

Department of Planning, Housing and Infrastructure

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Bullawah Wind Farm

State Significant Development Assessment Report (SSD-50505215)

July 2026





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Preface

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development SSD-50505215 application for the Bullawah Wind Farm located in the South West Renewable Energy Zone (REZ), lodged by BayWa r.e. Projects Australia Pty Ltd ('BayWa', the applicant).

The report includes:

- an explanation of why the project is considered/declared SSD and who the approval authority is;
- an assessment of the project against government policy and statutory requirements, including mandatory considerations;
- a demonstration of how matters raised by the community and other stakeholders have been considered;
- an explanation of any changes made to the project during the assessment process;
- an assessment of the likely environmental, social and economic impacts of the project;
- a comprehensive assessment and evaluation of the project including the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice to assist the Independent Planning Commission (the Commission) in making an informed decision about whether the project is in the public interest.

Executive Summary

This report details the Department of Planning, Housing and Infrastructure's (the Department's) assessment of the State significant development (SSD) application SSD-50505215 for the Bullawah Wind Farm. This report will be provided to the Independent Planning Commission (the Commission) for their consideration when deciding whether to grant consent to the SSD.

BayWa r.e. Projects Australia Pty Ltd ('BayWa') proposes to develop a wind farm with a capacity of up to around 804 megawatts (MW), located in the South West Renewable Energy Zone (REZ) at a site around 28 kilometres (km) southeast of Hay (the project). The site spans across three Local Government Areas (LGAs). The northern section of the site is in the Hay LGA, the eastern section is in the Murrumbidgee LGA and the southern section is in the Edward River LGA.

The project involves the development of up to 141 turbines with a maximum tip height of up to 300 metres (m), a 359 MW / 718 megawatt hour (MWh) battery energy storage system (BESS), connection to the Project EnergyConnect transmission line and other ancillary infrastructure.

The project has a capital investment value of \$2.507 billion and is expected to generate 380 construction jobs and 40 operational jobs. If approved, construction of the project is proposed to take three years.

Over the next decade, three of the four remaining coal fired generators in NSW are scheduled to retire, removing around 8.3 gigawatts (GW) of dispatchable electricity generation from the system. The NSW Government's *Electricity Infrastructure Roadmap* (the roadmap) provides a plan to coordinate investment in new generation and supports the delivery of 12 GW of new renewable electricity generation and 2 GW of long-duration storage in NSW by 2030. EnergyCo has identified the project as one of several major renewable energy generation projects with planned connections to the South West REZ transmission network.

The project is classified as SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposed development has received over 50 unique public submissions expressing objections to the project. Consequently, the Commission is the consent authority for the project in accordance with the EP&A Act. On 16 December 2025, the Minister for Planning and Public Spaces requested the Commission hold a public hearing for the project.

The Department publicly exhibited the Environmental Impact Statement (EIS) from 27 August 2024 until 23 September 2024. During the exhibition period, the Department received 87 submissions from the public (74 submissions from individuals, 10 submissions from special interest groups, and three from public authorities (the host local councils). Murrumbidgee Shire Council supported the project, while Hay Shire Council and Edward River Council provided comment. Key reasons for objections from members of the public are discussed further in Section 5 of this report and include impacts of the

project to amenity, biodiversity, transport and cumulative impacts. The Department also received advice from 18 agencies.

The Department engaged with local councils and relevant government agencies throughout the assessment of key issues and each recommended the implementation of appropriate mitigation and management measures. The Department also visited the area surrounding the project on 24 November 2024.

BayWa amended the project in April 2025 to refine its layout and construction assumptions (including removal of two turbines), and to assess additional transport route options for wind turbine components.

The key assessment considerations are energy transition, biodiversity, transport and visual impacts. The Department has also undertaken a comprehensive assessment of the full range of other potential impacts and recommended a range of detailed conditions, developed in conjunction with agencies and councils, to effectively minimise, manage or offset potential impacts.

The project would have the capacity to generate up to around 804 MW of renewable energy, sufficient to power around 463,400 homes per year. The project would save up to 1,725,600 tonnes of greenhouse gas emissions per year and would make a material contribution towards the State meeting its net zero targets and the renewable energy objectives of the roadmap.

The project is within the South West REZ, which has good wind resource potential and would connect directly to the existing and proposed transmission lines within the South West REZ that have available network capacity. EnergyCo has granted access rights and allocated 262.3 MW of capacity for the project to connect to the Project EnergyConnect 330 kV transmission line. The project is also located on land where wind development is permissible with consent.

The project has been designed and refined to avoid and minimise biodiversity impacts to high value vegetation. The majority of the project area is comprised of native grassland and chenopod shrubland, with a smaller proportion of vegetation consisting of a mosaic of freshwater wetlands and open woodland. The Department considers that the vegetation clearing impacts of the project would not be significant, subject to the implementation of mitigation and adaptive management measures, the recommended conditions (developed in consultation with the Conservation Programs, Heritage and Regulation Group (CPHR) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW)) and through offsetting biodiversity impacts.

The project has the potential to result in impacts to bats and avifauna, due to removal of native vegetation and risk of collision with turbines. The Department considers that BayWa has made efforts to avoid and minimise these potential impacts, through locating infrastructure away from sensitive areas and avoiding mapped Important Habitat for the endangered Plains-wanderer. The Department has recommended a condition requiring adaptive management in a Bird and Bat Adaptive

Management Plan (BBAMP) including detailed monitoring and a trigger action response plan to minimise potential impacts of the project and the implementation of measures to reduce the mortality of those species or populations.

The Department considers that the project would manage potential impacts on the capacity, efficiency and safety of the road network. Potential impacts would be largely restricted to the construction period and would be suitably managed through road upgrades, restricting vehicles to approved routes, road maintenance and the implementation of a Traffic Management Plan.

BayWa has reduced the number of proposed turbines from the early conceptual layout as part of the iterative project design process and further reduced these numbers in both the EIS and amendment reports. There are no non-associated receivers located within 5.9 km of the nearest proposed turbine (within the 'blue line' of the *NSW Wind Energy Guideline's Visual Assessment Bulletin* (2016)). Most dwellings benefit from distance, intervening topography and screening from existing mature vegetation between viewpoints and the project. The visual performance objectives set out in the Visual Assessment Bulletin would be achieved at all receivers. The Department is satisfied that the project would not fundamentally change the broader landscape characteristics of the area or result in any significant visual impacts on the surrounding non-associated residences.

The Department has carefully considered the likely environmental, social, and economic impacts of the project in accordance with the requirements of section 4.15 of the EP&A Act.

Overall, the Department's assessment concludes that the project would result in benefits to the State of NSW including providing renewable energy in the South West REZ and in an area that has available network capacity.

The Department has not provided an overall recommendation but rather has undertaken a comprehensive assessment and evaluation of the project to inform the Commission to make its decision on whether the project is in the public interest. Should the Commission determine to approve the project, the Department has provided recommended conditions.

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1 Introduction

1. Bullawah Wind Farm Pty Ltd, a subsidiary of BayWa r.e. ('BayWa'), proposes to develop the Bullawah Wind Farm (the project). The site is located approximately 28 kilometres (km) southeast of Hay in the Riverina region of south western NSW, within the Murrumbidgee, Hay and Edward River local government areas (LGAs) (see Figure 1).



Figure 1 | Regional context map

2 Project

2. BayWa is proposing to develop a wind farm with up to 141 wind turbines, with a maximum tip height of 300 metres (m). The project would have a nameplate capacity of up to approximately 804 MW, capable of generating up to 2,615 gigawatt hours (GWh) of electricity annually.
3. The project also includes a battery energy storage system (BESS) with a capacity of up to 359 MW / 718 MWh and up to three substations.
4. The project would be constructed within a development corridor of variable width (to avoid key site constraints) and generally includes a radius of up to 200 m around all wind turbine locations and a 25 m wide area for access tracks. The development corridor would allow for micro-siting of wind turbines and other project infrastructure. BayWa has also assessed a disturbance footprint within the development corridor and other areas where off-site road works are proposed.
5. BayWa has assessed a maximum tip height of 300 m for all components of the assessment including biodiversity, visual and noise, except for the transport of wind turbines from the Port of Newcastle or Port Adelaide to Hay. The transport assessment (from Port to Hay) was based on smaller wind turbine dimensions, with a maximum tip height of up to 233 m, hub height of up to 148 m and blade length of up to 80 m. BayWa considers that a third-party may undertake future road upgrades to accommodate larger turbine components between Port and Hay, and is seeking flexibility to transport and install larger turbines if such upgrades are completed (see **Section 6.4**).
6. The project is proposed to be constructed and commissioned in two stages – Stage 1 (South) and Stage 2 (North) – with each stage connecting to different transmission lines, as described in **Table 2-1**. The location of works for each stage is shown on **Figure 3**.
7. The key components of the project are shown in **Table 2-1** and **Figure 2** and described in the Environmental Impact Statement (EIS) (**Appendix A**), submissions report (**Appendix C**), amendment report (**Section 5.2** and **Appendix D**) as well as additional information provided during the Department's assessment of the project (**Appendix E**).

Table 2-1 | Key components of the project

Aspect	Description
Project summary	- Up to 141 turbines and associated infrastructure (up to 804 MW capacity) - BESS with a capacity of up to 359 MW / 718 MWh and up to three substations
Project area	- Project area: 20,629 hectares (ha) - Development corridor: 4,274 ha - Disturbance footprint: 656.5 ha, comprising: - Disturbance footprint within the development corridor: 637 ha - Disturbance footprint for off-site road works: 19.5 ha
Wind turbine dimensions	- Maximum tip height of 300 m - Maximum turbine hub height of 200 m - Maximum blade length of 100 m Transport of wind turbines from the Port of Newcastle or Port Adelaide to Hay, NSW has been assessed based on alternate, smaller maximum wind turbine dimensions (see Section 6.4).
Ancillary infrastructure	- Grid connection: - Stage 1 of the project would connect to the existing Transgrid 220kV transmission line which traverses the project area. BayWa has indicated Stage 1 includes the connection of 58 turbines (330.6 MW) to this existing line. - Stage 2 would connect to Project EnergyConnect 330 kV transmission line and includes 83 turbines (473.1 MW). - On 12 April 2025, the project was granted access rights and allocated 262.3 MW of capacity to connect to the approved Project EnergyConnect 330 kV transmission line in the South West REZ. This equates to around 46-48 turbines of those currently proposed in Stage 2. - BayWa indicated it would proceed with approval for all turbines in the case that augmentation occurs to the network and they can increase their connection capacity. - Permanent ancillary connection infrastructure including main and collector substations, switchyards and underground and overhead electricity transmission lines and poles. - Other permanent infrastructure including hardstand, new access tracks, upgrades to existing access tracks, access points from public roads, operation and maintenance buildings, telecommunications facilities, meteorological masts and water storage tanks. - Temporary facilities such as construction compound site office buildings, laydown areas, storage areas, on-site concrete batching plants, on site borrow pits, temporary workforce accommodation camp and site signage.
Access routes	- Construction vehicles would travel from the intersection of the Cobb Highway and Jerilderie Road at Hay to the site and would access the site via one of 13 access points along Jerilderie Road, North Boundary Road or Bullelah Road. A fourteenth access point would provide access to and from the temporary workers accommodation from Bullelah Road. - Oversized and over-mass (OSOM) vehicles would travel from the Port of Newcastle or Port Adelaide to Hay (see Section 6.4). These routes are: - from the Port of Newcastle with varying maximum loaded height restrictions: Route 1 via NorthConnex, Route 2 via Central West and Route 3 via Pennant Hills Road - from Port Adelaide, via Robinvale. - Several route options have been assessed for heavy vehicles transporting materials from existing off-site quarries (if required) to the south and northeast of the project area (see Section 6.4).

Aspect	Description
Off-site road works	- Road upgrades in discrete areas along the five Port to Hay transport routes to enable use by oversized and over-mass (OSOM) vehicles. - Upgrades to the local transport route between the project area and the town of Hay, including at the intersection of the Cobb Highway and Jerilderie Road, widening of North Boundary Road and the maintenance and use of roadside parking areas along Jerilderie Road during the construction period. - Upgrade to the intersection of Willurah Road and Carrathool Road (south of the project area) to accommodate heavy vehicles travelling to and from off-site quarries via this intersection.
Construction	Approximately three-year construction period (35 months) with an additional six-to-eight-month period of pre-construction minor works.
Operation	Approximately 30 years. The project may be upgraded during this time to extend its operation.
Decommissioning and rehabilitation	The project would include decommissioning at the end of the project life, which would involve removing all above ground infrastructure.
Subdivision	- Subdivision of the following lots may be required to create new allotments for substations: - Lot 26 of DP 750891 and Lot 86 of DP 750891 for the main substation - Lot 117 of DP 756317 for the 220kV switchyard.
Employment	Peak of 380 jobs with an average of 182 jobs during construction phase and approximately 40 jobs during the operational phase.
Capital Investment Value	\$2.507 billion
Voluntary Planning Agreement (VPA)	- Benefit sharing would be undertaken at a rate of \$1,050 per MW generated. - A total of 85% would be provided under VPA to the three host Councils and 15% of the annual contributions would support First Nations. - Hay Shire Council and Edward River Council (37.5%) – An annual contribution of up to approximately \$233,000 per year (excl. GST and indexed to CPI; dependent on the final size of the project) paid over the operational life of development - Murrumbidgee Council (25%) – An annual contribution of up to approximately \$155,000 (excl. GST and indexed to CPI; dependent on the final size of the project) paid over the operational life of development.

