis.
Oxyura australis (blue-billed duck)	-	Priority 4	**Unlikely** The blue-billed duck is wholly aquatic and is rarely found on land (Australian Museum 2022)[19]. They are found in terrestrial wetlands, saline or freshwater, and nest in sedges, rushes, paperbark and lignum (BirdLife International 2023)[20]. There are seven records of the blue-billed duck in DBCA's database within a 25 km radius of the project (DBCA 2023b). All records were associated with water sources, with three records near farm lakes (over 9 km east of the project), three records near Guraga Lake and a lake to its north-east (over 19 km south of the project) and one record near wetlands (over 13 km south-west of the project) (Landgate 2023)[21]. Approximately 80 blue-billed ducks have been observed at Namming Lake, located to the south of Guraga Lake (RPS 2010). The project is intersected by an ephemeral watercourse, which does not represent suitable habitat for the blue-billed duck. There are no permanent water bodies within the project. This species is highly unlikely to occur within the project due to the absence of suitable habitat within the project.	**Unlikely** The blue-billed duck is unlikely to be significantly impacted by the proposed clearing of 5.5 ha as their preferred habitat (i.e. permanent water bodies) is not present within the project.
Platycercus icterotis xanthogenys (western rosella (inland))	-	Priority 4	**Likely** The western rosella (inland) occupies eucalypt and sheoak woodlands and scrubs, especially those containing wandoo (*Eucalyptus wandoo*), flooded gum (*Eucalyptus rudis*), salmon gum (*Eucalyptus salmonophloia*), tall mallee and rock sheoak (*Allocasuarina huegeliana*) (DEC 2009)[22]. The western rosella (inland) is mainly sedentary but can move towards the coast in summer (RPS 2014). It is generally found in forested areas but also feeds on grassy clearings and pasture. There are two historical records of the western rosella (inland) in DBCA's database within a 25 km radius of the project (DBCA 2023b). The records are over 14 km to the east of the project (with an accuracy of 10 km to 50 km). This species has not been recorded during the avian surveys conducted within the project, the Yandin Wind Farm, representative habitat areas in the wider locality or wetland habitats in the wider locality (RPS 2010 and *ecologia* 2017). The project is predominantly comprised of agricultural land used cropping, as such the western rosella (inland) could potentially use these areas for foraging. They could also use areas of Proteaceous scrub heath of the Kwongan and *Eucalyptus todtiana* Woodland vegetation mapped within the Indicative Disturbance area (Table 6). However this does not reflect the floristic composition of their favoured woodlands and scrubs habitat as no wandoo, flooded gum, salmon gum and rock sheoak have been recorded within the Indicative Disturbance area (DEC 2009) (Attachment 22 Native vegetation and plantation descriptions_2010–2023).	**Unlikely** The western rosella (inland) is unlikely to be significantly impacted by the proposed clearing of 1.1 ha of Proteaceous scrub heath of the Kwongan and *Eucalyptus todtiana* Woodland as it does not reflect their preferred habitat and they are unlikely to be dependent on this minor extent of native vegetation. The proposed disturbance of 128.3 ha of cleared areas which contains pasture and grassy clearings is unlikely to potentially impact the western rosella (inland) foraging resources as the project area (10,490.8 ha) and surrounding area is predominantly comprised of agricultural land uses. As such, the western corella (inland) is unlikely to be dependent on this minor extent of cleared areas.

[18] Australian Museum. 2019. Peregrine Falcon. https://australian.museum/learn/animals/birds/peregrine-falcon/#:~:text=Habitat,nesting%20on%20high%20city%20buildings. Accessed on 1 September 2023.

[19] Australian Museum. 2022. Blue-billed Duck. https://australian.museum/learn/animals/birds/blue-billed-duck/#:~:text=The%20Blue%2Dbilled%20Duck%20is%20endemic%20to%20Australia%2C%20being%20found,west%20parts%20of%20the%20continent. Accessed on 1 September 2023.

[20] BirdLife International. 2023. Blue-billed Duck *Oxyura australis*. http://datazone.birdlife.org/species/factsheet/blue-billed-duck-oxyura-australis/text. Accessed on 1 September 2023.

[21] Landgate. 2023. Locate V5. https://maps.slip.wa.gov.au/landgate/locate/. Accessed 4 July 2023.

[22] Department of Environment and Conservation. 2009. Fauna Notes No. 24 Western rosella. https://library.dbca.wa.gov.au/static/Journals/082168/082168-24.pdf. Accessed 1 September 2023.

Species	Conservation code BC Act	DBCA priority level	Likelihood of occurrence within the project	Likelihood of significant impact
Mammals				
Phascogale tapoatafa wambenger (south-western brush-tailed phascogale)	Specially Protected - Conservation Dependent	-	**Unlikely** The south-western brush-tailed phascogale is found mainly in dry sclerophyll woodland where trees are mature and provide hollows (RPS 2014). Records of this species are less common in high rainfall areas (DEC 2012a)[23]. The south-western brush-tailed phascogale forage almost exclusively from the tree canopy and they spend most of their time in trees in woodlands (DEC 2012a and RPS 2014). The project is located in the north-western extent of the Wheatbelt region, which is a significant distance from where the south-western brush-tailed phascogale's distribution is known to occur in the South West region between Perth and Albany (DEC 2012a). This is reflected in the scarcity of occurrence records of this species in the project's wider locality. The nearest south-western brush-tailed phascogale records proximate to the project includes subfossil material located approximately 20 km south south-west, one individual recorded in 1987 located approximately 70 km to the south east (DBCA 2023b) (Atlas of Living Australia 2023)[24]. The species is more frequently recorded between Perth and Albany, over 150 km from the project. Native vegetation types mapped within the project's Indicative Disturbance area include Banksia Low Open Woodland, *Melaleuca* Low Open Woodland, *Eucalyptus todtiana* Woodland, and *Corymbia calophylla* Woodland (Table 6). Eleven mature Marri (*Corymbia calophylla)* trees with diameter at breast heights (DBH) of more than 50 cm and with hollows were recorded within the *Corymbia calophylla* Woodland vegetation (Terrestrial Ecosystems 2022). This vegetation is unlikely provide suitable habitat for the south-western brush-tailed phascogale as it is in Degraded condition and there is existing competition for suitable nesting hollows from corellas and bees (Terrestrial Ecosystems 2022). None of the 677 planted non-endemic Eucalyptus sp. trees inspected within the project had a DBH of greater than 50 cm, as such they are less likely to provide suitable hollows for the south-western brush-tailed phascogale in the near future. Native vegetation within the project is fragmented by areas cleared for agricultural land uses. The fragmented nature of native vegetation in the project and its surroundings would make it difficult for the south-western brush-tailed phascogale to persist in the project. The south-western brush-tailed phascogale is unlikely to occur within the project due to its known areas of distribution in Western Australia and the minimal number of mature trees containing hollows and restricted availability of these hollows by any south-western brush-tailed phascogale if present due to existing pressures from existing hollow competitors.	**Unlikely** The south-western brush-tailed phascogale is unlikely to be significantly impacted by the proposed clearing of 4.4 ha of Banksia Low Open Woodland, *Melaleuca* Low Open Woodland, *Eucalyptus todtiana* Woodland, and *Corymbia calophylla* Woodland (Table 6), as they prefer intact dry sclerophyll woodlands and are unlikely to disperse over expanses of unsuitable habitat (i.e. cleared areas). Furthermore, majority of the vegetation types proposed to be cleared are dominated by non-hollow forming species (i.e. *Banksia* sp., *Eucalyptus todtiana, Xanthorrhoea drummondii*), and south-western brush-tailed phascogale requires mature trees that provide hollows in their habitats.
Hydromys chrysogaster (water rat)	-	Priority 4	**Possible** The water rat is found in habitats in the vicinity of permanent fresh, brackish or marine water (DEC 2012b)[25]. In the south west of Western Australia, they prefer riparian vegetation, a degree of habitat complexity and better water quality. Important areas of refuge include woody debris, rock ledges and wetland islands. This species was not recorded in DBCA's database within a 25 km radius of the project (DBCA 2023b). The water rat may disperse along the Mullering Brook when sufficient water is present, but they are unlikely to be a permanent resident (*ecologia* 2016). Native vegetation mapped within the Mullering Brook includes *Corymbia calophylla* Woodland (Table 6). This vegetation is unlikely provide suitable habitat for the water rat as it is in Degraded condition.	**Unlikely** The water rat is unlikely to be significantly impacted by the proposed clearing of 0.2 ha of *Corymbia calophylla* Woodland (Table 6) as the vegetation adjacent to the Mullering Brook is in a Degraded condition and as their preferred habitat (i.e. permanent fresh, brackish or marine water) is not present within the project.
Notamacropus irma (western brush wallaby)	-	Priority 4	**Likely** The western brush wallaby preferred habitat is open forest or woodland, and they favor open, seasonally wet flats with open scrubby thickets and low grasses (DEC 2012c)[26]. They can also be found in areas of mallee and heathland and are uncommonly found in karri forest. There are five records of the western brush wallaby in DBCA's database within a 25 km radius of the project (DBCA 2023b). All records were within stands of native vegetation, with two records immediately west of the project along Brand Highway and the Conservation Park (Crown Reserve 41986), two records near the Wongonderrah Nature Reserve and the Badgingarra National Park located approximately 12 km west and north of the project and one record near native vegetation located over 23 km to the south (with an accuracy of 50 km) (Landgate 2023). The western brush wallaby may occur as a resident or forage in the Banskia Woodland and Proteaceous scrub heath of the Kwongan mapped within the project, as these vegetation types contain a common food item for the species, Christmas tree (*Nuytsia floribunda*) (DEC 2012c and RPS 2014). The various patches of native vegetation across the project could be used by western brush wallaby as movement corridors between significant stands of habitat.	**Unlikely** The western brush wallaby is unlikely to be significantly impacted by the proposed clearing of 5.5 ha of Banksia Low Open Woodland, *Melaleuca* Low Open Woodland, *Eucalyptus todtiana* Woodland, and *Corymbia calophylla* Woodland (Table 6) as they are able to occupy a range of different habitat types (i.e. open forest, woodland, open flats, low grasses). Therefore, they are unlikely to be dependent on this minor extent of native vegetation. The proposed disturbance of 128.3 ha of cleared areas which contains grassy clearings is unlikely to potentially impact the western brush wallaby available habitats as the project area (10,490.8 ha) and surrounding area is predominantly comprised of agricultural land uses. As such, the western brush wallaby is unlikely to be dependent on this minor extent of cleared areas.

[23] Department of Environment and Conservation. 2012a. Fauna profiles Brush-tailed Phascogale. https://library.dbca.wa.gov.au/static/FullTextFiles/925273.pdf. Accessed 1 September 2023.

[24] Atlas of Living Australia. 2023. South-Western Brush-Tailed Phascogale. https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/05cba699-3105-476e-9936-1ab246427dfc. Accessed 1 September 2023.