FIGURE 1.1

Amended Project Layout

Legend

- Project Boundary
- Development Corridor
- Wind Turbine Generators
- Host Residence
- Associated Residence (Visual Impact)
- 220kV Transmission Poles
- 330kV Transmission Poles
- ▲ Site Access Points
- ▲ Permanent Meteorological Masts
- Temporary Met Mast (As Built)
- Tracks Connecting Hardstands
- Hardstand Area
- Cable Corridor
- 330kV Project Energy Connect Line
- 220kV External Transmission Line
- 330kV Internal Transmission Line (North to Central)
- 220kV Internal Transmission Line (Central to South)
- Main Temporary Laydown
- Temporary Satellite Laydown
- Main Temporary Construction Compound
- Temporary Construction Compound
- Temporary Workers Accommodation Compound
- Operations and Maintenance Facility
- Collector Substation
- 220 kV Switchyard
- Switchyard Laydown Area
- Main Substation
- Main Substation Temporary Laydown
- Battery Storage
- Quarry South (Current)
- Quarry South (Proposed)
- Quarry North
- NPWS Reserves
- Road

0 1 2
Kilometres

Scale 1:110,000 at A4
GDA2020 MGA Zone 55

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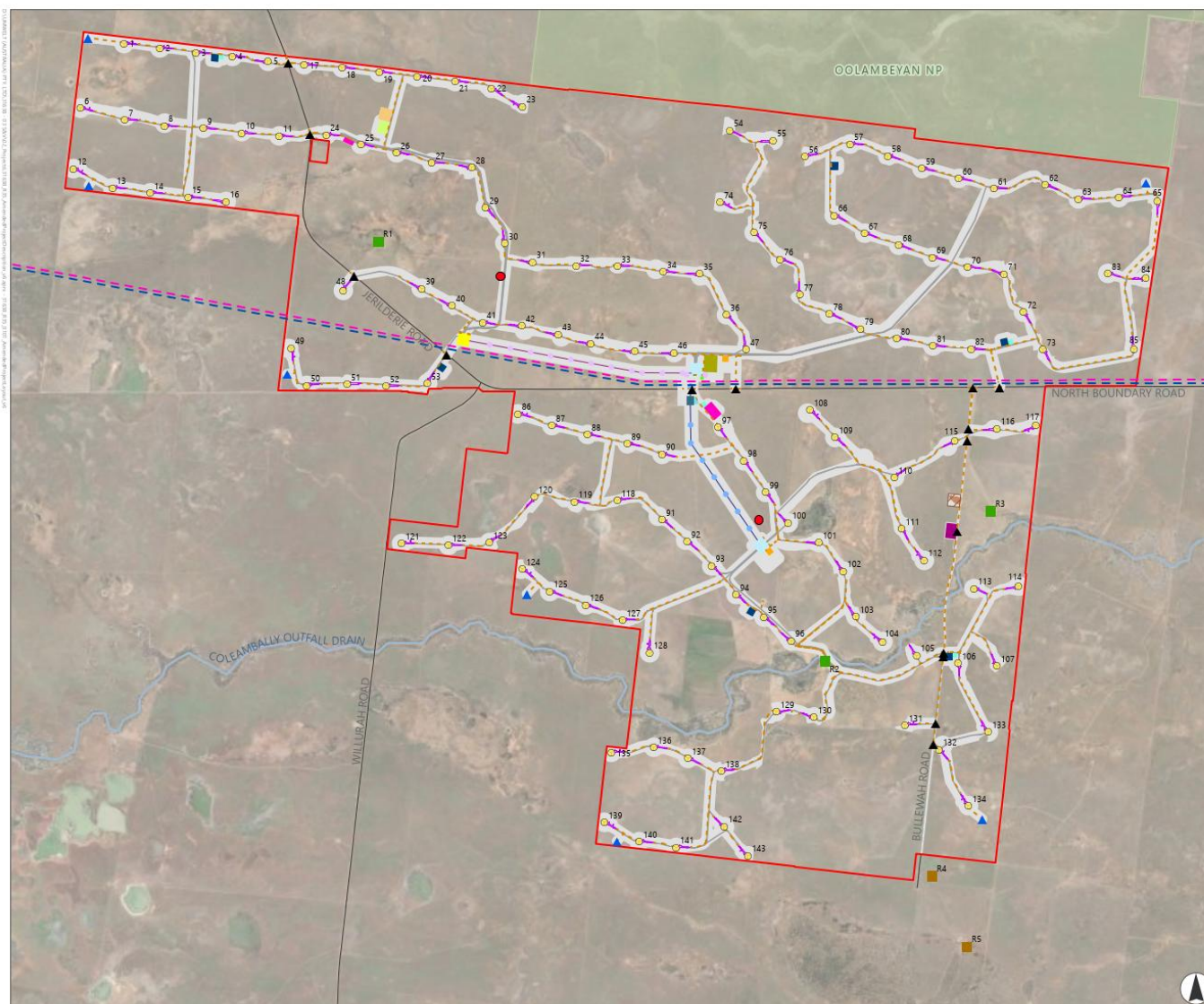


Image Source: ESRI Basemap (2023) | Data Source: NSW DFSI (2023)

Figure 2 | Project layout (as amended)

FIGURE 1.2
Conceptual Project Staging

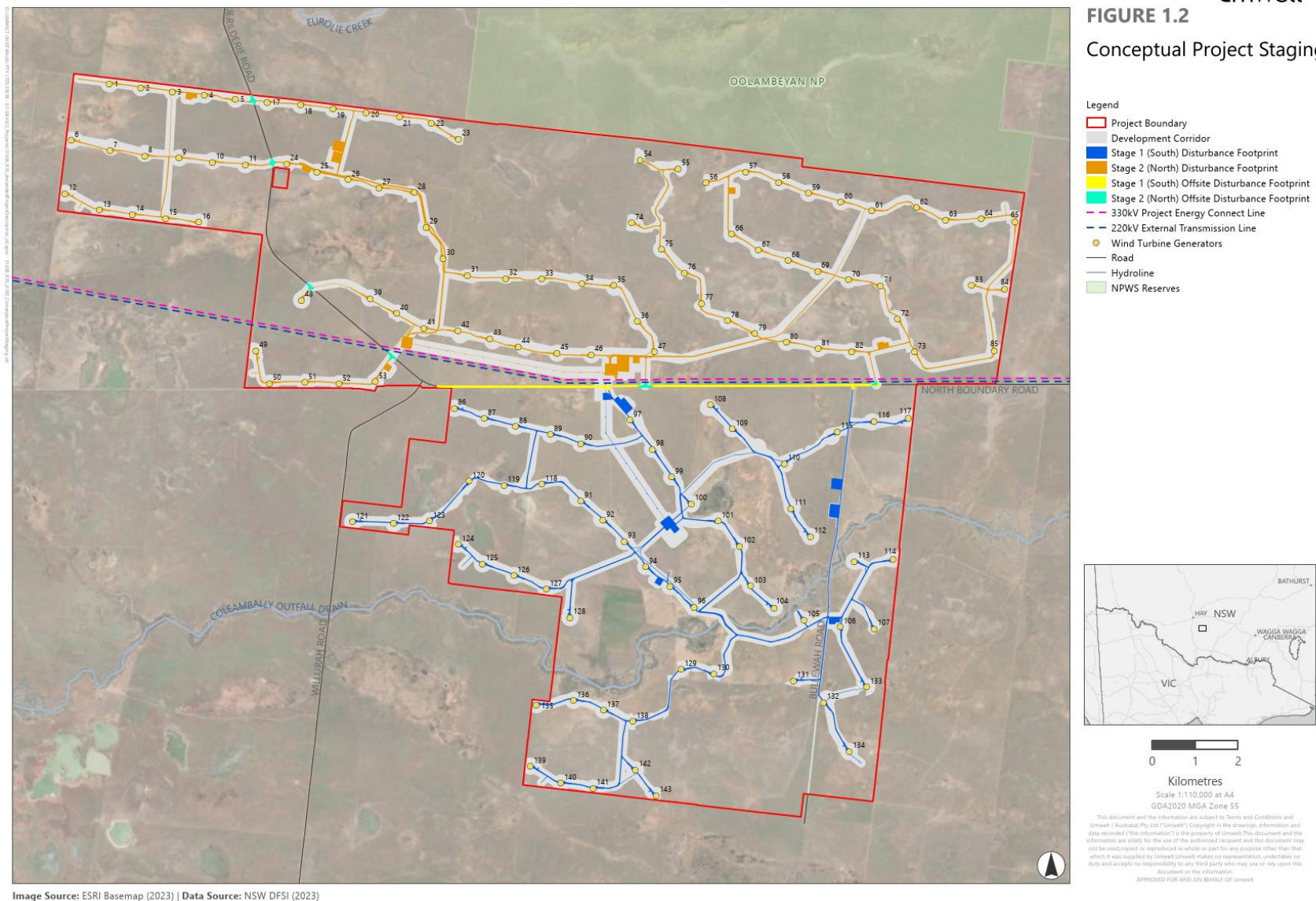


Figure 3 | Project staging approach

3 Strategic context

3.1 Site and surrounds

8. The project is located in the South West REZ, an area identified as strategically advantageous with strong renewable energy potential, proximity to existing and future high voltage transmission infrastructure including Project EnergyConnect and is considered suitable based on the potential interactions with existing land uses, including agriculture and biodiversity conservation.
9. The project area currently comprises predominantly grazing land and adjoins the Oolambeyan National Park directly to the north. Land within the project area has been primarily subject to sheep grazing, with some cattle grazing and cropping activities. The surrounding area is a largely rural landscape with farming infrastructure and a small number of rural residential dwellings. The area has been subject to extensive historical clearing for agricultural uses and is generally homogenous, agricultural land. There is no mapped Biophysical Strategic Land (BSAL) within the project area.
10. The project is located near the localities of Coleambally, Darlington Point, Deniliquin, Hay and Jerilderie with a cumulative population of 12,770. The largest population centres nearby include Hay (located 28 km northwest of the project) and Deniliquin (located 90 km south of the project), with approximate populations of 2,400 and 7,900, respectively.
11. The area surrounding the project area is sparsely populated, with few neighbours located on large land holdings. There are three associated receivers (for visual impact) within 4 km of a proposed wind turbine (i.e. within the 'black line' identified in the Visual Assessment Bulletin which has been used to assess visual impacts of the projects). All other non-associated receivers are more than 5.9 km of the nearest proposed wind turbine (i.e. outside of the 'blue line' in the Visual Assessment Bulletin). Potential amenity impacts are discussed further in Section 6.5.
12. The topography is relatively flat with an elevation ranging from 94 and 105 m Australian Height Datum (AHD). The project area includes plains of native grassland and semi-arid shrublands.
13. The site is located within the lower Murrumbidgee River Catchment in southern NSW. Numerous minor water courses are present on the site. The area drains in a southwestern direction following the Coleambally Outfall Drain to Billabong Creek and eventually to Edward River and then the Murray River.

3.2 Other energy projects

14. There are multiple State significant developments within the broader region including existing and approved wind and solar farms which are outlined in Table 3-1.

Table 3-1 | Nearby energy generation or storage projects

Project	Capacity	Status	Distance from the project
Pottinger Wind Farm	1300 MW	Approved	Adjacent
Pottinger Solar Farm	300 MW	Preparing EIS	Adjacent
The Plains Wind Farm	1230 MW	Under assessment	7 km west
Dinawan Wind Farm	1200 MW	Under Assessment	9 km west
Yanco Delta Wind Farm	1500 MW	Approved	15 km southeast
Hay Solar Farm	110 MW	Approved	36 km northwest
Dinawan Solar Farm	800 MW	Approved	39 km southeast

3.3 Energy policy context

15. In 2024, NSW derived approximately 37% of its energy from renewable sources. The rest was derived from fossil fuels, including 60% from coal and 3% from gas. NSW is one of the nation's leaders in large-scale renewables, with 47 major operational projects (wind and solar).
16. The Commonwealth and the State energy context is described in Table 3-2.