[25] Department of Environment and Conservation. 2012b. Fauna profiles Water Rat (Rakali). https://library.dbca.wa.gov.au/static/FullTextFiles/925280.pdf. Accessed 1 September 2023.

[26] Department of Environment and Conservation. 2012c. Fauna profiles Western Brush Wallaby. https://library.dbca.wa.gov.au/static/FullTextFiles/925291.pdf. Accessed 1 September 2023.

Species	Conservation code BC Act	Conservation code DBCA priority level	Likelihood of occurrence within the project	Likelihood of significant impact
Reptiles				
Ctenotus gemmula (Swan Coastal Plain population) (jewelled southwest ctenotus (Swan Coastal Plain population))	-	Priority 3	**Likely** The jewelled southwest ctenotus (Swan Coastal Plain population) is found in pale sandplains supporting heaths in association with Banksia or mallee woodlands (Wilson and Swan 2017)[27]. There are two records of the jewelled southwest ctenotus (Swan Coastal Plain population) in DBCA's database within a 25 km radius of the project (DBCA 2023b). Both records were associated with patches of Banksia Woodlands TEC and were found near the Cooljarloo Mine, over 5 km west of the project (with an accuracy of 3 km to 10 km) (Landgate 2023). Native vegetation mapped within the project's Indicative Disturbance area includes Banksia Low Open Woodland and Proteaceous scrub heath of the Kwongan (Table 6). This is similar to the Banksia Woodlands habitat that the DBCA records were located in (Landgate 2023). If present, the jewelled southwest ctenotus (Swan Coastal Plain population) is likely to be restricted to native vegetation on sandy soils (RPS 2014). The majority of the project has sandy soils as it is predominantly within the Lesueur Sandplain subregion, which is characterised by extensive, undulating, lateritic sandplain mantling Permian to Cretaceous strata (Desmond and Chant 2001)[28].	**Unlikely** The jewelled southwest ctenotus (Swan Coastal Plain population) is unlikely to be significantly impacted by the proposed clearing of 5.1 ha of Banksia Low Open Woodland and Proteaceous scrub heath of the Kwongan (Table 6) as greater extents of these vegetation types will be retained within and proximate to the project. This includes 83.3 ha (or 95%) of Banksia Low Open Woodland and 55.2 ha (or 98%) of Proteaceous scrub heath of the Kwongan. Furthermore, Crown Reserves 27216 and 41986 and the Badgingarra National Park are likely to comprise a much larger area of similar or better-quality habitat for this species.
Neelaps calonotos (black-striped snake)	-	Priority 3	**Likely** The black-striped snake is restricted to the sandy coastal strip near Perth from Mandurah to Cataby, where it inhabits dunes and sandplains vegetated with heaths and Eucalyptus/Banksia woodland (Wilson and Swan 2017). There are three records of the black-striped snake in DBCA's database within a 25 km radius of the project (DBCA 2023b). One record was found near the Cooljarloo Mine, over 5 km west of the project (with an accuracy of 1 km), one record was found in native vegetation near the Wongonderrah Nature Reserve located over 14 km west (with an accuracy of 3 km), and one record at Minyulo Brook located over 14 km south of the project (with an accuracy of 3 km) (Landgate 2023). Native vegetation types mapped within the project's Indicative Disturbance area include Banksia Low Open Woodland, *Eucalyptus todtiana* Woodland and Proteaceous scrub heath of the Kwongan (Table 6). If present, the black-striped snake is likely to be restricted to native vegetation on sandy soils (RPS 2014). The majority of the project has sandy soils as it is predominantly within the Lesueur Sandplain subregion, which is characterised by extensive, undulating, lateritic sandplain mantling Permian to Cretaceous strata (Desmond and Chant 2001).	**Unlikely** The black-striped snake is unlikely to be significantly impacted by the proposed clearing of 5.1 ha Banksia Low Open Woodland, *Eucalyptus todtiana* Woodland and Proteaceous scrub heath of the Kwongan (Table 6) as greater extents of these vegetation types will be retained within and proximate to the project. This includes 83.3 ha (or 95%) of Banksia Low Open Woodland, 1.7 ha (or 97%) of *Eucalyptus todtiana* Woodland and 55.2 ha (or 98%) of Proteaceous scrub heath of the Kwongan. Furthermore, Crown Reserves 27216 and 41986 and the Badgingarra National Park are likely to comprise a much larger area of similar or better-quality habitat for this species.
Invertebrates				
Bothriembryon perobesus (A bothriembryontid land snail (Moore River))	-	Priority 1	**Likely** The bothriembryontid land snail (Moore River) is found in stabilised sand dunes supporting Banksia and/or Eucalyptus woodland over heath (Bennelongia Environmental Consultants 2013; as sourced from Spectrum Ecology 2020)[29]. There is one record of the bothriembryontid land snail (Moore River) in DBCA's database within a 25 km radius of the project (DBCA 2023b). The record was found near the Cooljarloo Mine, located approximately 4.5 km south of the project (with an accuracy of 100 m) (Landgate 2023). Native vegetation types mapped within the project's Indicative Disturbance area include Banksia Low Open Woodland and Proteaceous scrub heath of the Kwongan) (Table 6). The bothriembryontid land snail (Moore River) is likely to occur due to the proximity of the DBCA record and the presence of suitable habitat with the project.	**Unlikely** The bothriembryontid land snail (Moore River) is unlikely to be significantly impacted by the proposed clearing of 5.1 ha Banksia Low Open Woodland and Proteaceous scrub heath of the Kwongan (Table 6) as greater extents of these vegetation types will be retained within and proximate to the project. This includes 83.3 ha (or 95%) of Banksia Low Open Woodland and 55.2 ha (or 98%) of Proteaceous scrub heath of the Kwongan. Furthermore, Crown Reserves 27216 and 41986 and the Badgingarra National Park are likely to comprise a much larger area of similar or better-quality habitat for this species.

[27] Wilson, S.; and Swan, G. 2017. A Complete Guide to Reptiles of Australia. 5th Edition. Sydney, NSW: New Holland Publishers.

[28] Desmond, A., and Chant, A. Geraldton Sandplain 3 (GS3 - Lesueur Sandplain subregion). https://library.dbca.wa.gov.au/static/FullTextFiles/021927.pdf. Accessed 1 September 2023.

[29] Spectrum Ecology. 2020. Atlas Project Level 1 & Targeted Fauna Assessment. Unpublished report for Image Resources.

4.3.3 Carnaby's black cockatoo habitat

Proposed clearing within the Indicative Disturbance area will result in the permanent loss of potential habitat for Carnaby's black cockatoo, as detailed in Attachment 9 Significance of impacts assessment_2023 and as summarised below:

- Potential foraging habitat
  - Approximately 5.2 ha of potential high quality foraging habitat comprised of patches of kwongan heath dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Attachment 21 Black-Cockatoo habitat assessment_2022). Terrestrial Ecosystems assessed the habitat quality using the foraging quality scoring tool across the majority of these areas and determined that it was of high foraging quality habitat for Carnaby's black cockatoo (rated 8 out of 10) (Department of Agriculture, Water and the Environment [DAWE] 2022)[30].
  - Twenty-one planted pine trees and 11 planted trees, which represents approximately 0.1 ha of high quality and approximately 0.2 ha of low quality, if any, foraging habitat for Carnaby's black cockatoo respectively (Attachment 21 Black-Cockatoo habitat assessment_2022).
- Potential breeding habitat
  - Three potential Carnaby's black cockatoo nesting trees, marri (*Corymbia calophylla*) with DBHs greater than 50 cm, but no observed hollows, identified near Mullering Brook (Attachment 21 Black-Cockatoo habitat assessment_2022). The location of the three potential Carnaby's black cockatoo nesting trees is shown in Figure D-13 (Attachment 7 Figures A to F).
  - No evidence of Carnaby's black cockatoo breeding was observed in or near the project (Attachment 21 Black-Cockatoo habitat assessment_2022). However, Carnaby's black cockatoo used to breed every year in the very old trees along a creek line in a local farmer's property but they have been displaced by the little corella (*Cacatua sanguinea*). This property is located in the northern extent of the project and it is intersected by Mullering Brook, which is approximately 1.7 km north of the Indicative Disturbance area. A large number of breeding little corellas were observed within the marri trees recorded in Mullering Brook within and proximate to the Indicative Disturbance area (Attachment 21 Black-Cockatoo habitat assessment_2022).
- Potential roosting habitat
  - Thirty-five potential roosting trees, comprised of 11 planted trees (non-native eucalypts), 21 pine trees and three marri trees. This is shown in Figure D-2, Figure D-3, Figure D-7 and Figure D-13 (Attachment 7 Figures A to F). These trees are at least 8 m tall and are surrounded by farm dams, wetlands and lakes, which may provide permanent sources of water for roosting Carnaby's black cockatoo (Attachment 23 Review of unsurveyed planted trees_2023, Attachment 21 Black-Cockatoo habitat assessment_2022).
  - However, no known night roosting sites have been identified within the project's Indicative Disturbance area (Landgate 2023). There are known roosting sites recorded during the 2019 Great Cocky Count, located approximately 23 km to the west-north-west and approximately 27 km to the east, as shown in the DBCA's Black Cockatoo Roosting Sites – Buffered dataset (Landgate 2023 and Peck, Barrett and Williams 2019[31]).

[30] Department of Agriculture, Water and the Environment. 2022. Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (*Zanda latirostris*), Baudin's Cockatoo (*Zanda baudinii*) and the Forest Red-tailed Black-cockatoo (*Calyptorhynchus banksii naso*). https://www.dcceew.gov.au/sites/default/files/documents/referral-guideline-3-wa-threatened-black-cockatoo-species-2022.pdf. Accessed 4 July 2023.

[31] A. Peck, G. Barrett and M. Williams. 2019. The 2019 Great Cocky Count: a community-based survey for Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*), Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*) and Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*). BirdLife Australia, Floreat, Western Australia.

- RPS (2014)[32] noted that there was a large roost (at least 100 birds) for Carnaby's black cockatoo located in Mullering Brook, approximately 1.2 km south of the project's Indicative Disturbance area around the Cataby substation (Attachment 20 Fauna Assessment_2014). DAWE (2022) defines the vegetation within a 500 m radius of one or more known night roosting trees as part of the night roosting site. The native vegetation within the Indicative Disturbance area is not considered part of this night roosting site, as it is separated by a distance of approximately 1.2 km at its closest point.

Direct impacts from clearing suitable Carnaby's black cockatoo habitat were considered to have a significant impact, as they were found to be at variance with two of the five referral thresholds of the EPBC Act referral guideline for three WA threatened black cockatoo species (DAWE 2022) and one of the nine significant impact criteria of the EPBC Act significant impact guidelines 1.1 (Department of the Environment, Water, Heritage and the Arts [DEWHA] 2013)[33] (Attachment 9 Significance of impacts assessment_2023).