Table 3-2 | Energy context

Policy	Consideration
Australia's Long Term Emissions Reduction Plan (2021) and Nationally Determined Contribution (2022)	Sets a pathway to net zero emissions by 2050 and affirms Australia's commitment to meeting its revised 2030 target (43% below 2005 levels).
Climate Change (Net Zero Future) Act 2023	Legislates a whole of government climate action to deliver net zero by 2050.
Australian Energy Market Operator's 2026 Integrated System Plan	Note that: - as coal retires, investment is needed to meet significantly increased electricity demand requiring a significant increase in large-scale variable renewable energy generation (wind and solar) - a mix of solar and wind is needed and they offer complementary daily and seasonal profiles.
NSW: Climate Change Policy Framework (2016) Transmission Infrastructure Strategy (2018)	Relevant aspects of these policy documents include: - aim to achieve net zero emissions in NSW by 2050 - note that all coal fired power plants in NSW are scheduled for closure within the next twenty years

Policy	Consideration
Electricity Strategy (2019)	- identifies Renewable Energy Zones (REZ) across NSW, including in the South West REZ, aimed at encouraging investment in electricity infrastructure and unlocking additional generation capacity in order to secure reliable energy in NSW - notes the need to expand transmission infrastructure into REZs to open new parts of the grid for renewable energy projects - unlock regional investment and new energy generation infrastructure - support well located renewable energy projects and the consequent transition away from fossil fuels.
Electricity Infrastructure Roadmap (2020)	
Net Zero Plan Stage 1: 2020 – 2030 (2020) and Implementation update (2022)	
Riverina Murray Regional Plan 2041 (2023)	

3.4 NSW Wind Energy Framework

17. In December 2016, the Department released the NSW Wind Energy Framework (the Framework). The Framework seeks to provide greater clarity, consistency and transparency for industry and the community regarding assessment and decision-making on wind energy projects.
18. The Framework provides a merit-based approach to the assessment of wind energy projects, which is focused on the issues unique to wind energy, particularly visual and noise impacts. The key documents comprising the Framework include Wind Energy Guideline; Visual Assessment Bulletin; and Noise Assessment Bulletin.
19. The Department's assessment of the project against the requirements of the Framework is detailed in Section 6.
20. The Department is implementing a new Energy Policy Framework to help achieve the transition to renewable energy, reduce emissions and secure an affordable supply of electricity for the people of NSW. The Energy Policy Framework includes a new Wind Energy Guideline, which includes updates to the existing wind energy guideline. However, the new Energy Policy framework does not apply to the assessment of this project as the EIS was lodged prior to its finalisation in November 2024.
21. While the new Energy Policy Framework does not strictly apply to this project, the Department has considered the approach prescribed in the Wind Energy Visual Technical Supplement (2024) in regard to visual magnitude in its assessment of the project against the visual performance objectives set out in the Wind Assessment Bulletin (2016).

4 Statutory context

4.1 State significant development

22. The project is classified as State significant development under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it meets Clause 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP), as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million.
23. Under section 4.5(2) of the EP&A Act and section 2.7 of the Planning Systems SEPP, the Commission is the consent authority for the development as the project has received more than 50 unique public submissions by way of objection. Further, on 16 December 2025, the Minister for Planning and Public Spaces requested the Commission hold a public hearing for the project.

4.2 Permissibility

24. The project area is located on land zoned as RU1 – Primary Production under the *Hay Local Environmental Plan 2011* (Hay LEP), *Edward River Local Environmental Plan 2013* (Edward River LEP) and *Murrumbidgee Local Environmental Plan 2013* (Murrumbidgee LEP). The area of off-site road works associated with widening at the intersection of the Cobb Highway and Jerilderie Road is zoned SP2 Infrastructure under the Hay LEP.
25. The RU1 zone includes various land uses that are permitted with and without consent. Under the Hay, Edward River and Murrumbidgee Local LEPs, electricity generating works are not expressly listed as permitted with or without consent and are therefore a prohibited land use.
26. However, electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including land zoned RU1, under section 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP). Consequently, the project is permissible with development consent.
27. Objectives of the SP2 Infrastructure zone are to provide for infrastructure and related uses and to prevent development that is not compatible with the provision of infrastructure. The augmentation of the existing infrastructure would be compatible with the objectives of this zone.
28. The proposed subdivision of lots (see Table 2-1) would be below the minimum lot size of 200 ha and would be prohibited under both the Murrumbidgee and Edward River LEPs. Section 4.83(3) of the EP&A Act allows development consent to be granted for SSD applications where the development is partially prohibited. While the consent authority can override a partial prohibition

for SSD, it must assess the merits of such a decision. The Department has considered the merits of the subdivision as follows:

- the Councils did not raise concern with the subdivision;
- it is necessary for the operation of the substations;
- it would not result in additional dwelling entitlements on the subdivided lots;
- the project aligns with the RU1 zone's key objective by supporting diversity of primary industry enterprises; and
- the Department has fully considered the impacts of the project and considers it can be approved.

4.3 Integrated and other approvals

29. Under section 4.41 of the EP&A Act, several approvals are integrated into the SSD approval process and consequently are not required to be separately obtained.
30. Under section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).
31. The project area boundary has been designed to avoid Crown land reserves, however, includes roadways administered by Crown Lands (referred to as Crown roads). As the project area includes Crown roads, further authorisations are required under the *Crown Land Management Act 2016* prior to its use. Crown Lands have submitted advice to BayWa in regard to limited access to site from Crown roads and reserves and the importance of the travelling stock route that intersects the project area. Crown roads are not part of the site access and would not be used during construction or operation.
32. The Department has consulted with the relevant government agencies responsible for these integrated approvals in its assessment of the project (see **Section 5.4**), considered their advice in its assessment of the merits of the project and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix F**).

4.4 Mandatory matters for consideration

33. Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. The Department has considered these matters in its assessment of the project in **Section 6** of this report. The Department has also considered relevant provisions of the environmental planning instruments as presented in **Appendix H**.

4.4.1 Objects of the EP&A Act

34. In determining the application, the consent authority should consider whether the project is consistent with ecologically sustainable development (ESD). Consideration of these factors is described in **Appendix H**. The Department is satisfied that the development is consistent with the objectives of the EP&A Act and the principles of ESD.
35. The Department notes that the objects and requirements for evaluation (section 4.15) in the EP&A Act were changed in recent reforms. While those changes came into effect on 15 December 2025, they do not apply to projects that were lodged before this date and therefore do not apply to this project.

4.4.2 Biodiversity Conservation Act 2016

Biodiversity Development Assessment Report

36. Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all SSD applications to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless it is determined that the project is not likely to have any significant impact on biodiversity values. The impact of the project on biodiversity values is assessed in **Section 6.3**.
37. The EIS included a BDAR which was prepared in accordance with the Biodiversity Assessment Methodology (BAM). The BDAR was updated to address comments raised in submissions on the project and to account for project amendments. A revised BDAR was provided to the Department in September 2025. The Department has considered the findings of the revised BDAR and the advice from the Conservation Programs, Heritage and Regulation Group (CPHR) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) in its assessment.

Concurrence

38. Concurrence from the NSW Minister for the Environment is required in accordance with section 7.14 of the BC Act for State significant projects where a consent authority decides to grant development consent with a condition other than to retire the number and class of biodiversity offset credits detailed in the final BDAR.
39. The Department has recommended conditions that require the retirement of the number and class of biodiversity offset credits detailed in the final BDAR however allows BayWa to reduce the total biodiversity credit liability post approval. It is intended that this may be achieved through the further avoidance of impacts to biodiversity values as a result of detailed design works, micro-siting wind turbines and ancillary infrastructure.

40. This approach to conditions is intended to provide an incentive to BayWa to reduce the biodiversity impact of the project reflecting the avoid, minimise and offset hierarchy set out as the purpose of the BC Act.
41. This approach to conditions will require concurrence from the NSW Minister for the Environment should the Commission decide to grant development consent with this approach to conditions.

4.5 Commonwealth Matters

42. On 20 March 2023, a delegate of the Commonwealth Minister for the then Department of Agriculture, Water and the Environment (DAWE) (now the Australian Government Department of Climate Change, Energy, the Environment and Water (AG DCCEEW)) determined the project (EPBC 2022/09423) to be a 'controlled action' in accordance with section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) due to the likely significant impacts to listed threatened species and communities (sections 18 and 18A).
43. The Department's assessment of the potential impacts of the project on controlling provisions under the EPBC Act relating to biodiversity is provided in **Section 6.3**. Further information on the matters that the Commonwealth Minister must consider under the EPBC Act is provided in **Appendix J**.
44. The Department consulted with the AG DCCEEW in accordance with the bilateral agreement and provided draft copies of this assessment report and the recommended conditions of approval to the AG DCCEEW for comment. Advice provided by AG DCCEEW on potential impacts to listed threatened species and communities and listed migratory species has been incorporated into this assessment report.

4.6 Draft Development Consent

45. The Department has included discretion in a small number of the draft conditions as a mechanism for an Applicant to seek approval from the Planning Secretary for minor matters that do not warrant a modification application. Such matters include timing of road upgrades, timing of management plans and improvements to battery technology that have no additional environmental impact.
46. This discretion is subject to the same level of scrutiny and assessment as any modification, against applicable legislation, policies and guidelines. Importantly, consultation is undertaken with all stakeholders relevant to any particular request, including councils, agencies, roads authorities and the public.

47. NSW has an urgent need for renewable energy generation and technologies are rapidly advancing. Some detailed design factors are only known upon financial close or execution of contracts with contractors, which occurs post development approval.
48. This discretion is a crucial tool in providing an avenue to achieve outcomes and resolutions for progressed projects that are working towards construction or are under construction.
49. In summary, the Department provides Planning Secretary's discretion provisions to:
 - account for updated technology at the time of construction from the time of approval, allowing applicants to construct and utilise technologies which would not result in additional impacts; and
 - account for changes required when an applicant receives financial investment and can appoint contractors. The appointment of these contractors often necessitates some project refinements as project details are finalised;
 - provide scope for applicants where changes would not be sufficient enough to warrant a modification; and
 - account for works already undertaken, for example should the required road upgrades be delivered by another party (including roads authorities) as part of broad network upgrades.
50. Significantly, any discretion is only ever granted following the Department's assessment of the request, which is undertaken in consultation with relevant stakeholders.

5 Engagement

- 51. The Department publicly exhibited the EIS from 27 August 2024 until 23 September 2024 (28 days) on the NSW Planning Portal.
- 52. The exhibition was advertised in *The Irrigator*, *The Deniliquin Pastoral Times* and *The Hay Riverine Grazier*. As the project is a ‘controlled action’ under the EPBC Act, a newspaper advertisement was placed in *The Australian* newspaper on 22 August 2024 in accordance with the NSW Assessment Bilateral Agreement.
- 53. The Department also consulted with affected local councils and members of the community during its detailed assessment of the project. The Department notified and invited comment from the Energy Corporation of NSW (EnergyCo), Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP as discussed further in Section 5.3.

5.1 Summary of public submissions

- 54. During the public exhibition period, the Department received 87 unique submissions; 68 objecting to the project, 17 in support and two providing comment. An overview of the proximity of the submitters to the project is provided in Table 5-1. A link to all submissions is provided in Appendix B. The Department has carefully considered the submissions as part of its assessment presented within Section 6.
- 55. While a majority of public submissions (about 78%) objected to the project, most objections (63 submissions, 93% of the objections) came from people living further than 50 km from the project area, including 20 from interstate. No objections came from people residing within 15 km of the project area.

Table 5-1 | Submitters proximity to project

Submitter	Object	Support	Comment	Total
<5 km	0	1	0	1
5–15 km	0	0	0	0
15-50 km	5	4	0	9
> 50 km**	63	12	2	77
Total	68	17	2	87

** Includes interstate submissions

5.1.1 Submissions in objection

56. The matters raised in submissions objecting to the project included:

- decommissioning, waste and contamination;
- biodiversity impacts including impacts to the Plains-wanderer, clearing of native vegetation, impacts on habitat connectivity and blade strikes to birds and bats;
- socio-economic factors including division in the community and impacts on community wellbeing;
- general objections to the project and renewable energy projects more broadly;
- loss of agricultural land and impacts to local agricultural practices and production;
- impacts of the project on water and soils both across the project area and within areas adjoining the site;
- impacts to human health during operation and decommissioning;
- noise and vibration from the construction and operational phases of the project;
- increased fire risk and limitations to firefighting capabilities; and
- visual impacts, including the potential for cumulative visual impacts with other nearby energy projects.

57. The key issues raised in public submissions are shown in Figure 4.

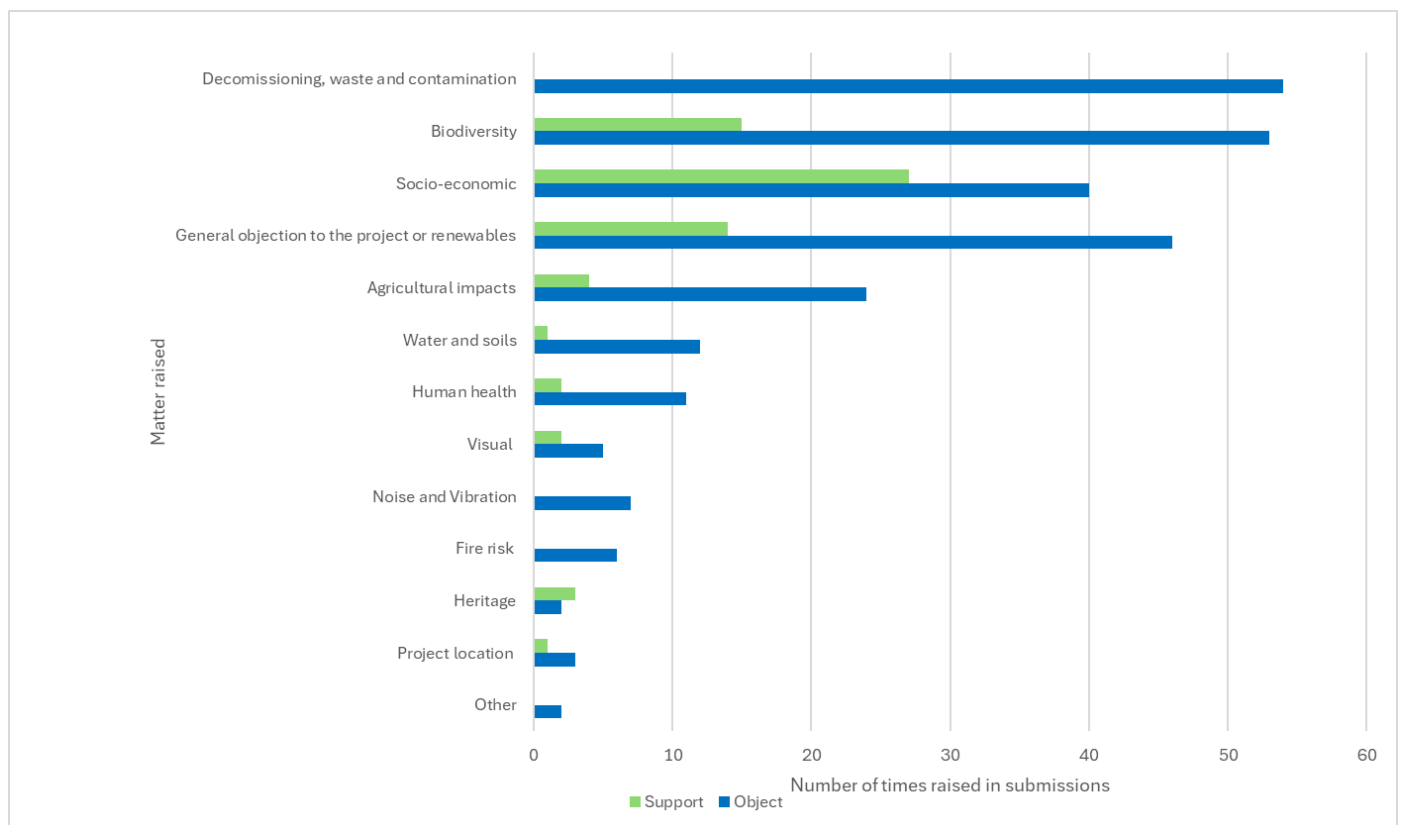


Figure 4 | Key issues raised in public submissions

5.1.2 Submissions in support and comments

58. Submissions in support of the project noted the social and economic benefits of the project associated with a perceived increase in tourism, benefits to local businesses, the creation of jobs and the benefits of renewable energy.
59. Submissions also identified that the project would contribute to energy sustainability in NSW and assist in the transition away from fossil fuel powered energy to lower emissions generating technology.

5.1.3 Special interest groups

60. Ten submissions were from special interest groups, with matters raised by these groups shown in Table 5-2.

Table 5-2 | Special interest group submissions

Position	Groups	Matters raised
Object (8)	SOS Moulamein	Decommissioning, contamination and waste generation
	SOS Barham	General objections to renewable energy
	Rainforest Reserves Australia	Visual amenity
	Save our Surroundings	Noise impacts
	Murrumbidgee	Traffic impacts
	Save our Surroundings Riverina	Biodiversity impacts
	National Rational Energy Network Inc.	Loss of agricultural land
	Save our Surroundings (SOS)	Fire risk
	CWO REZist Inc.	Foreign ownership/investment
		Cost of power
		Aboriginal cultural heritage
		Pressure on local services
		Cumulative impacts
		Aviation impacts
		Lack of consultation
Support (2)	FW & RB Crighton Rural Eng Pty LTD (Trading as Crighton's)	Community benefit sharing program
		Job creation
	Country Education foundation of Coleambally-Darlington Point Inc.	Minimal visual impacts

5.2 Response to submissions and amended application

61. Following the public exhibition period, the Department requested that BayWa respond to the issues raised in submissions and the advice received from government agencies. BayWa provided a submissions report addressing the issues raised in agency advice and in submissions by the community and Councils (see **Appendix C**).

62. In accordance with section 37 of the EP&A Regulation, a development application can be amended at any time before the application is determined. An application can be amended with the agreement of the consent authority (i.e. the Commission for this development), however, under the delegation dated 14 June 2022, the Director, Energy Assessments can agree to amendments to an application.
63. BayWa sought to amend its application on one occasion. The amendment report is provided in **Appendix D** and the amended project is described in **Section 2**. Amendments to the project included:
- revised construction staging and timing assumptions – including the earlier commencement of Stage 2 (North) compared to the timing considered in the EIS, a subsequent increase in peak workforce volumes and shorter overall construction program duration;
 - transport route amendments – including the assessment of new OSOM route options from the Port Adelaide to Hay in addition to alternate route options from the Port of Newcastle; and
 - project design amendments – including
 - removal of two wind turbines from the project design;
 - provision of obstacle lighting on select wind turbines and meteorological masts in accordance with CASA requirements; and
 - consideration of a reduced maximum turbine size (being a tip height of up to 233 m with a blade length of up to 80 m) (Table 2-1), for the assessment of Port to Hay OSOM transport routes.
64. As the amendments would not have a material environmental impact beyond the impacts expected by the initially proposed project, the Department did not exhibit the amendment report. The Department considers that it can accept the amendments to the application for the following reasons:
- the amendments directly respond to key issues raised in submissions received by the Department during the exhibition of the original application;
 - the amendments have reduced the impacts of the project as a whole;
 - BayWa assessed the impacts of the amended project (see **Appendix D**); and
 - the Department made the additional information available online and sent it to the relevant agencies for comment.
65. The Department published both the submissions report and amendment report on the NSW Planning Portal and provided them to government agencies and local councils for comment on 16 April 2025.

5.3 Summary of advice received from government agencies

66. The Department received advice from 18 government agencies and groups within government. A summary of the agency advice is provided in Table 5-3. A link to the full copy of the advice is provided in Appendix C.
67. Three of the 18 agencies/groups, being the Department of Primary Industries and Regional Development (DPIRD) – NSW Resources, Water NSW and Telco Authority, raised no concerns or provided no comment.

Table 5-3 | Summary of agency advice

Agency	Advice summary
Conservation Programs, Heritage and Regulation (formerly Biodiversity, Conservation and Science Group) (NSW DCCEEW CPHR)	- Following review of the EIS, NSW DCCEEW CPHR: - requested that a Bird and Bat Adaptive Management Plan (BBAMP) be prepared to demonstrate how impacts would be avoided and managed - commented that baseline bird and bat surveys need to be conducted over a greater proportion of the site and flight paths need to be mapped to inform avoidance - requested further detail on the avoidance of impacts to Serious and Irreversible Impacts (SAIL) including to the critically endangered Plains-wanderer and residual indirect and prescribed impacts, - requested revision of vegetation zone identification of Threatened Ecological Communities (TECs) and credits updated to reflect these amendments - required proposed mitigation measures included in EIS to be more specific and assessable as required by the Biodiversity Assessment Method (BAM) - Following review of the submissions and amendment reports (included an amended BDAR): - requested further information on the potential SAIL to the Plains-wanderer including updated justification of habitat mapping methodology and species credits - provided recommendations to be included in the Plains-wanderer Management Plan - Following review of an additional amended BDAR (V3): - considered the project would be likely to result in SAIL to the Plains-wanderer, and recommended expert advice be sought - provided comments and further recommendations for BayWa's proposed approach to the Plains-wanderer Management Plan.
National Parks and Wildlife Service (NPWS)	- Following review of the EIS, NPWS requested that impacts to the adjoining Oolambeyan National Park and surrounding National Parks be addressed including: - noise and vibration impacts - impacts to landscape amenity resulting from night lighting - consideration of NPWS's use of aviation, including use of nearby helipads - recognition of NPWS's role as a firefighting authority relevant to the development site - Following review of the submissions and amendment reports: - requested further consideration of noise and vibration impacts on wildlife occupying Oolambeyan National Park, including the Plains-wanderer

Agency	Advice summary
	– recommended more stringent assessment criteria be applied to noise impacts at the Oolambeyan National Park, noting NPWS’ position that noise levels above 40dB(A) have the potential to impact wildlife.
Transport for NSW (TfNSW)	• Following review of the EIS, TfNSW requested further or updated information including: – turn warrant assessments for each project access and intersection – strategic designs for proposed road upgrades – detail of traffic impacts of pre-construction works and works associated with accommodation facilities – further detail on high risk OSOM route assessments to inform the required road upgrades, such as bridge and culvert assessments, impacts to rail corridors and overhead powerlines along the routes, and consideration of other TfNSW or third-party projects and alternative routes via Newcastle Inner City Bypass to Newcastle Road – assessment of pull over and rest stop locations – noted that the location and extent of any Port to Hay roadworks (should they be completed under an agreement with TfNSW and EnergyCo) have not been determined – commented that some of BayWa’s proposed routes are not approved for night travel • Following review of the submissions and amendment reports, an amended traffic impact assessment (TIA) and additional information provided: – highlighted unresolved comments from previous advice, including in relation to strategic designs, bridge and culvert assessments and OSOM assessment assumptions – requested clarification on turn warrant assessments provided by BayWa – requested updates to and additional strategic designs for proposed road upgrades – requested further assessment of pre-construction traffic – requested that strategic designs for proposed road upgrades – raised new comments on routes from Port Adelaide (which were not included in the EIS), including to assess suitable rest areas, the timing of OSOM movements through townships, and several pinch points. • Following review of additional information: – supported the inclusion of a design strategy to avoid multiple upgrades at the intersections of Murray Valley Highway/Sturt Highway, Euston and Sturt Highway/Market Street, Balranald – supported the inclusion of a CHL at the intersection of the Cobb Highway/Jerilderie Road, Hay South and provided specific requirements for this upgrade – raised no further comments on swept paths along the Sturt Highway through Balranald, Newell Highway/Dowling Street, Forbes and Showground Road/Newell Highway, West Wyalong.
Environment Protection Authority (EPA)	• Following review of the EIS, the EPA recommended conditions of consent and mitigation strategies to manage noise and waste impacts • EPA offered no further comment on the submissions and amendment reports.
Crown Lands	• Following review of the EIS, Crown Lands: – noted that the Crown roads included in the project area should not be relied on for practical access to the project area

Agency	Advice summary
	– noted the need for licences to authorise occupation over Crown roads/lands, if structures, access tracks or transmission lines traverse Crown roads/lands • Crown Lands offered no further comment on the submissions and amendment reports.
Heritage NSW	• Following review of the EIS and accompanying ACHAR, Heritage NSW: – requested additional documentation of Registered Aboriginal Parties (RAP) consultation, additional modelling and mapping of sites, boundary determination and mitigation measures – requested additional assessment to provide adequate coverage of the transport route upgrades • After reviewing the submissions and amendment reports and subsequent ACHAR revisions: – provisionally supported BayWa's proposed management strategies and provided recommended conditions of consent.
Heritage Council	• Following review of the EIS, Heritage Council: – requested confirmation that pastoral stations and a house southeast of the Bullawah Homestead Group had been adequately considered in the heritage assessment (including assessment of archaeological potential) – requested additional information in the assessment of significance for potential archaeological deposits associated with the South Burrabogie Woolshed Group • Heritage Council provided no further comment on the submissions and amendment reports.
DCCEEW Water	• Following review of the EIS, DCCEEW Water: – raised concern about security and supply of water, impacts on groundwater and groundwater dependent ecosystems • DCCEEW Water offered no further comment on the submissions and amendment reports.
DPIRD – Land Use	• Following review of the EIS, DPIRD – Land use: – requested a land use conflict risk assessment be carried out to justify the proposed worker accommodation site on land zoned RU1 Primary Production, noting subdivision of land would not result in new dwelling entitlements • DPIRD – Land use offered no further comment on the submissions and amendment reports.
Rural Fire Service (RFS)	• Following review of the EIS, RFS: – provided recommendations on the response to emergencies during operation, • RFS offered no further comment on the submissions and amendment reports.
Fire and Rescue NSW (FRNSW)	• Following review of the EIS, FRNSW: – recommended plans and procedures to be developed prior to construction, including a Fire Safety Study, Emergency Plan, Emergency Services Information Package and an Emergency Responders Induction Package – requested that these plans be developed in consultation with and to the satisfaction of FRNSW • Following review of the submissions and amendment reports:

Agency	Advice summary
	– requested further detail be included in the aforementioned plans and recommended conditions should the project be approved.
NSW State Emergency Service (SES)	• Following review of the submissions and amendment reports, NSW SES: – recommended assessment of a full range of flood events – recommended inclusion of flooding into the site emergency plan and that BayWa further consider measures to minimise flood risk. • Following review of the submissions and amendment reports: – Provided recommendations should the project be approved
Civil Aviation Safety Authority (CASA)	• Following review of the EIS, CASA: – recommended obstacle lighting to provide safe aviation across project area airspace • Following review of the submissions and amendment reports: – accepted the obstacle lighting plan provided by BayWa, noting more turbines were marked to be lit than necessary.
Airservices Australia	• Following review of the EIS, Airservices Australia: – identified that the height of turbines would impact overhead air-route W762 by exceeding the lowest safe altitudes – identified other impacts to airspace procedures at Hay aerodrome and that further consultation with aerodrome operators is required • Airservices offered no further comment on the submissions and amendment reports.
Local Land Services	• Following review of the EIS, Local Land Services: – recommended further consideration of impacts on the Plains-wanderer – highlighted the intersection of the project area with the Crown lands travelling stock route intersection • Local Land Services offered no further comment on the submissions and amendment reports.
DPIRD – Fisheries	• Following review of the EIS, DPIRD Fisheries: – provided recommendations regarding the design and construction of watercourse crossings and riparian buffer zones adjacent to Key Fish Habitat • DPIRD Fisheries offered no further comment on the submissions and amendment reports.
DCCEEW Energy	• Following review of the EIS, DCCEEW Energy: – recognised the contribution of the project to the renewable energy transition – confirmed the projects’ ability to connect to both proposed and existing transmission lines in the South West REZ • DCCEEW Energy offered no further comment on the submissions and amendment reports.
EnergyCo	• EnergyCo awarded access rights for the project to the proposed Project EnergyConnect transmission line in April 2025. Given the award of access rights, EnergyCo confirmed that it supports the project and requested ongoing consultation as the project progresses.