To address potential significant impacts to Carnaby's black cockatoo from the implementation of the project, an EPBC Act referral was prepared and lodged in August 2023 and a referral number has been issued to the Proponent, EPBC 2023/09639.

To avoid disrupting the breeding cycle of Carnaby's black cockatoo, the Proponent will undertake the following mitigation measures:

- Undertaking pre-clearing surveys within 100 m of the native vegetation clearing areas by a suitably qualified fauna specialist
- Should breeding Carnaby's black cockatoo be found, clearing will not commence within 100 m of the breeding tree until breeding in the area has finished. Carnaby's black cockatoo breeding season in the Swan Coastal Plain and Wheatbelt regions occur from July to December (DAWE 2022)

4.4 Assessment against the 10 Clearing Principles

Table 10 provides an assessment of the proposed clearing activities against the "10 Clearing Principles" as outlined in Schedule 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 to determine whether the proposed clearing is at variance to the Principles.

The project's current design has been underpinned by the findings of the three flora and vegetation surveys (i.e. Outback Ecology 2014, *ecologia* Environment 2016 and RPS 2023). Specifically, this has resulted in most of the Wind Farm and Transmission Line infrastructure (i.e. wind turbines, access tracks and onsite substation) being located within cleared farm land to avoid the key environmental values including Threatened flora species and riparian vegetation and minimising impacts to the Banksia Woodlands TEC and PEC and DBCA listed Priority flora species.

[32] RPS. 2014. Fauna Assessment Project. Report prepared for Project Pty Ltd.

[33] Department of the Environment, Water, Heritage and the Arts. 2013. Significant Impact Guidelines 1.1 - Matters of National Environmental Significance. https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf. Accessed 5 July 2023.

Table 10: Assessment of the clearing area against the 10 Clearing Principles

Principle	Assessment	Outcome
Native vegetation should not be cleared if it comprises a high level of biological diversity	Up to 5.5 ha of native vegetation will require clearing to construct the project. Approximately 5.0 ha (or 91%) of native vegetation is in Good or better condition with high species richness, whilst 0.5 ha (or 9%) of native vegetation is in Completely Degraded to Degraded condition. Consequently, most of the native vegetation within the clearing area is likely to represent high biodiversity. Furthermore, the Threatened Species Scientific Committee for the Australia Government has identified a number of areas as Biodiversity Hotspots for priority action (Department of Environment Regulation [DER] 2014[34]). The Geraldton Sandplain region, which includes the clearing area, has been included as the Mount Leseur-Eneabba hot spot. Biodiversity values within the clearing area are likely to be similar to areas within Crown Reserves 27216 and 41986, which are connected to the project by continuous vegetation as well as the Badgingarra National Park. The proposal would require clearing up to 4.8 ha of native vegetation with high biodiversity, including 1.8 ha and 2.3 ha within Crown Reserves 27216 and 41986. Up to 38 records (or 70 individuals) of four Priority 4 flora species will require clearing to construct the project (Table 7), including *Banksia chamaephyton* (one record or one individual), *Conostephium magnum* (26 records or 42 individuals), *Hypolaena robusta* (seven records or 21 individuals) and *Stylidium aeonioides* (four records or six individuals). The clearing area is not considered to support the whole, or part of, significant populations of these four Priority 4 flora species as they have been identified in the local area and the majority of the priority flora records will be retained within and proximate to the project: • Two records (or 67%) (20 individuals or 95%) of *Banksia chamaephyton* are proposed to be retained. This species has been identified within the Crown Reserve 27216, which is comprised of over 1,500 ha of native vegetation which are likely to contain similar or better biodiversity values to the clearing area. • Two hundred and ninety-nine records (or 94%) (524 individuals or 93%) of *Conostephium magnum* are proposed to be retained. Due to the high number of records for this species and as it was recorded in the three previous flora and vegetation surveys for the project, it is likely to be locally abundant (Outback Ecology 2014, *ecologia* 2016 and RPS 2023). This species has been identified within the Crown Reserves 27216 and 41986, which is comprised of over 3,500 ha of native vegetation which are likely to contain similar or better biodiversity values to the clearing area. • Twenty-one records (or 75%) (67 individuals or 76%) of *Hypolaena robusta* are proposed to be retained. This species has been identified within the Crown Reserve 41986, which is comprised of over 2,000 ha of native vegetation which are likely to contain similar or better biodiversity values to the clearing area. • Thirteen records (or 80%) (44 individuals or 88%) of *Stylidium aeonioides* are proposed to be retained. This species has been identified within the Crown Reserve 27216, which is comprised of over 1,500 ha of native vegetation which are likely to contain similar or better biodiversity values to the clearing area. Of the DBCA listed priority flora species identified within and proximate to the project, the project will avoid impacts to all records of 15 priority flora species (100% of records and 100% individuals) and will retain the majority of records for the four Priority flora species impacted (92% of records and 92% of individuals). The proposed clearing represents a small portion (approximately 0.1%) of each Crown Reserve, which are likely to contain similar or better biodiversity values to the clearing area. Although an extent of high biodiversity vegetation is proposed be cleared (approximately 4.8 ha, which includes 4.1 ha within the Crown Reserves), it is considered unlikely that local biological diversity values within the project would be significantly diminished. Up to 0.3 ha of the Banksia Woodlands TEC, which is recognised as a Priority 3 PEC by the DBCA, is proposed to be cleared. Within a 50 km radius from a central point of the project, there is over 35,000 ha of Banksia Woodlands TEC patches recorded within the DBCA's Threatened and Priority ecological communities database (RPS 2023). A portion of these TECs are protected and managed by the DBCA in three Nature Reserves (1,753 ha or 5%), two of which are Class 'A' reserves. The proposed clearing of 0.3 ha is unlikely to adversely affect the patch of Banksia Woodlands TEC surrounding the clearing area considering its minor extent and that it is aligned with the existing access tracks. Furthermore, the extent proposed to be cleared represents a very minor portion (0.3 ha or 0.001%) of the more than 35,000 ha of Banksia Woodlands TEC patches present within a 50 km radius from a central point of the project. As such, the 0.3 ha area is not considered to comprise the whole, or part of, a significant occurrence of a PEC. Five DBCA listed priority fauna species were found as likely to occur at the project (Table 9). However, the assessment of likelihood of significant impact to these species concluded that the proposed clearing is unlikely to significantly impact these species.	The project may be at variance with the principle
Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous Western Australia	A likelihood of occurrence assessment of fauna species protected under the EPBC Act and BC Act and DBCA listed priority species was undertaken (Attachment 17 Key flora and fauna findings_2010–2023 and Table 9), which found that the following species are likely to or may occur in the project: • Likely – Carnaby's black cockatoo (*Zanda latirostris*), listed as Endangered under the EPBC Act and BC Act – Western rosella (inland) (*Platycercus icterotis xanthogenys*), a Priority 4 DBCA-listed species. – Western brush wallaby (*Notamacropus irma*), a Priority 4 DBCA-listed species – Jewelled southwest ctenotus (Swan Coastal Plain population) (*Ctenotus gemmula* (Swan Coastal Plain population)), a Priority 3 DBCA-listed species – Black-striped snake (*Neelaps calonotos*), a Priority 3 DBCA-listed species – *Bothriembryon perobesus* (A bothriembryontid land snail (Moore River)) Priority 1 • May possibly – Chuditch (*Dasyurus geoffroii*), listed as Vulnerable under the EP Act and EPBC Act – Fork-tailed swift (*Apus pacificus*), listed as Migratory under the EPBC Act – Peregrine falcon (*Falco peregrinus*) listed as Species otherwise in need of special protection (other specially protected) under the BC Act – Water-rat (*Hydromys chrysogaster*), a Priority 4 DBCA-listed species. Out of these fauna species, the proposed clearing is likely to have a significant impact on habitat critical for Carnaby's black cockatoo. Potential foraging, breeding and roosting habitat for Carnaby's black cockatoo has been identified within the clearing area. This habitat represents a vegetation remnant associated with the Crown Reserves 27216 and 41986 as well as the Badgingarra National Park. Direct impacts from clearing suitable Carnaby's black cockatoo habitat were considered to have a significant impact, as they were found to be at variance with two of the five referral thresholds of the EPBC Act referral guideline for three WA threatened black cockatoo species (DAWE 2022) and one of the nine significant impact criteria of the EPBC Act significant impact guidelines 1.1 (DEWHA 2013) (Attachment 9 Significance of impacts assessment_2023). The extent of habitat proposed to be cleared is relatively minor compared to the extent to be retained within and proximate to the project: • Approximately 5.2 ha of native vegetation (or 6%) and 21 planted pine trees (or 24%) identified as high-quality foraging habitat, and 11 planted trees (non-native eucalypts) (or 2%) identified as low-quality foraging habitat, if any, for Carnaby's black cockatoo • Three (or 2%) potential black cockatoo nesting trees (marri) • Thirty-five (or 4%) potential roosting trees, comprised of 11 planted trees (non-native eucalypts), 21 pine trees and three marri trees. The extent of foraging habitat, potential breeding habitat and potential roosting habitat critical for Carnaby's black cockatoo to be retained within and proximate to the project is summarised as follows: • Approximately 74.7 ha (or 94%) native vegetation and 68 pine trees (or 76%) identified as high-quality foraging habitat and 666 (or 98%) planted trees identified as low-quality foraging habitat, if any, for Carnaby's black cockatoo • One hundred and twenty-four (or 98%) potential black cockatoo nesting trees (63 planted non-endemic Eucalyptus sp. and 61 marri) will be retained, inclusive of 11 marri trees with hollows of suitable dimensions for breeding Carnaby's black cockatoo • Nine hundred and forty-two (or 96%) potential roosting trees, comprised of 665 planted trees (mostly non-native eucalypts), 144 coastal blackbutt (*Eucalyptus todtiana*), 68 pine trees, 62 marri trees, two native Eucalypt sp. and one dead tree. There are large areas of remnant vegetation within 12 km of the project that are likely to contain high quality foraging, breeding, and roosting habitat for Carnaby's black cockatoo, in closer proximity to lakes, wetlands and watercourses, as shown in Figure E (Attachment 7 Figures A to F_2023). This includes areas protected and managed by the DBCA, totalling 9,913 ha of native vegetation and described in Attachment 9 Significance of impacts assessment_2023.	The project is at variance with the principle.

34 Department of Environment Regulation. 2014. A Guide to the Assessment of Applications to Clear Native Vegetation – Under Part V Division 2 of the *Environmental Protection Act 1986*.