5.4 Summary of council advice

68. Edward River Council and Hay Shire Council both provided submissions commenting on the project and Murrumbidgee Shire Council provided a submission in support of the project. A summary of the issues raised by each council is provided in Table 5-4 and a link to the full submissions is provided in Appendix C.

Table 5-4 | Council submissions

Council	Key issues raised
Edward River Council (Host council – Comment)	- Following review of the EIS: - noted that significant consideration should be given to the immediate and cumulative impacts of the project on biodiversity, cultural heritage, visual amenity, traffic and bushfire risks - requested detail on the source location of construction materials and proposed haulage routes, noting the potential for haulage to impact road infrastructure and local traffic - requested further detail on waste management and proposed accommodation facilities. - Following review of the submissions and amendment reports: - noted their satisfaction with BayWa's consideration of biodiversity, cultural heritage, visual amenity, accommodation and resources and bushfire management strategies - requested a waste management strategy, traffic management planning and consultation with Council on these matters.
Hay Shire Council (Host council – Comment)	- Following review of the EIS: - noted need for consent and/or approvals from council for waste management, traffic and parking, accommodation facilities and water use for the project. Offered a potential agreement to accept most waste streams - commented on mitigation strategies for weed and biosecurity purposes during construction phase - requested that all wind turbines and meteorological masts be lit for aviation safety - commented that Jerilderie Road requires upgrades as in its current state would not be able to withstand the proposed traffic movements - requested consultation on all local road and pavement upgrades. - Council offered additional comments in relation to the Amended project and additional information as follows: - requested consideration of the ability of local roads, notably Jerilderie Road, in accommodating the proposed construction traffic volumes as well as cumulative traffic volumes with other projects in the area - provided a geotechnical report of Jerilderie Road for consideration.

Council	Key issues raised
Murrumbidgee Shire Council (Host council – Support)	• Following review of the EIS: – expressed support for renewable energy transition and community benefit programs – requested consultation during the development of bushfire and emergency management plans and regarding traffic upgrades to local roads – provided recommendations for conditions of consent relating to voluntary planning agreements, bushfire risk and emergency management, traffic, the accommodation camp and waste management. • Council offered no further comment on the submissions or amendment reports.

6 Assessment

6.1 Overview

69. The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key issues: energy transition, biodiversity, traffic and transport, and visual amenity (see Section 6.2 to Section 6.5).
70. The Department acknowledges that the project has been sited and designed to minimise potential impacts, including locating turbines and associated infrastructure within areas of lower biodiversity values, avoiding impacts to Plains-wanderer habitat, reducing the number of proposed turbines and reducing blade throw impacts.
71. Further, being located within the South West REZ, the project is likely to contribute to some cumulative impacts in the region. The Department has considered cumulative impacts as well as the full range of potential impacts associated with the project and has included its assessment of these matters in Section 6.6.

6.2 Energy transition

72. The project aligns with national and state policies, which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability (see Section 3.3).
73. The project would have the capacity to generate around 804 MW of renewable energy, which would be sufficient to power about 463,400 homes per year, and would save approximately 1,725,600 tonnes of greenhouse gas emissions per year. This would assist NSW in achieving the targets established by the *Climate Change (Net Zero Future) Act 2023*, is consistent with the NSW Climate Change Policy Framework objective of achieving net zero emissions by 2050 and the *Net Zero Plan Stage 1: 2020 – 2030*.
74. The inclusion of a 359 MW / 718 MWh BESS would enable the project to store energy for dispatch to the grid when the wind isn't blowing and/or during periods of peak demand, increasing grid stability and energy security.
75. The project is located in the South West REZ, a region which has strong renewable energy resources. EnergyCo has granted the project access to connect to Project EnergyConnect in the South West REZ providing direct access to the electrical grid via the approved transmission line, on land where wind development is permissible with consent under the Transport and Infrastructure SEPP.

76. EnergyCo have granted access to the project for a maximum of 262.3 MW. BayWa may stage the project to meet the current access granted. BayWa advised that additional capacity is currently available on the existing network that would allow part of the project to connect to the existing 220kv Transgrid transmission line. Approval for the remaining generation of the project would be sought in the event that extra capacity becomes available through future augmentation of the network.
77. EnergyCo has confirmed that it supports the project given it has been successful in being granted access.
78. The Department has considered the impacts of the project on the transition of the State's energy system and that it would play an important role in:
 - increasing renewable energy generation and capacity;
 - firming the grid by including 359 MW / 718 MWh of energy storage; and
 - contributing to the transition to a cleaner energy system as coal fired generators retire.

6.3 Biodiversity

79. Approximately two thirds of submissions received objected to the biodiversity impacts associated with project, raising concerns regarding the endangered Plains-wanderer, clearing of native vegetation, including threatened ecological communities (TECs), impacts on habitat connectivity and blade strikes to birds and bats.
80. Clearing of native vegetation would cause direct and indirect impacts to threatened flora and fauna species and communities, while operation of the wind turbines has the potential to impact flight paths of birds and bats from changes in air pressure (barotrauma) or collision with turbines (bird and bat strike).
81. In order to address concerns raised in public submissions and in response to comments from NSW DCCEEW CPHR and NPWS, BayWa provided additional information during the Department's assessment and revised its BDAR.
82. Overall, the Department considers that the concerns raised by the public, NSW DCCEEW CPHR and NPWS have been resolved, either through provision of additional information, including revisions to the project layout to further minimise the impacts, or development of consent conditions and management plans and that the BDAR adequately assesses the potential biodiversity impacts of the project in accordance with the BAM.

6.3.1 Project footprint and disturbance

83. The project area is around 20,629 ha of predominantly grazing land adjoining the Oolambeyan National Park directly to the north. The land subject to the proposed development is approximately 4,293 ha, with the onsite development footprint considered for the BDAR comprising 637 ha within the project area and approximately 19 ha associated with off-site road works along the project's transport route.
84. The onsite development footprint to be cleared is predominantly native vegetation (approximately 632.67 ha or 96%) with the majority (552.26 ha or 87%) non-threatened vegetation. It consists of primarily native grassland and shrubland, with a smaller proportion of the vegetation consisting of a mosaic of freshwater wetlands and open woodland. Vegetation within the project area has been subject to long-term agricultural disturbance, primarily through grazing and low levels of pasture improvement.
85. The 19 ha of disturbance associated with road works at Euston and Balranald would result in clearing of 0.14 ha of native vegetation comprising native shrubland and native vegetation / planted Australian native species.

6.3.2 Avoidance and minimisation

86. BayWa has focused on avoidance of impacts through site selection and avoidance of higher quality native vegetation and threatened ecological communities and habitat during the preliminary design process for the project.
87. In particular, this work has focused largely on avoiding and minimising impacts to areas of habitat for the Plains-wanderer, areas of mapped TEC, including Myall Woodlands, Weeping Myall Woodlands and Sandhill Pine Woodland and potential habitat for threatened flora and fauna species.
88. With respect to impacts on TECs mapped in the project area, predicted clearing of these communities would be limited to 80.41 ha (12% of the site), including:
 - Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregion (endangered under the BC Act) in moderate-good and derived native grassland condition: 57.61 ha of 464.92 ha mapped in the project area;
 - Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions (endangered under the BC Act) in moderate-good and derived native grassland condition: 22.8 ha of 114.74 ha mapped in the project area; and

- Weeping Myall Woodlands (endangered under the EPBC Act and included within Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions under the BC Act) in moderate-good condition: 4.92 ha of 42.56 ha mapped in the project area.
89. BayWa has aimed to avoid and/or minimise impacts on biodiversity values by:
- reducing the project area and development corridor by 42% from scoping phase through to the final development corridor within the amendment report;
 - avoiding all extents of mapped Important Habitat for Plains-wanderer (Important Habitat) with no areas of Important Habitat to be impacted by the project;
 - locating and micro-siting turbines and associated infrastructure to avoid areas of high conservation value native vegetation;
 - locating wind turbines at least 450 m from the boundary of the Oolambeyan National Park, exceeding the minimum 100 m recommended in the new Energy Policy Framework (noting that it does not strictly apply to this project);
 - maximising the separation distance between turbines / rotor swept area and tree canopies;
 - using the existing network of access tracks within the project area;
 - excluding riparian zones associated with higher order streams from the development area (noting that some stream crossings for access are still required), ephemeral wetlands and the freshwater lakes;
 - committing to undertake pre-clearance surveys and tree-felling supervision to minimise potential impacts on native fauna species (including threatened species), including during the clearing of hollow bearing trees;
 - committing to develop a Biodiversity Management Plan (BMP) and a Bird and Bat Adaptive Management Plan (BBAMP); and
 - committing to the implementation of a Plains-wanderer Management Plan to monitor and manage impacts to Plains-wanderer.
90. Following exhibition of the EIS (including the BDAR), NSW DCCEEW CPHR requested further information to demonstrate how the project avoids and minimises biodiversity impacts to SAI entities, including areas of Important Habitat for the Plains-wanderer.
91. Subsequently, BayWa provided further information in the BDAR documenting the avoidance throughout development of the project from early stages of the project. . This informed the development of a Plains-wanderer Management Plan.
92. The extent of micro-siting allowance for the project (a 100 m radius development corridor around wind turbines) has been demonstrated to be reasonable as BayWa has assessed the entire development corridor as part of the BDAR and identified the importance of the development

corridor to facilitate future micro-siting of wind turbines and project infrastructure and further avoidance of impacts to biodiversity values.

93. Overall, the Department considers that BayWa has demonstrated reasonable and feasible measures to avoid biodiversity impacts, specifically in relation to areas of mapped Important Habitat for the Plains-wanderer and to habitat for other flora and fauna impacted by the project.

6.3.3 Native vegetation

94. The project area disturbance footprint is 637 ha and an additional 19 ha is required to be cleared to facilitate road upgrades. An area of 632.67 ha of the onsite disturbance footprint is native vegetation, with a further 0.14 ha of native vegetation required to be cleared to facilitate offsite road upgrades.
95. Of the 632.67 ha of native vegetation within the project area disturbance footprint, the majority (552.26 ha or 87%) is non-threatened vegetation, with approximately 88% woodland in moderate to good condition. Approximately 12% is derived native grassland (DNG).
96. The 0.14 ha of native vegetation expected to be impacted by the road upgrades comprises non-threatened vegetation and includes 0.05 ha (35%) of planted native vegetation.
97. In relation to clearing of TECs listed under the BC Act and / or EPBC Act, the project would impact approximately 80.41 ha (in the project area and no TECs in the road upgrade footprint), which is largely derived native grassland (94%) comprised of:
- Myall Woodland in derived native grassland condition (BC Act): 17.88 ha of 72.19 ha mapped in the project area;
 - Myall Woodland (BC Act) /Weeping Myall Woodland (EPBC Act) in moderate-good condition: 4.92 ha of 42.56 ha mapped in the project area; and
 - Sandhill Pine Woodland in derived native grassland condition: 57.61 ha of 464.93 ha mapped in the project area listed under the BC Act.
98. Table 6-1 shows the project impacts on native vegetation, and the relevant ecosystem credit liability under the NSW Biodiversity Offset Scheme.

Table 6-1 | Ecosystem credit requirements for native vegetation impacts

Plant Community Type	Condition	Conservation significance		Total in project area (ha)	Impact area (ha)	Credit liability
		BC Act	EPBC Act			
PCT 10: River Red Gum - Black Box woodland wetland of the semi-arid (warm) climatic zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Moderate-Good	-	-	19.96	2.23	29
PCT 13: Black Box - Lignum woodland wetland of the inner floodplains in the semiarid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Moderate-Good	-	-	2.45	0.08	3
PCT 17: Lignum shrubland wetland of the semi-arid (warm) plains (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Moderate-Good	-	-	20.20	2.05	77
PCT 24: Canegrass swamp tall grassland wetland of drainage depressions: lakes and pans of the inland plains	Moderate-Good	-	-	10.02	1.97	27
PCT 26: Weeping Myall open woodland of the Riverina Bioregion and NSW South Western Slopes Bioregion	Moderate-Good	E	E	42.56	4.92	135
	DNG	E	-	72.19	17.88	307
PCT 28: White Cypress Pine open woodland of sand plains, prior streams and dunes mainly of the semi-arid (warm) climate zone	Moderate-Good	E	-	0.85	0	1,418
	DNG	E	-	486.69	57.61	
PCT 44: Forb-rich Speargrass - Windmill Grass - White Top grassland of the Riverina Bioregion	Moderate-Good	-	-	1,126.43	169.25	4,077
PCT 46: Curly Windmill Grass - speargrass - wallaby grass grassland on alluvial clay and loam on the Hay Plain: Riverina Bioregion	Moderate-Good	-	-	2,189.24	333.15	8,546
PCT 160: Nitre Goosefoot shrubland wetland on clays of the inland floodplains	Moderate-Good	-	-	16.43	2.55	56
PCT 164: Cotton Bush open shrubland of the semi-arid (warm) zone	Moderate-Good	-	-	296.40	40.97	746
Total				4,283.42	632.67	15,421

6.3.4 Threatened flora

99. The project has the potential to impact flora species listed under the BC Act and EPBC Act through direct loss from vegetation clearing, and from indirect impacts.
100. Seventeen candidate flora species were identified as potentially occurring in the project area and were subject of targeted surveys. Of the 17 candidate species, five threatened flora species were recorded during targeted surveys (Spike-rush, Chariot Wheels, Silky Swainson-pea, Slender Darling Pea and Winged Peppergrass). Of these identified species, four are listed as vulnerable under the BC Act (Spike-rush, Chariot Wheels, Silky Swainson-pea and Slender Darling Pea) and one as endangered under both the EPBC and the BC Act (Winged Peppergrass). Spike-rush, Chariot Wheels and Slender Darling Pea are also listed as vulnerable under the EPBC Act.
101. Table 6-2 shows the species credits required to be offset for the project, including for impacts to threatened flora.

6.3.5 Threatened fauna

102. Vegetation clearing within the project area would result in the loss of habitat for threatened species identified or predicted to occur as ecosystem credit species. The BDAR anticipated there would be loss of habitat as a result of the project to 44 ecosystem species. Eight ecosystem credit species were recorded during field surveys.
103. Potential impacts on these species would be offset via the ecosystem credit requirements detailed in Table 6-1.

Species Credit Species

104. Nine candidate threatened fauna species were considered to have potential habitat within the project area and were subject to targeted surveys. Three species, Little Eagle (vulnerable under the BC Act), Barking Owl (vulnerable under the BC Act) and the Southern Bell Frog (endangered under the BC Act, vulnerable under the EPBC Act), were recorded.
105. The Plains-wanderer (endangered under the BC Act, critically endangered under the EPBC Act), was recorded on site (discussed further in Section 6.3.7). The project would impact on potential habitat for the Plains-wanderer, however no mapped important habitat for this species would be impacted and as such no species credits would be required.
106. Table 6-2 shows the species credits required to be offset for the project.

Table 6-2 | Species credit requirements

Species	Conservation significance		SAIL Entity	Impact on habitat (ha)	Credit liability
	BC Act	EPBC Act			
Flora					
Spike-rush (Eleocharis obcis)	Vulnerable	Vulnerable	-	7.31	193
Chariot Wheels (Maireana cheelii)	Vulnerable	Vulnerable	-	4.67	116
Silky Swainson-pea (Swainsona sericea)	Vulnerable	-	-	9.78	282
Slender Darling Pea (Swainsona murrayana)	Vulnerable	Vulnerable	-	445.21	13,058
Winged Peppercross (Lepidium monoplucoides)	Endangered	Endangered	-	3.52	88
Fauna					
Little Eagle (Hieraetus morphnoides)	Vulnerable	-	-	34.63	643
Barking Owl (Ninox connivens)	Vulnerable	-	-	2.8	49
Southern Bell Frog (Ranoidea raniformis)	Endangered	Vulnerable	-	52.16	1,426
Total				560.08	15,855

6.3.6 Prescribed impacts

107. The project has the potential to result in impacts to birds and bats through changes in air pressure (barotrauma) or collision with turbines (bird and bat strike).
108. The assessment of these impacts is dealt with in a different way to other biodiversity impacts. They are considered a 'prescribed impact', as opposed to a 'direct impact' (like clearing and habitat loss) or an 'indirect impact' (such as impacts of predation, and weed invasion, edge effects in adjacent habitat).
109. Prescribed impacts are impacts on biodiversity values which are not related to, or are in addition to, native vegetation clearing and habitat loss. There is no policy on how to calculate or quantitatively assess prescribed impacts relating to barotrauma or bird and bat strike and there is no requirement to provide biodiversity offset credits.
110. In that context, the approach adopted for these impacts across all wind farms in NSW is a combination of risk assessment followed by post-determination adaptive management. This adaptive management approach involves stringent requirements for baseline monitoring,

ongoing monitoring of any impacts during operation and triggers for adaptive management measures to avoid or minimise impacts.

111. The area surrounding the project is known to have a moderate species diversity and density of birds and microbats. The revised BDAR includes a strike risk assessment for the bird and bat species most at risk of blade strike and barotrauma. The assessment considered conservation status and flight character.
112. Following exhibition of the EIS, NSW DCCEEW CPHR and NPWS requested further information relating to bird and bat utilisation of the area and a turbine-based risk assessment. NSW DCCEEW CPHR recommended additional bird and bat utilisation surveys and breeding habitat surveys prior to the development of the Bird and Bat Adaptive Management Plan (BBAMP) to verify turbine risk ratings were reliant on the most up to date information. Additionally, NSW DCCEEW CPHR requested that the proposed BBAMP present specific thresholds for adaptive management and impact investigation. BayWa responded with a commitment to implementing a BBAMP and provided additional data and information of bird and bat surveys undertaken. Additionally, the risk assessment was updated and BDAR revised which also included further mitigation measures.
113. Of the 144 candidate bird and 18 candidate bat species considered within the BDAR, the BDAR undertook a more detailed risk assessment of threatened or key bird and bat species (12 bird and 17 bat). The assessment concluded a moderate risk of blade strike for four species; the Little Eagle (listed as vulnerable under the BC Act), Black Falcon, White-striped Freetail Bat and the Yellow-bellied Sheath-tail-bat. The remaining bird and bat species are considered subject to a minor impact risk.
114. In consultation with NSW DCCEEW CPHR, the Department has recommended conditions:
 - to allow for micro-siting of 100 m which allows BayWa to micro-site turbines within the development corridor to reduce the potential strike impacts subject to the requirements of other conditions;
 - requiring a comprehensive regime of adaptive management to address the risk of bird and bat strike, including:
 - the collection of relevant baseline data on threatened and ‘at risk’ bird and bat species and populations in the locality that could be affected by the project;
 - a detailed description of the measures that would be implemented on site for minimising bird and bat strike during operation of the project, including a wind turbine curtailment strategy (if required);
 - identifying trigger levels for further investigation of the potential impacts of the project on particular bird or bat species or populations;

- an adaptive management program that would be implemented if the development is having an adverse impact on a particular threatened or ‘at risk’ bird and/or bat species or populations, inclusive of appropriate triggers;
 - a detailed program to monitor and report on the effectiveness of these measures any bird and bat strikes on site; and
 - submitting monitoring data to NSW DCCEE CPHER and the Planning Secretary.
115. The Department considers that the recommended conditions, including the requirement to develop and implement an adaptive management plan in consultation with NSW DCCEE CPHER would be effective in managing the risk of bird and bat strike.

6.3.7 Serious and irreversible impacts

116. Under clause 6.7 of the BC Regulation, an impact is to be regarded as serious and irreversible if it is “*likely to contribute significantly to the risk of extinction of a threatened species or ecological community*” on the basis of four principles.
117. The project would have potential impacts on one species at risk of SAIL, the Plains-wanderer. The Plains-wanderer has been identified as a species at risk of SAIL based on Principle 1 (in a rapid rate of decline). For the Plains-wanderer, it is important to focus on the impacts of the project on the rate of decline and population size as the relevant principles.
118. The Department notes that the population size of the Plains-wanderer is known to be small and as set out in the listing advice for the species, has been subject to a rapid decline (significant (>90%) decline in the monitored population over a 14-year period) due to changes in environmental conditions (floods / droughts), habitat loss / fragmentation through agricultural land use and predation by feral species.
119. NSW DCCEE CPHER has reviewed the revised BDAR and advised that the proposed extent and nature of impacts are likely to result in a SAIL to the Plains-wanderer and requested additional avoidance of impacts to the Plains-wanderer.
120. In NSW, mapped Important Habitat for the Plains-wanderer is prioritised for conservation and offset requirements. BayWa reduced the impact to mapped Important Habitat from 68.62 ha at the scoping phase to 0 ha within the revised BDAR. Approximately 1,456 ha of mapped Important Habitat occurs within the project area and the project would not impact this area.
121. Noting the presence of the Plains-wanderer at the site (20 individuals sighted during field surveys), BayWa sought to classify suitable habitat across the project area. Through remote-sensing techniques, BayWa considered suitable supplementary habitat for the Plains-wanderer (analogous to mapped Important Habitat) across the project area to be 4,940 ha. Of this, 170.86 ha is within the development footprint and would be directly impacted by the development.

BayWa considered this equated to only a small fraction (3.5%) of the potential habitat available within the project area being directly impacted.

122. BayWa concluded that given the geographic range of individual birds and overall low population numbers, impacts to up to 3.5% of habitat at the site, equalling a statistically insignificant proportion of the available habitat across NSW, the project would be unlikely to adversely affect habitat critical to species survival.
123. BayWa has committed to management and monitoring actions which would be detailed in a Plains-wanderer Management Plan. These would include:
 - pre-clearance and vegetation clearing protocols during construction;
 - habitat management and monitoring for the first five years of operation across the project area;
 - provision of landholder training to assist in management of suitable habitat which would address pest and weed management practices across the project area;
 - population monitoring across the project area including acoustic monitoring and spotlighting; and
 - implementation of adaptive management actions to be implemented where outcomes are not achieved.
124. CPHR considered the additional information provided by BayWa and maintained the conclusion that the project would be likely to result in a SAI to the species.
125. Noting the differences in opinion, the Department referred the consideration of SAI to the Plains-wanderer to the Independent Expert Advisory Panel for Energy Transition (IEAPET).
126. The IEAPET considered the impacts on the Plains-wanderer to be complex due to:
 - variability of the existing population numbers and where they are found (the extent of occurrence) both in the region and on the site, as well as cyclical changes in population numbers;
 - uncertainties in the potential impacts from a wind farm project on the species including impacts of feral pests, blade strike potential, impacts to habitat, noise and tall tower avoidance; and
 - the need to consider the above scenarios in the context of the corresponding cycles.
127. The IEAPET advice considered that the specific dynamics of the species and where they are found is variable and influenced by favourable and average climate conditions (being wet and dry climate conditions) and described this as a 'boom or bust' cycle for the species. The IEAPET considered both favourable and average climate conditions scenarios. The IEAPET also considered the uncertainties of potential impacts by considering 'worst', 'likely' and 'best case'

scenarios to account for a conservative approach in the case of potential, but not yet known, indirect impacts. The impact of the project on the species was considered by aligning these scenarios for the use of habitat types and the population estimates within the project area with the understanding of the corresponding period of the broader species' population within a fluctuating boom-bust lifecycle.

128. The IEAPET noted that the species was previously widely distributed but is now generally limited to two stronghold areas in inland NSW and in Victoria during average and below-average (drier) environmental conditions. The project area is within the NSW 'stronghold'.
129. The IEAPET advice concluded that whilst the species has experienced a rapid rate of decline, the scale of the impacts of the project would not be large enough to contribute significantly to the risk of extinction. A potential worst case set of impacts is estimated as an impact to 3.2% of the estimated NSW stronghold population during average conditions, with the IEAPET concluding the likely case was 2.0%.
130. The advice did note that there are other renewable energy projects proposed within the species stronghold area within the South West REZ and that the potential cumulative impact of all of those proposals could be more serious. The IEAPET recommend that a concentrated effort is made to provide further information on some of the key scientific unknowns about this species in order to generate enhanced management measures for current and future projects across the region.
131. The Department has carefully considered the five assessment provisions in section 9.1.2 of the BAM 2020, and the *Guidance to assist a decision-maker to determine a serious and irreversible impact* (NSW DPIE – EES, 2019).
132. As part of its assessment, the Department has also considered BayWa's assessment, comments from NSW DCCEEW CPHR and the advice of the IEAPET and considers that the project's impacts would not contribute significantly to the risk of extinction and would not constitute SAIL, noting there would be significant habitat area remaining at the site and across NSW.
133. Noting the conclusions of the IEAPET, the Department has recommended conditions requiring BayWa to participate in a working group to be established by the IEAPET, to develop and implement a Regional Plains-wanderer Management Strategy jointly with relevant wind farms within the South West REZ. The Regional Plains-wanderer Management Strategy would support a consistent regional approach to Plains-wanderer monitoring, research and adaptive management, including consideration of key research questions and knowledge gaps relating to wind energy development in Plains-wanderer habitats (including noise, tall tower avoidance, effectiveness of feral pest and weed programs, flight height and blade strike potential, habitat clearing, restoration and management).