<table>
<tr><th>Principle</th><th>Assessment</th><th>Outcome</th></tr>
<tr><td>Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.</td><td>Three Threatened flora species (21 records) were identified during the Reconnaissance flora and vegetation assessment (RPS 2023), as shown in Table 7. The locations of the Threatened flora species records are shown in Figures B-2, B-3, B-4, B-9 and B-15 (Attachment 7 Figures A to F). One of the Threatened flora species, star sun-orchid (Thelymitra stellata), has 12 records which are less than 50 m from the proposed clearing area, with separation distances from the proposed clearing area ranges from 4.6 m to 18 m. Indirect impacts to star sun-orchids from disturbance from construction activities were unlikely to be at variance with any of the nine significant impact criteria of the EPBC Act significant impact guidelines 1.1 (DEWHA 2013) (Attachment 9 Significance of impacts assessment_2023).
The remaining records of the star sun-orchid and all records of two other Threatened flora species are located more than 50 m away from the proposed clearing area.
The project was designed to avoid impacts to all of the Threatened flora species, as such 21 records (or 100%) of Threatened flora species are proposed to be retained within and proximate to the project. To reduce potential indirect impacts to the nearby star sun-orchids, avoidance and mitigation measures will be implemented (see Section 5.2). Approximately 55.2 ha (or 98%) of Proteaceous Heath vegetation identified within and proximate to the project will be retained, which is the vegetation type that the majority of Threatened flora species were identified within. As such, the proposed clearing area is not considered necessary for the continued existence of rare flora.</td><td>The project is unlikely to be at variance with the principle.</td></tr>
<tr><td>Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community</td><td>Up to 0.3 ha of the Banksia Woodlands TEC listed under the EPBC Act and recognised as a Priority 3 PEC by the DBCA is proposed to be cleared. Within a 50 km radius from a central point of the project, there is over 35,000 ha of Banksia Woodlands TEC patches recorded within the DBCA's Threatened and Priority ecological communities database (RPS 2023). A portion of these TECs are protected and managed by the DBCA in three Nature Reserves (1,753 ha or 5%), two of which are Class 'A' reserves.
As the proposed clearing area of 0.3 ha is part of a TEC, it is at variance with this Clearing Principle.
The proposed clearing of 0.3 ha is unlikely to adversely affect the patch of Banksia Woodlands TEC surrounding the clearing area considering its minor extent and that it is aligned with the existing access tracks. Furthermore, the extent proposed to be cleared represents a very minor portion (0.3 ha or 0.001%) of the more than 35,000 ha of Banksia Woodlands TEC patches present within a 50 km radius from a central point of the project.</td><td>The project is at variance with the principle.</td></tr>
<tr><td>Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared</td><td>Vegetation within the proposed clearing area was broadly mapped by Beard et al. (2013[35]) at a scale of 1:1,000,000. Three vegetation associations were mapped within the clearing area.
• Vegetation Association 7 and Vegetation Type 4:
Woodland: Wheatbelt—York gum (Eucalyptus loxophleba), salmon gum (E. salmonophloia), etc. Goldfields—gimlet (E. salubris), redwood (E. transcontinentalis), etc. Riverine—rivergum (E. camaldulensis). Tropical—Darwin stringybark (E. tetrodonta) and woolybutt (E. miniata)
• Vegetation Association 1030 and Vegetation Type 9:
Low woodland or open low woodland: Other wattle (Acacia spp.), banksia (Banksia spp.), peppermint (Agonis flexuosa), cypress pine (Callitris spp.), casuarina (Allocasuarina spp.), York gum (Eucalyptus loxophleba)
• Vegetation Association 1031 and Vegetation type 108:
Scrub-heath / heath vegetation mosaic.
The National Objectives and Targets for Biodiversity Conservation 2001-2005 and the EPA recognises that 30% or more of the pre-clearing extent of each ecological community is needed to adequately protect Australia's biodiversity (DER 2014).
Vegetation proposed for clearing includes one vegetation association below this 30% threshold at the statewide level. Specifically, Beard Vegetation Association 7 currently retains 12.73% of its pre-European extent. With less than 10% of its original extent, Beard Vegetation Association 7 is regarded by the EPA to represent an 'endangered' level. Beard Vegetation Associations 1030 and 1031 currently retains 63.99% and 32.90% of their pre-European extents, meaning that they are currently above the 30% threshold.
To minimise requirements for clearing native vegetation, the project has been designed to ensure future infrastructure would be positioned within previously disturbed areas, wherever practicable. Consequently, only minor clearing of native vegetation is required. Total areas of the vegetation associations that require clearing are summarised in the table below. Although vegetation with conservation value will be cleared, given the small amount of clearing required, the reduction in availability of Beard Vegetation Association 7 is considered to be insignificant.
Based on the vegetation types mapped by the three flora and vegetation surveys, the vegetation proposed to be cleared is not representative of Vegetation Association 7 described above. Therefore the proposed clearing is not likely to impact on the true remaining extent of this vegetation association.
<table>
<tr><th>Vegetation association</th><th>Current extent remaining (ha)</th><th>Proportion of extent remaining (%)</th><th>Area to be cleared (ha)</th><th>Total area remaining after clearing (ha)</th><th>Proportion of extent remaining after clearing (%)</th></tr>
<tr><td>7</td><td>22,885.35</td><td>12.73</td><td>0.5</td><td>22,884.81</td><td>12.73</td></tr>
<tr><td>1030</td><td>88,949.55</td><td>63.99</td><td>0.3</td><td>88,949.25</td><td>63.99</td></tr>
<tr><td>1031</td><td>88,668.30</td><td>32.90</td><td>4.7</td><td>88,663.64</td><td>32.90</td></tr>
</table>
(Source: Government of Western Australia 2019[36])</td><td>The project is unlikely to be at variance with the principle</td></tr>
<tr><td>Native vegetation should not be cleared if it is growing in or in association with a watercourse or wetland.</td><td>A minor amount of Corymbia calophylla Woodland (0.2 ha), comprised of the canopies of three marri trees adjacent to the Mullering Brook is proposed to be cleared, as shown in Figure B-13 (Attachment 7 Figures A to F_2023). This vegetation is in Degraded condition with low species diversity, limited to scattered overstorey species (Outback Ecology 2014). Additionally, ecologia Environment (2016) considered this vegetation to be severely impacted by disturbance.
The project has been designed to avoid areas of riparian vegetation and drainage lines where possible. Access tracks have been designed to align with existing tracks and areas that have already been heavily degraded by cropping. Disturbance of the Mullering Brook has been limited by siting the nearest transmission pole outside of the streamline and limiting the number of trees removed. Access is not proposed across Mullering Brook.
The proposed clearing is unlikely to have a significant impact on the ecological or hydrological values of the Mullering Brook watercourse.</td><td>The project is unlikely to be at variance with the principle.</td></tr>
<tr><td>Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.</td><td>Land degradation can be caused or exacerbated by uncontrolled run-off and wind or water erosion. Clearing associated with the project has been minimised to reduce potential impacts on land values. The proposed clearing is unlikely to significantly alter hydrological processes and erosion within the project area</td><td>The project is not at variance with the principle.</td></tr>
<tr><td>Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.</td><td>The project would require clearing up to 4.8 ha of native vegetation with high biodiversity, including 1.8 ha and 2.3 ha within Crown Reserves 27216 and 41986. The proposed clearing represents a small portion (approximately 0.1%) of each Crown Reserve, which are likely to contain similar or better biodiversity values to the clearing area. Although an extent of high biodiversity vegetation is proposed be cleared (approximately 4.8 ha, which includes 4.1 ha within the Crown Reserves), it is considered unlikely that local biological diversity values within the project would be significantly diminished.
The Conservation Park (Crown Reserve 41986) has a history of soil borne Phytophthora pathogen occurrences (dieback), mainly due to the historic mineral sand mining activities in the area. The Proponent prepared a Hygiene Protocol in April 2019 to comply with its licence to occupy Crown land (Licence 02804/1991_A9222973), which was intended to prevent the introduction of pathogens (such as Phytophthora dieback) and weeds within Crown Reserve 41986 (unnamed Conservation Park). Vegetation clearing and construction works within Crown Reserve 41986 will be subject to the Hygiene Protocol (RPS 2019), which is anticipated to be required under a new licence to occupy Crown land. The Hygiene Protocol outlines Phytophthora dieback and weed management measures to prevent the introduction and / or spread of Phytophthora dieback and weeds into and within the Crown Reserve 41986.</td><td>The project may be at variance with the principle.</td></tr>
</table>

[35] Beard, J. S., Beeston, G.R., Harvey, J.M., Hopkins, A. J. M. and Shepherd, D. P. 2013. The vegetation of Western Australia at the 1:3,000,000 scale. Explanatory memoir. Second edition. Conservation Science Western Australia. 9. 1-152.

[36] Government of Western Australia. 2019. 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Principle	Assessment	Outcome
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water	A minor amount of *Corymbia calophylla* Woodland (0.2 ha), comprised of the canopies of three marri trees adjacent to the Mullering Brook is proposed to be cleared, as shown in Figure B-13 (Attachment 7 Figures A to F_2023). This vegetation is in Degraded condition with low species diversity, limited to scattered overstorey species (Outback Ecology 2014). Additionally, *ecologia* Environment (2016) considered this vegetation to be severely impacted by disturbance. The project has been designed to avoid areas of riparian vegetation and drainage lines where possible. Access tracks have been designed to align with existing tracks and areas that have already been heavily degraded by cropping. Disturbance of the Mullering Brook has been limited by siting the nearest transmission pole outside of the streamline and limiting the number of trees removed. Access is not proposed across Mullering Brook. No drainage lines within the Indicative Disturbance area retain water permanently. Once construction activities have been completed, all operational vehicles will be limited to undertaking maintenance activities from the defined access tracks. It is anticipated that these maintenance activities will not significantly increase the incidence of erosion and sediment transfer along these drainage lines. The proposed clearing is unlikely to cause deterioration in the quality of surface or underground water of the Mullering Brook watercourse.	The project is not at variance with the principle
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the intensity of flooding.	A minor amount of *Corymbia calophylla* Woodland (0.2 ha), comprised of the canopies of three marri trees adjacent to the Mullering Brook is proposed to be cleared, as shown in Figure B-13 (Attachment 7 Figures A to F_2023). This vegetation is in Degraded condition with low species diversity, limited to scattered overstorey species (Outback Ecology 2014). Additionally, *ecologia* Environment (2016) considered this vegetation to be severely impacted by disturbance. The proposed clearing is unlikely to cause or exacerbate, the intensity of flooding of the Mullering Brook watercourse.	The project is not at variance with the principle

5 Avoidance and mitigation measures

5.1 Measures during design stage

Environmental impact has been minimised through avoidance, design and management. Refinement of the project's design has been underpinned by the findings of the Outback Ecology (2010), Outback Ecology (2014), *ecologia* Environment (2016) and RPS (2023). Specifically, the clearing requirements have been avoided and mitigated through the design stage by:

- Siting most of the infrastructure (i.e. wind turbines, access tracks and on-site substation) within cleared farm land that has already been heavily degraded by cropping.
- Ongoing consultation with Main Roads Western Australia resulting in its agreement for the overhead 132 kV transmission line to pass overhead of Brand Highway, rather than passing underground, which avoided the requirement for additional clearing of native vegetation to facilitate an underground connection.
- Disturbance of areas of riparian vegetation and drainage lines have been avoided including siting the nearest transmission pole outside of the streamline and limiting the number of trees removed.
- Impacts to conservation significant vegetation and flora species identified during the historical flora and vegetation surveys have been avoided or mitigated through the design of the project, including:
  - Avoiding the *Banksia attenuata* Woodland over species rich dense shrubland Threatened Ecological Community (TEC) (SCP20a) (recorded by Outback Ecology 2010). This is a TEC listed under the *Biodiversity Conservation Act 2016* (BC Act) and is commonly a component of the Banksia Woodlands of the Swan Coastal Plain ecological community, which is a TEC listed under the EPBC Act and a DBCA listed Priority 3 Priority Ecological Community (PEC) (DBCA 2023a[37]). Consultation with DEC revealed that the vegetation community could also be considered consistent with the Swan Coastal Plain *Banksia attenuata - Banksia menziesii* woodlands, a DBCA listed Priority 3 PEC.
    - Further discussions with Val English from the (then) Department of Parks and Wildlife's Threatened Species and Communities Branch were undertaken as part of the later Outback Ecology (2014) study. These discussions explained that the physical disjunct (more than 50 km across bioregions) between the mapped vegetation and the community with which it has affinities TEC SCP20a (recorded on uplands centred on Bassendean Dunes and the Dandaragan Plateau (Gibson et al. 1994)[38]) suggests that a meaningful floristic comparison and determination of status cannot be made.
    - Hence the mapped vegetation is not considered a representation of TEC SCP20a. However, this vegetation has been avoided in the project's current design.
  - Avoiding all records of three Threatened flora species listed under the BC Act and EPBC Act (recorded by RPS 2023).
  - Avoiding the majority of records of 19 priority flora species (recorded by Outback Ecology 2010 and 2014, *ecologia* Environment 2016 and RPS 2023) and minimising the area of native vegetation to be cleared through detailed design, which kept the number of priority flora species records proposed to be cleared within the project's Indicative Disturbance area as low as practicable (recorded by Outback Ecology 2014 and RPS 2023).

[37] Department of Biodiversity Conservation and Attractions. 2023. Threatened ecological communities. https://www.dbca.wa.gov.au/wildlife-and-ecosystems/threatened-ecological-communities. Accessed 29 August 2023.

[38] Gibson, N. Keighery, B. Keighery G. Burbidge A. and M. Lyons. 1994. A Floristic Survey of the southern Swan Coastal Plain. A report prepared by the Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council for the Australian Heritage Commission.

- Minimising the extent of Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia Woodlands TEC) to be cleared (recorded by Outback Ecology 2014 and *ecologia* Environment 2016). This is a TEC listed under the EPBC Act and a DBCA listed Priority 3 PEC (DBCA 2023a). The approximately 0.3 ha of Banksia Woodlands TEC to be cleared is adjacent to the unsealed access tracks to the Cataby substation and the sealed Cooljaroo Road to the Cooljaroo mining operations. Widening the existing access tracks from the new transmission line to the existing Cataby substation is required to ensure that all structures are all trafficable by Western Power's heavy fleet vehicles.

5.2 Measures during construction and operation stages

To reduce impacts to Carnaby's black cockatoo habitat and Banksia Woodlands TEC and avoid indirect impacts to Threatened flora species (i.e. star sun-orchid), the following avoidance and mitigation measures will be implemented during construction and operation of project:

- During construction, the Indicative Disturbance area boundary will be surveyed and delineated in areas of native vegetation prior to commencement of native vegetation clearing works.
- Both topsoil and cleared vegetation will be stockpiled and returned to disturbed areas during rehabilitation in consultation with the relevant land managers. Rehabilitation will be undertaken in areas that are temporarily disturbed, such as the electrical underground cabling, access track batters, around the turbine footprints, which is standard practise for the Proponent's wind farms.
- Dust management practice will be adopted during construction to ensure that excessive amounts of dust are not generated along access tracks and during clearing activities.
- The Proponent prepared a Hygiene Protocol in April 2019 to comply with its licence to occupy Crown land (Licence 02804/1991_A9222973), which was intended to prevent the introduction of pathogens (such as *Phytophthora* dieback) and weeds within Crown Reserve 41986 (unnamed Conservation Park). Vegetation clearing and construction works within Crown Reserve 41986 will be subject to an the Hygiene Protocol (RPS 2019), which is anticipated to be required under a new licence to occupy Crown land. The Hygiene Protocol will include *Phytophthora* dieback and weed management measures to prevent the introduction and / or spread of *Phytophthora* dieback and weeds into and within the Crown Reserve 41986.
- Weed management measures for the project will include:
  - Limiting the number of Indicative Disturbance areas to minimise colonisation by weed species
  - Off-road vehicle use will be strictly controlled over the project with no driving permitted off designated routes
  - If earthworks are required to take place in areas with existing weed populations, precautions will be taken to prevent the weed contaminated material being transported to uncontaminated areas
  - Material containing weeds will not be used in rehabilitation, and machinery operating in areas of known weed contamination will be cleared before leaving the area
  - If significant populations of weeds are identified spot spraying with glyphosate (herbicide) will be undertaken with a backpack spray device. The weed program will be maintained throughout the life of project.
- To avoid disrupting the breeding cycle of Carnaby's black cockatoo, the proponent will undertake the following mitigation measures:
  - Undertaking pre-clearing surveys within 100 m of the native vegetation clearing areas by a suitably qualified fauna specialist
  - Should breeding Carnaby's black cockatoo be found, clearing will not commence within 100 m of the breeding tree until breeding in the area has finished. Carnaby's black cockatoo breeding season in the Swan Coastal Plain and Wheatbelt regions occur from July to December (DAWE 2022)

  - Maintenance of the Transmission Line's safe operating clearance distance will not result in the removal or damage to any hollows of suitable dimensions for breeding Carnaby's black cockatoo as the trimming works will be confined to the upper canopies of the marri trees and the suitable hollows within the 11 marri trees to be retained were observed within the trunks (Attachment 21 Black-Cockatoo habitat assessment_2022).

- Fire during the star sun-orchids growing season (May to November) is an identified threat to this species (DEWHA 2008). Fire prevention procedures will be implemented during the construction and operation of the project, including construction of additional fire breaks and improved access roads for firefighting to minimise the risk of fire. The Proponent will implement a Fire Management Plan in accordance with the Planning Approval.
- The Proponent will implement an Avian Fauna Collision Monitoring Program, to the satisfaction of the DBCA, in accordance with the Planning Approval to monitor the impact of the Wind Farm on avian fauna specifically in respect to the endangered Carnaby's black cockatoo (Attachment 4 Shire of Dandaragan historical planning approvals_ 2012–2019).
- A Construction Environment Management Plan (CEMP) will be prepared to provide the high-level environmental management framework to be implemented by the civil contractor during the construction of the project. The CEMP will detail the key environmental receptors proximate to the project and provide management actions and monitoring frameworks to be implemented prior to, during and post construction to ensure that the works comply with relevant legislative and environmental approval requirements. The CEMP will include protocols and procedures for monitoring (e.g. visual records, auditing) and management (e.g. refuelling procedures, waste disposal) to minimise the residual impacts to the receiving terrestrial environment to be as low as reasonably practicable.

6 Offset proposal / strategy

An offset proposal / strategy will be prepared during the assessment of the clearing permit application, in consultation with DWER, once the significant residual impacts have been determined regarding matters protected under the EPBC Act and the EP Act. The Proponent will develop and implement an offset strategy once the type and extent of offsets are known for the project.

7 Benefits of the project

7.1 Environmental benefits

The project is anticipated to have the following environmental benefits:

- Generate enough combined renewable energy to power 33,520 homes
- Result in 195,000 tons of greenhouse gas savings by offsetting traditional power generation
- Smaller environmental footprint than comparative forms of energy generation
- Minimal impact on the productivity of traditional farming activities
- Minimising environmental impact through avoidance, design and management
- Offsetting any environmental impacts where they cannot be avoided with net environmental benefits
- Additional fire breaks and improved access roads for firefighting
- Additional energy supply to help meet the growing demands in Western Australia.

7.2 Employment and economic benefits

The project is also anticipated to have the following employment and economic benefits:

- Employ over 150 people during construction and six to ten full time staff during its predicted 30-year lifespan. All of the Proponent's projects have resulted in significant local employment. The Proponent will continue to recommend maximising local employment in their future projects.

- Local employment during construction, with the operations phase still providing opportunities for local employment and for local businesses. Typical goods and services likely to be sourced locally during construction and operations include accommodation, engineering, freight services, construction materials and equipment, local labour, technical contractors, earth works services, fencing and landscaping.
- The project will contribute over $1 million per annum to the local community through payments to involved landholders, permanent staff, and community fund contributions. It will assist local farmers by providing a drought-proofing and post-retirement income stream.
- Once the Transmission Line is constructed, it will be handed over to Western Power and become a public asset for the state government.

8 Assessment bilateral agreement – Annex C7

8.1 Part 2: Proposed clearing action and impact assessment details

8.1.1 Description of the proposed clearing action

The Proponent is proposing to clear approximately 5.5 ha of native vegetation within a larger footprint of 1,227.0 ha (the Indicative Works area). The purpose for the proposed clearing is to develop the Waddi Wind Farm and associated infrastructure, including an overhead 132 kV transmission line. The native vegetation proposed to be cleared is situated within the wind farm to create internal access tracks, install electrical underground cabling, hard stand areas and a viewing area. Native vegetation will also be cleared along the transmission infrastructure, which will connect the project's on-site substation to the Western Power's existing transmission network located to the west of the wind farm.

Figures B-1 to Figure B-16 (Attachment 7 Figures A to F) show the spatial extent of the 5.5 ha of native vegetation proposed to be cleared and details the vegetation units identified by the three flora and vegetation surveys within the Indicative Disturbance area (i.e. Outback Ecology 2014, *ecologia* Environment 2016 and RPS 2023).

Clearing will occur as one action between Q1 2024 and Q4 2026 and the native vegetation will be cleared mechanically.

8.1.2 Detailed descriptions of the MNES prescribed through the EPBC Act controlled action decision and any other relevant matters

The MNES prescribed through the EPBC Act controlled action decision included:

- Nationally listed threatened species and ecological communities including suitable habitat
  - Carnaby's black cockatoo (*Zanda latirostris*) (Endangered)
  - Star sun-orchid (*Thelymitra stellata*) (Endangered)
  - Banksia Woodlands of the Swan Coastal Plain Ecological Community – (Endangered)
  - Dwarf green kangaroo paw (*Anigozanthos viridis* subsp. *terraspectans*) (Vulnerable)
  - Lesueur hakea (*Hakea megalosperma*) (Vulnerable)
  - Sandplain duck orchid (*Caleana dixonii* listed as *Paracaleana dixonii*) (Endangered)
  - Glossy-leafed hammer orchid (*Drakaea elastica*) (Endangered)
- Listed migratory species including suitable habitat
  - Curlew sandpiper (*Calidris ferruginea*) (Critically Endangered and Migratory)
  - Fork-tailed swift (*Apus pacificus*) (Migratory)
  - Sharp-tailed sandpiper (*Calidris acuminata*) (Migratory)
  - Pectoral sandpiper (*Calidris melanotos*) (Migratory)
  - Common sandpiper (*Actitis hypoleucos*) (Migratory)

These MNES have been surveyed within and surrounding the project area from 2008 to 2023. Descriptions of the reports, surveys and methodologies are outlined in Table 11.

Table 11: Reports addressing MNES and suitable habitat for MNES

Survey report	Description of survey and methodology	Findings relevant to MNES and suitable habitat for MNES
Targeted Level 1 Vegetation and Flora Assessment Waddi (Outback Ecology 2010)	• Undertook two visits for a Level 1 flora and vegetation survey between November 2008 and January 2009 for a previous design of the project • Included a targeted declared rare and priority flora search undertaken in late spring and mid-summer where the rainfall in the months preceding both field visits (October and December 2008) was slightly higher than the mean rainfall average for that month. • Methods adopted were consistent with state guidance	• Banksia Woodlands TEC – Vegetation units comprised of Banksia woodland within the Swan Coastal Plain were mapped, however this vegetation was not identified as a TEC as it was listed as Endangered under the EPBC Act after the survey on 16 September 2016. • Threatened flora species (sun star-orchid, dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid) – No Threatened flora species were recorded.
Waddi Wind Farm Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey (Outback Ecology 2014)	• Undertook a Level 1 spring flora and vegetation survey for a previous design of the overhead transmission line alignment extending west of the Wind Farm to the Cataby substation and alternative substation options in October to November 2013 • Included a targeted spring flora search to fulfil Condition 8 of CPS 4608/2 within previous designs of the Wind Farm (Attachment 26 DEC CPS 4608_2 clearing permit) and overhead transmission line alignment. The survey was undertaken with approximately four weeks after the seasonal rainfall in August to September when ephemeral flora and flowering of plant taxa would be expected. • Undertook a black cockatoo habitat assessment within a previous design of the overhead transmission line alignment extending west of the Wind Farm to the Cataby substation and alternative substation options • Methods adopted were consistent with state and Commonwealth guidance.	• Carnaby's black cockatoo – No current breeding habitat was recorded within the survey area, however significant trees with the potential to develop hollows were recorded. – Foraging habitat in high quality and in good condition was recorded within the survey area, including *Eucalyptus* spp., *Banksia* spp. and *Hakea* spp. in the Open Woodland and Proteaceous Heath habitat types. • Banksia Woodlands TEC – Vegetation units comprised of Banksia woodland within the Swan Coastal Plain were mapped, however this vegetation was not identified as a TEC as it was listed as Endangered under the EPBC Act after the survey on 16 September 2016. • Threatened flora species (sun star-orchid, dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid) – No Threatened flora species were recorded.
Fauna Assessment Waddi Wind Farm (RPS 2014)	• Undertook a study of fauna species likely to be present in the project and the likely impacts of the proposed development, informed by previous flora and vegetation and fauna surveys. • Undertook a site inspection in 2013 to support a revision of the data from the 2008 survey and to inspect any areas that fall outside the original footprint of the proposed development. • Included the Avifauna Assessment Proposed Waddi Wind Farm Development (RPS 2010) as Appendix 3, which involved: – A site survey (12 and 13 November 2008) and a second site visit (27 November 2013) for a Level 1 reconnaissance fauna survey – A bat survey over two separate periods (between October and November 2008 and in May 2009) – A targeted avifauna field surveys over three separate periods (29 October–7 November 2008, 18–26 November 2008 and 15–16 January 2009) • Methods adopted were consistent with state guidance.	• Carnaby's black cockatoo – Habitat utilisation within the site and its locality followed what is generally known of the species i.e. on-site occurrences were largely confined to intact Marri woodland areas, which occur as riparian remnants along valley bottom watercourses and lower slopes, and tall heathland communities and their remnants on sand plains and lower slopes in the wider locality. – Carnaby's black cockatoo were recorded in the study area moving through the Rotor Swept Area (RSA) (40 m to 152 m above ground level) at least occasionally. They were found to primarily frequent low-land areas and movements of these species tended to follow valleys with woodland vegetation. • Migratory birds (curlew sandpiper, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper) – The curlew sandpiper, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper are migratory wading bird species. – There is no habitat for migratory wading bird species within the vicinity of the project, although there are habitats within the region that are frequented by these species (RPS 2010). A number of migratory wading bird species were recorded from wetland habitats around Lake Guraga to the south-west, the near coastal Lake Thetis near Cervantes and from the Upper Moore River area to the north-west and west of Moora (RPS 2010). This included one observation of a common sandpiper at Thetis Lake and 23 observations of sharp-tailed sandpiper at the upper Moore River catchment near Moora. – Waterbirds can be expected only as vagrants or otherwise in small numbers on wetlands in the region (RPS 2014). The sharp-tailed sandpiper and common sandpiper waterbirds could potentially fly through the project area. Movements to and from these wetland habitats by migratory wading birds are likely to follow north–south routes, which follow the general landscape arrangement of these habitats in relation to drainage basins in the east and coastal dune topography in the west (RPS 2010). As such, it is unlikely that significant movements of migratory wading birds would take place in an east to west direction across the Koodiwoodie Range where the project is to be constructed. • Migratory birds (fork-tailed swift) – The fork-tailed swift is an aerial species that occurs widely over a range of habitats at a range of elevations from quite close to the ground to at least 300 m, although likely higher. – This species has not been recorded during the avian surveys conducted within the project, the Yandin Wind Farm, representative habitat areas in the wider locality or wetland habitats in the wider locality (RPS 2010). Although due to its wide-ranging movements across open areas within Australia, its occurrence within the project on at least an intermittent seasonal basis cannot be discounted (RPS 2010).
Waddi Wind Farm project – Cataby Supplementary Flora, Vegetation and Fauna Survey (*ecologia* 2016)	• Undertook a spring flora and vegetation survey for additional portions of a previous design of the overhead transmission line alignment not covered by Outback Ecology (2014) • Included a targeted spring flora search within the additional areas of a previous design of the overhead transmission line alignment. The survey was undertaken on 6 October 2016 and the study area received better-than-average rainfall in the period prior to the survey (January–September 2016). • Undertook a black cockatoo habitat assessment within the additional areas of a previous design of the overhead transmission line alignment not covered by Outback Ecology (2014). • Methods adopted were consistent with state and Commonwealth guidance.	• Carnaby's black cockatoo – A Carnaby's black cockatoo was heard flying above the Banksia woodland surrounding the Cataby substation. – Approximately 7.5 ha of the study area was considered suitable foraging habitat for Carnaby's black cockatoo. – Potentially significant Carnaby's black cockatoo habitat trees were present as isolated, individual living and stag marri trees in the Cleared Farmland with Paddock Trees habitat type. A total of 24 trees with DBH estimated to be greater than 500 mm were mapped. • Banksia Woodlands TEC – Approximately 5.05 ha of the vegetation unit Banksia Low Open Woodland was considered representative of the Banksia Woodlands TEC. • Threatened flora species (sun star-orchid, dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid) – No Threatened flora species were recorded. • Migratory species (curlew sandpiper, fork-tailed swift, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper) – No opportunistic observations of migratory birds were recorded.

Survey report	Description of survey and methodology	Findings relevant to MNES and suitable habitat for MNES
Black-Cockatoo habitat assessment for the Waddi Wind Farm transmission line alignment and the nominated areas in the adjacent farmland (Terrestrial Ecosystems 2022)	Undertook a black cockatoo habitat assessment over two periods (14 and 15 October 2021 and 28 October 2022) within the wind farm and transmission line.	• Carnaby's black cockatoo – Approximately 79.86 ha of high-quality foraging habitat for Carnaby's black cockatoo within patches of kwongan heath dominated by proteaceous plant species such as *Banksia* sp., Hakea sp. and Grevillea sp. – Recorded up to 127 potential black cockatoo nesting trees (63 planted non-endemic *Eucalyptus* sp. and 64 marri with DBH greater than 500 mm), of which 11 marri trees had hollows of suitable dimensions. No evidence of black cockatoo breeding was observed in or near the project. – Recorded up to 967 tall and significant trees (at least 8 m tall or at least 6 m tall for *Eucalyptus todtiana*), comprised of 676 planted trees (non-native eucalypts), 144 coastal blackbutt (*Eucalyptus todtiana*), 79 pine trees, 65 marri trees (significant trees), two native *Eucalypt* sp. and one dead tree.
Reconnaissance flora and vegetation assessment, Waddi Wind Farm (RPS 2023)	• Undertook two visits for a reconnaissance flora and vegetation between 29 September and 7 October 2021 (by Ecoedge) and between 7 and 9 September 2022 (by RPS) for a previous extent of the Indicative Works area • Included a targeted spring flora search within a previous extent of the Indicative Works area. Rainfall was above average for the survey area in 2021 and 2022 resulting in good flowering in both annual and perennial species. • Methods adopted were consistent with state guidance.	• Threatened flora species (sun star-orchid, dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid) – Recorded 16 records (37 individuals) of the star sun-orchid. The records were all identified within the Proteaceous Heath vegetation unit in Very Good to Excellent condition and were situated within the Geraldton Sandplains IBRA bioregion. – Recorded one record (number of individuals is unknown) of the dwarf green kangaroo paw. The record was identified within the Banksia woodland vegetation unit in Excellent condition and was situated within the Geraldton Sandplains IBRA bioregion. – Recorded four records (four individuals) of the Lesueur hakea. The records were identified within the Proteaceous Heath vegetation unit in Excellent condition and were situated within the Geraldton Sandplains IBRA bioregion. – For the desktop review, the sandplain duck orchid and glossy-leafed hammer orchid were identified in the NatureMap and PMST database searches, but not in the DBCA Threatened and Priority Flora database circle search within a 25 km radius. These Threatened flora species were not observed during the survey. • Banksia Woodlands TEC – The extent of a vegetation unit of Banksia woodland within the Swan Coastal Plain IBRA bioregion was considered representative of the Banksia Woodlands TEC.