134. The Department's recommendation has not specified which wind farm operators are to be approached about participation in the working group at this time, as the intent is that the Department would identify the relevant wind farms in consultation with EnergyCo and NSW DCCEEW CPHR should this and other projects be determined. This would require the most relevant wind farms are engaged in the working group and there is appropriate sharing of costs.
135. The implementation of the Regional Plains-wanderer Management Strategy may be staged to suit the project outcomes and would provide a framework for coordinating research, monitoring, data review and adaptive management across participating wind farms. Through the working group, monitoring results and mitigation approaches would be reviewed at a regional scale to identify emerging trends and support a consistent and adaptive approach to managing the potential cumulative impacts on Plains-wanderer during construction and operation.
136. Although CPHR considered the potential for SAI, the Department considered with further advice of the IEAPET that the project's impacts would not contribute significantly to the risk of extinction and would not constitute SAI and further, the recommended conditions include participation in the Regional Plains-wanderer Management Strategy to support a consistent regional approach to Plains-wanderer.

6.3.8 Significance of impacts on Commonwealth listed species and ecological communities

137. BayWa identified and addressed all threatened species and communities and listed migratory species included in the Commonwealth Referral Decision (2022/09423) (Referral Decision).
138. Assessments of significance were undertaken for threatened species and communities and migratory species that were recorded during field surveys or were considered to have a moderate or higher potential to occur. This included one TEC, nine threatened species and no migratory species.
139. BayWa concluded there would not likely be a significant impact on any MNES and the project would not have any residual impacts, being adequately offset through meeting any biodiversity offset obligation established under the NSW Biodiversity Offset Scheme.
140. NSW DCCEEW CPHR acknowledged BayWa's consideration of the MNES significant impact guidelines, that the project would be unlikely to significantly impact any MNES, however disagreed with the outcome for the Plains-wanderer. NSW DCCEEW CPHR concluded that there may be a potential SAI to the Plains-wanderer under the BC Act noting the unknown impacts of construction and operation of the project.
141. Although the IEAPET concluded that scale of the impacts of the project would not be large enough to contribute significantly to the risk of extinction to be considered SAI under the BC

Act, the Department notes that the consideration of SAI is a separate consideration under NSW biodiversity legislation to MNES under the Commonwealth biodiversity legislation.

142. Notwithstanding, NSW DCCEEW CPHR noted BayWa's commitment to long-term monitoring and management of the Plains-wanderer and recommended conditions requiring ongoing consultation with NSW DCCEEW CPHR in relation to ongoing management of impacts to the Plains-wanderer.
143. The Department considered Commonwealth matters in consultation with NSW DCCEEW CPHR and AG DCCEEW, including consideration of BayWa's assessments of significance and the relevant approved conservation advice, recovery plans and threat abatement plans (TAPs). This assessment is provided in **Appendix J**.
144. The Department concludes that should the Commission determine to approve the project, the impacts to Commonwealth matters as a result of the project would be acceptable, subject to the avoidance, mitigation and offsetting measures described in documentation submitted for the project and the recommended conditions of consent in **Appendix F**.

6.3.9 Biodiversity offsets

145. The project would generate a credit liability of 15,421 ecosystem credits and 15,855 species credits requiring offset under the NSW Biodiversity Offset Scheme.
146. Both the Department and NSW DCCEEW CPHR are satisfied that the offset credit requirements have been correctly calculated. BayWa would offset the residual biodiversity impacts of the project in accordance with the NSW Biodiversity Offset Scheme, which includes the following options:
 - acquiring or retiring 'biodiversity credits' within the meaning of the BC Act;
 - making payments into an offset fund that has been developed by the NSW Government;
 - entering into a strategic offset delivery agreement (SODA) with DCCEEW CPHR; or
 - funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the offset scheme.
147. Although the final approach for how the credit liability would be met is still under development, at this stage BayWa has committed to securing offsets required for the project within the local area. Any offsets that cannot be secured through the establishment of local offsets would then be acquitted either by purchasing matching credits from the market or by paying into the Biodiversity Conservation Fund. In accordance with the bilateral agreement, variation rules would not apply to MNES entities, and all credits would be retired on a like-for-like basis.

148. The Department has recommended conditions requiring BayWa to retire the required biodiversity offset credits (as referenced in the revised BDAR) in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset.
149. The BDAR proposes the staged retirement of biodiversity offset credits. The Department's recommended conditions present the full credit obligation for the project but could be implemented in conjunction with the condition allowing staging of any aspect of the project. This allows flexibility for BayWa in the staging of the delivery.
150. The Department notes that with further avoidance measures and ecological surveys during detailed design, the number and class of credits required to be offset could be reduced. The credits would be re-calculated when the final layout design of the project and number of turbines is known to confirm the final number and class of biodiversity credits required to be offset. This approach provides an incentive to BayWa to avoid and minimise impacts on biodiversity values through the detailed design process to limit the offset liability for the project. The Department has recommended a condition setting out the requirements and process for recalculation of the biodiversity offset credits.
151. Consistent with statutory amendments to section 7.14 of the BC Act, concurrence would need to be sought from the NSW Minister for the Environment (NSW Environment Minister) to allow the recommended conditions for post-approval changes to credit obligations as outlined above.

6.3.10 Recommended conditions

152. The Department has recommended conditions requiring BayWa to:
- minimise the clearing of native vegetation and key fauna habitat within the development footprint and protect native vegetation and key fauna habitat outside the approved disturbance area in accordance with limits in the recommended conditions;
 - prepare and implement the Biodiversity Management Plan which requires BayWa to:
 - minimise the impacts of the development on threatened flora and fauna species within the disturbance footprint;
 - rehabilitate and revegetate temporary disturbance areas and maximise the salvage of resources within the approved disturbance area for beneficial reuse (such as fauna habitat enhancement) during the rehabilitation and revegetation of the site;
 - control weeds and feral pests;
 - provide a detailed program to monitor and report on the effectiveness of these measures; and

- prepare and implement a Plains-wanderer management plan in consultation with NSW DCCEEW CPHR.
- prepare and implement a BBAMP in consultation with NSW DCCEEW CPHR to provide a comprehensive regime of adaptive management to address the risk of bird and bat strike;
- participate in a Regional Plains-wanderer Working Group and contribute to developing and implementing a Regional Plains-wanderer Management Strategy to co-ordinate monitoring and adaptive management of the potential cumulative impacts of wind farms on the Plains-wanderer within the South West REZ; and
- retire the applicable biodiversity offset credits in accordance with the NSW Biodiversity Offset Scheme prior to carrying out any development that could directly or indirectly impact biodiversity values requiring offsets.

6.3.11 Conclusion

153. The Department considers that BayWa has made an effort to avoid and minimise biodiversity impacts through project design. This has been achieved through measures such as locating infrastructure within areas of non-threatened native vegetation, adopting buffers for important habitat features, avoiding threatened species habitat and avoiding mapped Important Habitat for the Plains-wanderer as well as areas of threatened Myall Woodlands and Sandhill Pine Woodland. BayWa has committed to further avoidance wherever practicable as part of the detailed design process.
154. The Department considers that the recommended condition for a BMP and BBAMP would further minimise the impacts on vegetation and fauna, including the collision risk to avifauna.
155. The Department has considered the potential biodiversity impacts of the project, including concerns of the community, advice from CPHR and independent advice. Should the Commission determine to approve the project, the Department, in consultation with CPHR has recommended strict conditions.

6.4 Traffic and transport

156. Approximately 5% of submissions objecting to the project raised concerns about traffic-related impacts. Concerns related to the suitability of the road network for project traffic, impacts on residents from increased traffic generated by the project and the impacts on the condition of the roads required for the project.
157. Murrumbidgee Council, Hay Shire Council and Edward River Council commented on the potential impacts of the project on road infrastructure and local traffic.

158. The construction of the project would involve the delivery of large plant, equipment and materials to the project area, including by high-risk heavy vehicles requiring escort and heavy vehicles requiring escort (also known as oversized and over-mass (OSOM), with some being 'high-risk' due to vehicle/load dimensions and/or weight). These vehicle movements have the potential to impact the local and regional road network. Large equipment, such as wind turbine components, substation, BESS, batching plant equipment and water tanks, is proposed to be transported via OSOM to the project area.
159. As part of the EIS, BayWa prepared a Traffic Impact Assessment (TIA). The TIA was revised in the amendment report to respond to TfNSW advice on the scope and requirements of the assessment (see Section 5.3) and to assess additional transport routes between the Port of Adelaide and Hay. A revised TIA was provided in September 2025, and additional information provided in February, March and April 2026, to address TfNSW advice.
160. Overall, the Department considers that the concerns raised by TfNSW have been resolved either through provision of additional information, including strategic concept designs for proposed road upgrades along the state road network and road network delay modelling, or through development of recommended conditions of consent; and that the TIA adequately assesses the potential transport impacts of the project.
161. The TIA has adopted the following assumptions regarding project design, equipment size and vehicle use:
- transport route for Port to Hay - upgrades have been assessed and designed based on a smaller maximum turbine size identified in the amendment report, being a tip height of up to 233 m, a hub height of up to 148 m and a blade length of up to 80 m;
 - transport route from Hay to the project area - upgrades have been assessed and designed based on the maximum wind turbine dimensions, being a tip height of up to 300 m, a hub height of up to 200 m and a blade length of up to 100 m; and
 - development of a 143 wind turbine layout. BayWa has since proposed to construct 141 wind turbines (see Section 5.2) and the Department agrees that the assessment of the 143 wind turbine layout for the TIA would be appropriately conservative.

6.4.1 Traffic volumes

162. Construction works are anticipated to be carried out over a period of 35 months. During the overall peak of construction (taking into account both Stages 1 and 2), the project would generate up to 56 heavy vehicle trips and 265 light vehicles trips per hour, and 528 heavy vehicle trips and 530 light vehicle trips per day. A maximum of seven OSOM deliveries would occur per working day during peak construction which equates to 14 OSOM trips (inbound and outbound).

163. Throughout the assessment process, BayWa provided further information on pre-construction traffic in response to advice from TfNSW.
164. BayWa has proposed an initial stage of construction works to be carried out over a period of six to eight months. In this stage, BayWa proposes to carry out some road upgrades (see Table 6-4 and Table 6-5), along with other low traffic generating activities such as establishment of site access points, deliveries of small quantities of quarried materials, pre-clearance surveys and Aboriginal cultural heritage salvage. Where the road upgrades are proposed to enable OSOM use, the Department has recommended conditions that require BayWa to carry out such upgrades prior to use by OSOM vehicles.
165. The next stage would generate up to 13 peak hour heavy vehicle trips and 14 peak hour light vehicle trips and up to 135 heavy vehicle trips and 28 light vehicle trips per day. Two OSOM vehicles (four movements) are also proposed to be used to transport the concrete batching plant. Deliveries from these vehicles are proposed to occur across two days in the first month.
166. Throughout the assessment process, BayWa clarified that no OSOM movements would occur until the relevant off-site road works to enable OSOM use are complete. BayWa has also clarified that other road upgrades would be undertaken prior to the commencement of pre-construction minor works, construction, or use of the relevant roads by the project (depending on the specific upgrade, refer further to Table 6-4 and Table 6-5).
167. Once the project is operational, traffic volumes are anticipated to be minor. The project is estimated to employ up to 40 on-site workers who would access the site by car or utility vehicles. An occasional heavy vehicle would be required for the delivery of parts to repair wind turbines. The decommissioning phase would generate fewer traffic movements than the construction phase.

6.4.2 Transport routes and site access locations

Port to Hay OSOM transport routes

168. Four OSOM transport routes have been assessed from the Port of Newcastle and Adelaide, which are described in Table 6-3 and shown on Figure 5. These include:
- three route options from the Port of Newcastle
 - Route 1: Via NorthConnex, with a maximum loaded height of 4.9 m for blades;
 - Route 2: Via Central West, with a maximum loaded height of 6.1 m for towers; and
 - Route 3: Via Pennant Hills Road (Sydney), with a maximum loaded height of 5.3 m for nacelles, generators, drive trains, hubs and smaller components.

- one route (within NSW) from Port Adelaide, via Robinvale, for towers, blades, motors and general loads with a maximum loaded height of 6.5 m.