8.1.3 Likely relevant impacts of the action on MNES prescribed through the EPBC Act controlled action decision

8.1.3.1 Carnaby's black cockatoo

8.1.3.1.1 Description of environmental impacts

During construction of the project, direct impacts include loss of foraging habitat, potential breeding habitat and potential roosting habitat and risk of injury or death from vegetation clearing, and indirect impacts may include disturbance from construction activities. During operation of the project, direct impacts may include risk of injury or death from collision with turbine blades and indirect impacts may include avoidance of the wind farm area and loss or fragmentation of habitat (RPS 2014). During maintenance of the Transmission Line, direct impacts may include a minor loss of foraging habitat due to trimming of upper canopies of marri trees to maintain a safe operating clearance distance of 7.5 m from the overhead 132 kV transmission line.

8.1.3.1.2 Significant impact assessment

The EPBC Act referral concluded that direct impacts from clearing suitable Carnaby's black cockatoo habitat were considered to have a significant impact, as they were found to be at variance with two of the five referral thresholds of the EPBC Act referral guideline for three WA threatened black cockatoo species (DAWE 2022) and one of the nine significant impact criteria of the EPBC Act significant impact guidelines 1.1 (DEWHA 2013) (Attachment 9 Significance of impacts assessment_2023).

The direct impacts included:

- Permanent loss of three potential black cockatoo nesting trees, marri (*Corymbia calophylla*)
- Permanent loss of approximately 5.2 ha of high quality foraging habitat comprised of patches of kwongan heath dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp.
- Permanent loss of foraging, potential breeding and potential roosting habitat critical for Carnaby's black cockatoo. The extent of habitat proposed to be cleared is relatively minor compared to the extent to be retained within the project area:
  - Approximately 5.2 ha of native vegetation (or 6%) and 21 planted pine trees (or 24%) identified as high quality foraging habitat, and 11 planted trees (non-native eucalypts) (or 2%) identified as low quality foraging habitat, if any, for Carnaby's black cockatoo
  - Three (or 2%) potential black cockatoo nesting trees (marri)
  - Thirty-five (or 4%) potential roosting trees, comprised of 11 planted trees (non-native eucalypts), 21 pine trees and three marri trees.

Direct impacts on Carnaby's black cockatoo from risk of injury or death from collision with turbine blades and indirect impacts from avoidance of the wind farm area are unlikely to significantly impact this species (Attachment 9 Significance of impacts assessment_2023).

Direct impacts on Carnaby's black cockatoo from risk of injury or death from vegetation clearing during construction of the project and during maintenance of the Transmission Line is unlikely to significantly impact this species as they are a highly mobile species and the Proponent will mitigate impacts on potential breeding activity by undertaking pre-clearing surveys within 100 m of the native vegetation clearing areas by a suitably qualified fauna specialist (Attachment 9 Significance of impacts assessment_2023). Should breeding Carnaby's black cockatoo be found, clearing will not commence within 100 m of the breeding tree until breeding in the area has finished. Carnaby's black cockatoo breeding season in the Swan Coastal Plain and Wheatbelt regions occur from July to December (DAWE 2022). Maintenance of the Transmission Line's safe operating clearance distance will not result in the removal or damage to any hollows of suitable dimensions for breeding Carnaby's black cockatoo as the trimming works will be confined to the upper canopies of the marri trees and the suitable hollows within the 11 marri trees to be retained were observed within the trunks, in forks, branches and spouts (Terrestrial Ecosystems 2022).

DCCEEW found that the proposed action is likely to have a significant impact on this MNES as (Attachment 28 DCCEEW determination_2023):

The proposed action involves: the clearing of 5.2 ha of native vegetation that is known to provide high quality feeding habitat to breeding and roosting individuals; the removal of three possible breeding trees, the ongoing impact to 11 suitable nesting, roosting and foraging trees, due to cropping of the canopy; the potential for direct mortality from turbine strikes and transmission line collision; and behavioural disturbance to flight paths between foraging, breeding and roosting habitat.

8.1.3.2 Migratory species (curlew sandpiper, fork-tailed swift, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper)

8.1.3.2.1 Description of environmental impacts

During operation, direct impacts to the fork-tailed swift may include risk of injury or death from collision with turbine blades (RPS 2014).

An assessment of the likelihood of occurrence for the curlew sandpiper, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper found that these species were unlikely to occur within the project, considering that (Attachment 17 Key flora and fauna findings_2010 – 2023):

- There is no habitat for migratory wading bird species within the vicinity of the project, although there are habitats within the region that are frequented by these species (RPS 2010). A number of migratory wading bird species were recorded from wetland habitats around Lake Guraga to the south-west, the near coastal Lake Thetis near Cervantes and from the Upper Moore River area to the north-west and west of Moora (RPS 2010). This included one observation of a common sandpiper at Thetis Lake and 23 observations of sharp-tailed sandpiper at the upper Moore River catchment near Moora.
- Waterbirds can be expected only as vagrants or otherwise in small numbers on wetlands in the region (RPS 2014). The sharp-tailed sandpiper and common sandpiper waterbirds could potentially fly through the project area. Movements to and from these wetland habitats by migratory wading birds are likely to follow north–south routes, which follow the general landscape arrangement of these habitats in relation to drainage basins in the east and coastal dune topography in the west (RPS 2010). As such, it is unlikely that significant movements of migratory wading birds would take place in an east–west direction across the Koodiwoodie Range where the Project and its wind turbines are to be constructed.

As such, impacts to the curlew sandpiper, sharp-tailed sandpiper, pectoral sandpiper and common sandpiper were not considered further in the EPBC Act referral. Potential impacts to the fork tailed-swift were considered as part of the EPBC Act referral, as addressed in Section 8.1.3.2.2.

8.1.3.2.2 Significant impact assessment

The potential for direct impacts from risk of injury or death from collision with turbine blades to the fork-tailed swift were not at variance with any of the three significant impact criteria of the EPBC Act significant impact guidelines 1.1 (DEWHA 2013) (Attachment 9 Significance of impacts assessment_2023), as such the direct impacts are not considered to be significant to the fork-tailed swift:

- This species was not recorded within the Project area nor its wider locality during field surveys in 2008 and 2009, however due to its wide-ranging movements across open areas within Australia, it could occur on at least an intermittent basis (RPS 2010). There is potential for this species to fly at the surveyed RSA height (40 m–135 m) if flocks were to move through the area under some seasonal conditions (RPS 2010). The Project's current RSA height is 18 m–180 m. However, this species has considerable aerial ability and is likely to easily avoid collision. Moreover, local occurrences of this species are likely to be intermittent spasmodic seasonal occurrences (RPS 2010).
- The avian surveys were informed by a previous design of the project, which included 57 wind turbines. Due to improvements in wind turbine technology, the final project will achieve the same generation capacity with fewer turbines, with 18 wind turbines proposed. This further reduces the low likely level of risk to this species (RPS 2010).
- Local occurrences of this species are likely to be intermittent spasmodic seasonal occurrences, which indicates that the project is not considered to comprise important habitat for the fork-tailed swift.

DCCEEW found that the proposed action is likely to have a significant impact on these MNES as (Attachment 28 DCCEEW determination_2023):

Impacts to the bird species above are based on the occurrence of the species within the area or flight paths that traverse the area, which may result in the direct mortality from turbine strikes or transmission line collision, electrocution from transmission lines, and/or behavioural disturbance to migratory flight paths.

8.1.3.3 Banksia Woodlands TEC

8.1.3.3.1 Description of environmental impacts

During construction, direct impacts include loss of part of a patch of this TEC.

There is approximately 0.3 ha of Banksia woodland vegetation in Excellent to Good to Very Good condition mapped within a minor portion of the Indicative Disturbance area that is also situated within the Swan Coastal Plain IBRA bioregion. This Banksia woodland vegetation is considered to represent part of a larger patch of the EPBC Act-listed Banksia Woodlands TEC, whose extent is illustrated in Figure B-16 (Attachment 7 Figures A to F).

8.1.3.3.2 Significant impact assessment

The direct impacts from clearing 0.3 ha were not at variance with any of the seven significant impact criteria of the EPBC Act significant impact guidelines 1.1 (DEWHA 2013) and Question 4 of the EPBC Referral Guidance – Banksia Woodlands of the Swan Coastal Plain ecological community (DEE 2019b)[39] (Attachment 9 Significance of impacts assessment_2023), as such the direct impacts are not considered to be significant to the Banksia Woodlands TEC:

- The proposed clearing of 0.3 ha is unlikely to adversely affect the patch of Banksia Woodlands TEC surrounding the Project's Indicative Disturbance area considering its minor extent and that it is aligned with the existing access tracks. Furthermore, the extent proposed to be cleared represents a very minor portion (0.3 ha or 0.001%) of the more than 35,000 ha of Banksia Woodlands TEC patches present within a 50 km radius from a central point of the Project (RPS 2023).

DCCEEW found that the proposed action is likely to have a significant impact on this MNES as (Attachment 28 DCCEEW determination_2023):

Likely clearing and fragmentation of a patch of the Banksia Woodlands that could result in the larger patch no longer meeting the diagnostic criteria for a threatened ecological community.

8.1.3.4 Threatened flora species (sun star-orchid, dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid)

8.1.3.4.1 Description of environmental impacts

During construction, indirect impacts may include disturbance from construction activities (i.e. dust deposition).

Out of the 16 records (37 individuals) of the star sun-orchid, there are 12 records (25 individuals) that are less than 50 m from the proposed Indicative Disturbance area where native vegetation clearing will occur (RPS 2023). The separation distances from the Indicative Disturbance area ranges from 4.6 m to 18 m. The locations of the flora records are illustrated in Figure B-9 and Figure B-15 (Attachment 7 Figures A to F). No clearing of the star sun-orchid individuals is proposed.

[39] Department of the Environmental and Energy. 2019b. EPBC Referral Guidance - Banksia Woodlands of the Swan Coastal Plain ecological community. https://www.dcceew.gov.au/sites/default/files/documents/banksia-woodlands-swan-coastal-plain-referral-guidance.pdf. Accessed 10 August 2023.

The known locations of the dwarf green kangaroo Paw (one record, number of individuals is unknown) and Lesueur hakea (four records, four individuals) are more than 50 m from proposed Indicative Disturbance area where native vegetation clearing will occur (RPS 2023). For the desktop review, the sandplain duck orchid and glossy-leafed hammer orchid were identified in the NatureMap and PMST database searches but not in the DBCA Threatened and Priority Flora database circle search within a 25 km radius (RPS 2023). These Threatened flora species were not observed during the survey.

As such, impacts to dwarf green kangaroo paw, Lesueur hakea, sandplain duck orchid and glossy-leafed hammer orchid were not considered further in the EPBC Act referral. Potential impacts to the star sun-orchid were considered as part of the EPBC Act referral, as addressed in Section 8.1.3.4.2.

8.1.3.4.2 Significant impact assessment

Indirect impacts from disturbance from construction activities are unlikely to significantly impact this species as the alignment of the access track was designed to avoid all recorded star sun-orchid locations. As such, no clearing of the star sun-orchid individuals is proposed (Attachment 9 Significance of impacts assessment_2023). To reduce potential indirect impacts to the star sun-orchids, the proposed avoidance and mitigation measures will be implemented (see Section 5.2).

DCCEEW found that the proposed action is likely to have a significant impact on these MNES as (Attachment 28 DCCEEW determination_2023):

> The proposed action involves the real chance or possibility that the clearing could reduce the availability and quality of habitat for the Star Sun-orchid…
> On the basis of the information currently available, the department cannot exclude a real possibility that the proposed action will have significant impacts to the following matters of national environmental significance:
> Dwarf Green Kangaroo Paw (*Anigozanthos viridis* subsp. *Terraspectans*) (vulnerable)
> Lesueur Hakea (*Hakea megalosperma*) (vulnerable)
> Sandplain Duck Orchid (*Caleana dixonii* listed as *Paracaleana dixonii*) (endangered)
> Glossy-leafed Hammer Orchid (*Drakaea elastica*) (endangered)

8.1.3.5 Description of social and economic impacts

The employment and economic benefits resulting from the project are addressed in Section 7.2.

8.1.4 Feasible alternatives to the proposed action

The project generates renewable energy from wind resources. The alternative would be generating energy from more conventional fuel such as from fossil fuels. Such an alternative to the proposed action is much less favourable, due to the ongoing greenhouse gas emissions resulting from fossil fuel electricity generation, compared to the low residual environmental impact from this project once operational.

When searching for potential wind farm sites, a number of selection criteria are applied to potential wind farm sites in order to determine site suitability. They include environmental, social, technical and operational criteria, such as good wind resource, proximity to a feasible electricity connection point, separation from places of residence, land availability, low ecological and heritage values. The proposed site was targeted due to its ability to meet all above-mentioned required criteria, ahead of other possible locations in the wider region.

Alternative locations or orientations of the Indicative Disturbance area are not possible. To minimise requirements for clearing native vegetation, the project has been designed to ensure future infrastructure would be positioned within previously disturbed areas, wherever practicable. Due to improvements in wind turbine technology, the final project will achieve the same generation capacity with fewer turbines. Further, design changes have resulted from further detailed design of the project, including ecological investigations with the aim of minimising impacts to native vegetation, extensive consultation with Western Power to meet its design specifications for the overhead 132 kV transmission line and ongoing discussions with landholders regarding the preferred siting of infrastructure on their properties.

8.1.5 Detailed description and cost details of possible mitigation measures

The avoidance and mitigation measures undertaken during design and those proposed to be undertaken during construction and operation stages to prevent or minimise impacts to MNES are oulined in Section 5.

An Avian Fauna Collision Monitoring Program will be prepared to monitor the impact of the wind farm on avian fauna specifically in respect to Carnaby's black cockatoo. A CEMP will be prepared to provide management actions and monitoring frameworks to be implemented prior to, during and post construction to ensure that the works comply with relevant legislative and environmental approval requirements and minimise impacts to MNES to be as low as reasonably practicable (Section 5).

Details of significant residual impacts on Carnaby's black cockatoo habitat are outlined in Section 8.1.3.1.2. The requirement for an offset proposal / strategy is adressed in Section 6.

The indicative costs of the mitigation measures proposed to be undertaken during construction and operation stages are summarised in Table 12. These indicative costs may be subject to change.

Table 12: Indicative cost range for mitigation measures

Item no.	Description of mitigation measure	Indicative cost range
Pre-construction phase		
1	Preparing an offset proposal / strategy	~$10,000–$20,000
During construction phase, including CEMP implementation		
2	Surveying and delineating the Indicative Disturbance area boundary in areas of native vegetation	~$5,000–$10,000
3	Stockpiling topsoil and cleared vegetation and returning topsoil and cleared vegetation to disturbed areas during rehabilitation	~$15,000–$25,000
4	Implementing dust management practices	
5	Implementing *Phytophthora* dieback and weed management measures for vegetation clearing and construction works within Crown Reserve 41986 • Cleaning earth-moving machinery and vehicles of soil and vegetation prior to entering Crown Reserve 41986. • Soil to be moved in dry conditions • No *Phytophthora* dieback infested or weed impacted soil, mulch, fill or other material is brought into Crown Reserve 41986. • Movement of machines and other vehicles to be restricted to cleared access tracks and works area within Crown Reserve 41986	~$5,000–$10,000
6	Pre-clearing surveys for Carnaby's black cockatoo	~$15,000–$25,000
7	Preparing management plans, including a Fire Management Plan, an Avian Fauna Collision Monitoring Program and a CEMP	~$50,000–$75,000
8	Implementing a Fire Management Plan. Fire prevention procedures will include construction of additional fire breaks and improved access roads.	~$5,000–$10,000
During operational phase		
9	Implementing an Avian Fauna Collision Monitoring Program	~$15,000–$25,000
Total indicative cost range		**~$120,000–$200,000**

8.1.6 Sources of information and references

The sources of information and references for Section 8.1 are provided either as references cited in this letter or as attachments, which are listed at the end of this letter.

8.2 Part 3: Consultation

A desktop study of European and Aboriginal heritage by Australian Interaction Consultants in December 2008 was undertaken to inform the 2011 EPBC Act referral and identified four Aboriginal registered sites within the Waddi Wind Farm and Solar Farm project area listed under the state *Aboriginal Heritage Act 1972*

(AH Act). Detailed Aboriginal heritage surveys were undertaken by Brad Goode & Associates Pty Ltd Consulting Anthropologists & Archaeologists in May 2012 and in June 2016. No archaeological sites as defined by section 5a of the AH Act were identified to be affected by the previous project. One ethnographic site as defined by section 5b of the AH Act, Site ID 4640 Mullering Brook was identified to be potentially affected by the previous Project at four locations (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017).

A draft Aboriginal Cultural Heritage Management Plan (ACHMP) was endorsed by the South West Aboriginal Land and Sea Council on 17 November 2016 and it provided its support for a Section 18 consent application under the AH Act by the (then) proponent, Trustpower Australia Holding Pty Ltd (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017). The ACHMP was amended to reflect the Section 18 consent conditions for approval in February 2017, which the South West Aboriginal Land and Sea Council endorsed and supported (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017).

To reflect the current project, further ethnographic surveys were undertaken with members of the Yued Native Title Claim Group in February 2022, with no new sites or Aboriginal heritage places identified (Attachment 10 Consultation summary_2023).

Based on the Aboriginal Cultural Heritage Inquiry System search results (DPLH 2023)[40] and the February 2022 ethnographic surveys, sites of Aboriginal cultural heritage do not intersect the project's Indicative Disturbance area (Attachment 10 Consultation summary_2023 and Attachment 24 Aboriginal Cultural Heritage Inquiry System results_2023). However, there is some potential for subsurface artefacts to be present near watercourses and where the land is in a naturalised state (not previously cleared) (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016–2017).

The Proponent intends to prepare an ACHMP in consultation with the Yued Aboriginal Corporation as the relevant Aboriginal group for the project. Consultation with the Yued Native Title Claim Group will be ongoing through construction, with members being present during ground disturbance work and revegetation work (Attachment 10 Consultation summary_2023).

Christmas trees (*Nuytsia floribunda*) are culturally significant to the Yued Noongar people and are known as 'Moodjar Trees' (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017). During Aboriginal heritage assessments in 2012 and 2016, the locations of 99 Moodjar Trees were mapped within the project area (Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017). The Yued Noongar people have requested that Moodjar Trees be avoided and protected from damage during the construction phase. The Indicative Disturbance area has been designed to avoid the identified Moodjar Trees and their immediate surroundings.

The Proponent will avoid impacts to Moodjar Trees where practicable. To avoid impacts to Moodjar Trees during construction, a buffer excluding all ground disturbance works will be placed around each tree where practicable.

9 Concluding remarks

Up to 5.5 ha of native vegetation clearing is proposed within the wind farm to create internal access tracks, install electrical underground cabling, hard stand areas and a viewing area and along the Transmission Infrastructure, which will connect the project's on-site substation to the Western Power's existing transmission network located to the west of the wind farm. This will be undertaken in non-contiguous discrete patches to avoid known locations of Threatened flora species and to minimise potential impacts to fauna species from habitat loss and fragmentation. Western Power's existing track will be used to provide access the transmission line alignment during construction.

The landholders, responsible agencies and interest holders for the easements in which native vegetation clearing is proposed (private landholders, DBCA, DPLH, Main Roads Western Australia, Shire of Dandaragan, APA Group and Western Power) have been consulted (Attachment 31 Landowner and easement interest holder consents_2023). The majority of landholders, responsible agencies and interest

[40] Department of Planning, Lands and Heritage. 2023. Aboriginal Cultural Heritage Inquiry System. https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS. Accessed 2 July 2023.

holders for the easements have provided their written consent to clear native vegetation within their lots, road reserves and easements, and the process of seeking their consent to clear is underway for DBCA and APA Group.

We trust this information is sufficient for your purposes, however, should you require further details or clarification, please do not hesitate to contact the undersigned.

Yours sincerely,
for RPS AAP Consulting Pty Ltd

[redacted]

att:

Attachment 1 WDWF-Infrastructure Map_2023
Attachment 2 WDWF-Solar Map_2023
Attachment 3 EPA historical determination and public advice_ 2011
Attachment 4 Shire of Dandaragan historical planning approvals_2012-2019
Attachment 5 DPLH historical licence approval_ 2018
Attachment 6 Key design changes_2023
Attachment 7 Figures A to F_2023
Attachment 8 SWALSC historical consultation, S18 consent and ACHMP_ 2016-2017
Attachment 9 Significance of impacts assessment_2023
Attachment 10 Consultation summary_2023
Attachment 13 Targeted Level 1 Vegetation and Flora Assessment Waddi_2010
Attachment 14 Spring Flora and Vegetation Survey and Black Cockatoo Habitat Survey_2014
Attachment 15 Supplementary Flora, Vegetation and Fauna Survey_2016
Attachment 16 Reconnaissance Flora and Vegetation Assessment_2023I
Attachment 17 Key flora and fauna findings_2010 – 2023
Attachment 20 Fauna Assessment_2014
Attachment 21 Black-Cockatoo habitat assessment_2022
Attachment 22 Native vegetation and plantation descriptions_2010–2023
Attachment 23 Review of unsurveyed planted trees_2023
Attachment 24 Aboriginal Cultural Heritage Inquiry System results_2023
Attachment 25 PMST report_2023
Attachment 26 DEC CPS 4608_2 clearing permit_2012
Attachment 27 DWER CPS 8449_1 clearing permit_2019
Attachment 28 DCCEEW determination_2023
Attachment 29 Application for a clearing permit (purpose permit)_2023
Attachment 30 Assessment bilateral agreement (Annex C7)_2023
Attachment 31 Landowner and easement interest holder consents_2023
Shapefile data; including the project, Indicative Works area, Indicative Disturbance area and native vegetation clearing area