Table 6-3 | Port to Hay transport routes

Route	Intended use and maximum load height	Description
Route 1: Newcastle, NSW (via NorthConnex)	Maximum loaded height of 4.9 m for wind turbine blades to use NorthConnex tunnel.	This route is approximately 955 km and travels through NSW from the Port of Newcastle to the project area through Sydney, Goulburn, Wagga Wagga and Narrandera (amongst other townships and localities).
Route 2: Newcastle, NSW (via Central West)	Maximum loaded height of 6.1 m for wind turbine towers.	This route is approximately 1,071 km and travels through NSW from the Port of Newcastle to the project area through Muswellbrook, Dubbo, Parkes and Narrandera (amongst other townships and localities).
Route 3: Newcastle, NSW (via Pennant Hills Road)	Maximum loaded height of 5.3 m for nacelles, generators, drive trains, hubs and smaller components via Pennant Hills Road.	This route is approximately 956 km and travels through NSW from the Port of Newcastle to the project area through Sydney, Goulburn, Wagga Wagga and Narrandera (amongst other townships and localities).
Route from Adelaide, South Australia (SA) (via Robinvale, Victoria)	Maximum loaded height of 6.5 m for wind turbine towers, blades, motors and general loads.	This route would be up to approximately 847 km in total (including interstate segments), and travels through South Australia, Victoria and NSW from Port Adelaide to the project area along the Sturt Highway via Hay. BayWa has proposed different route options within South Australia and Victoria to account for load size restrictions, however, within NSW, the route from Port Adelaide is consistent.

169. Segments of the route from Port Adelaide are outside of NSW and would not form part of the project for which BayWa is seeking development consent in NSW. The Department assesses planning and development activities within NSW or the unincorporated area of the State. BayWa would be responsible for undertaking any required coordination or consultation with agencies in other states, including the South Australian and Victorian governments, to meet the relevant transport and road requirements.
170. Notwithstanding the above, the Department has considered the potential number of deliveries to ports. The Department notes that port capacity and scheduling are matters that involve coordination between several relevant authorities and are handled by those authorities. The Department has recommended a condition of consent requiring BayWa to consult with the relevant port authority, TfNSW and the NSW Office of the Cross-Border Commissioner (where a port located in another State is proposed to be used) to verify that these movements and deliveries can be accommodated. Should the Commission determine to approve the project, the Department considers that the proposed consultation requirements provide a framework for the port authorities to receive information for consideration.

Local transport route and site access

171. From the Cobb Highway at Hay, a single local transport route (see **Figure 6**) would be used for all OSOM movements and most project-related heavy and light vehicle movements. The local transport route would extend from the intersection of the Cobb Highway and Jerilderie Road at Hay, from which vehicles would enter the site from one of the site access points on Jerilderie Road or continue to one of the site access points on North Boundary Road or Bullewah Road.
172. Fourteen site access points are proposed off Jerilderie Road, North Boundary Road and Bullewah Road, with 13 accommodating OSOM movements and one providing access to the temporary workers accommodation off Bullewah Road. The site access points are shown on **Figure 2** and **Figure 7**. Road upgrades would be required to establish these access points, which are discussed in **Section 6.4.4**.
173. Light vehicles routes have also been identified for use by construction workers travelling to and from site. On one of the identified routes, TfNSW recommended conditions that restrict traffic from turning left into Four Corners Road from Kidman Way, to align with BayWa's assessment. The Department has recommended a condition of consent to restrict left turn movements at this intersection.

Other routes – quarried materials

174. To provide a worst-case assessment of potential construction traffic volumes, the TIA assumes that 100% of gravel, aggregate and sand would be sourced externally. For the purposes of the assessment, the TIA assumes these materials would be sourced from up to eight existing quarries within the surrounding region. Routes to the project area from these eight quarries have been identified and assessed by BayWa.
175. The TIA identifies the following route options for the delivery of quarried materials to and from the project area (see **Figure 8**):
 - for the three quarries to the south of the project area:
 - Option A: inbound quarry vehicles would travel north along the Cobb Highway past Jerilderie Road, perform a U-turn at the Sturt Highway/Cobb Highway roundabout and then return southbound to make a left turn into Jerilderie Road and travel to the project area. Outbound quarry vehicles would travel via internal roads to Jerilderie Road, then turn left onto the Cobb Highway;
 - Option B: inbound quarry vehicles would travel westbound along the Riverina Highway, turn right onto Conargo Road (northbound), then turn left onto Willurah Road to access the project area. Outbound vehicles would utilise Willurah Road (southbound), turn right

onto Conargo Road (southbound) then turn left onto the Riverina Highway (eastbound); and

- for the five quarries northeast of the project area: inbound and outbound vehicles would travel to/from the north via the Cobb Highway and Jerilderie Road, utilising North Boundary Road, Bullewah Road and internal access roads within the project area.

176. BayWa is proposing to upgrade the intersection of Willurah Road / Carrathool Road, about 48 km south of the project, to accommodate heavy vehicles travelling to and from off-site quarries via this intersection (see Table 6-5).

177. TfNSW recommended conditions that restrict traffic from turning right from the Cobb Highway into Jerilderie Road. The Department considers that BayWa's proposed route aligns with this recommendation and has included a condition of consent to restrict right turn movements at this intersection.

FIGURE 1.7

Port to Hay Transport Routes

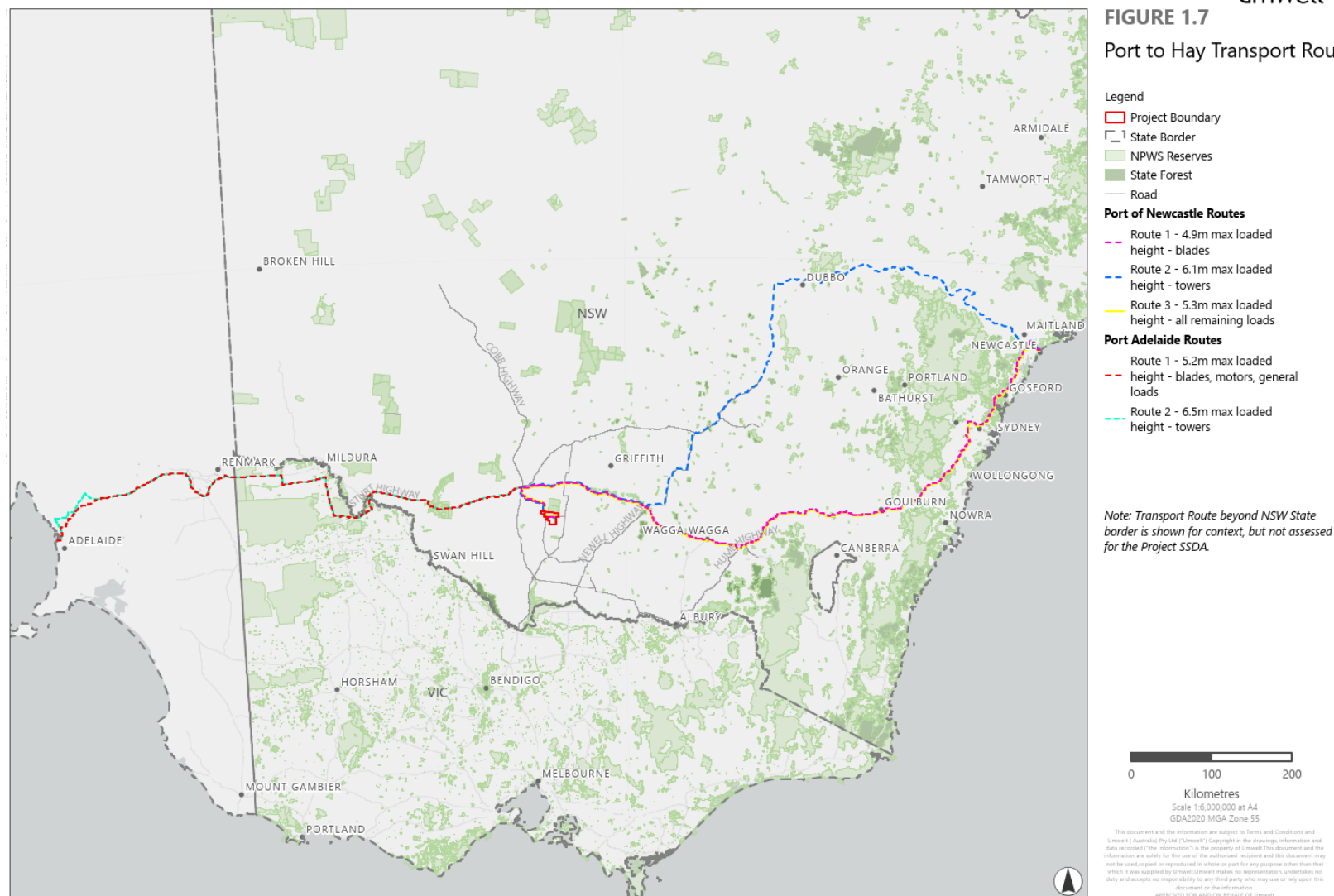


Image Source: ESRI Basemap (2023) | Data Source: NSW DFSI (2023)

Figure 5 | Port to Hay transport routes

FIGURE 1.9
Local Transport Route

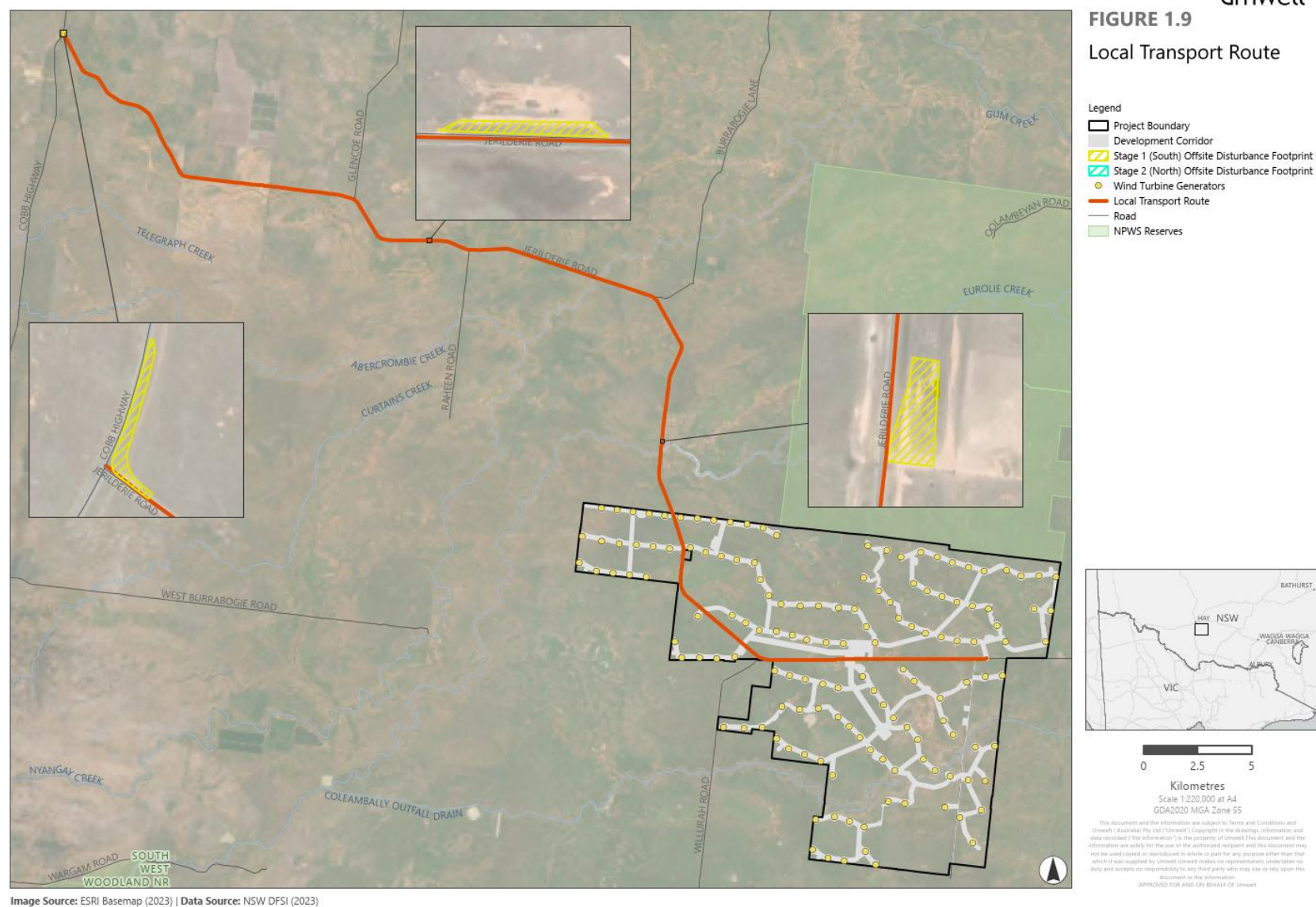


Image Source: ESRI Basemap (2023) | Data Source: NSW DFSI (2023)

Figure 6 | Local transport route

FIGURE 1.10
Site Access

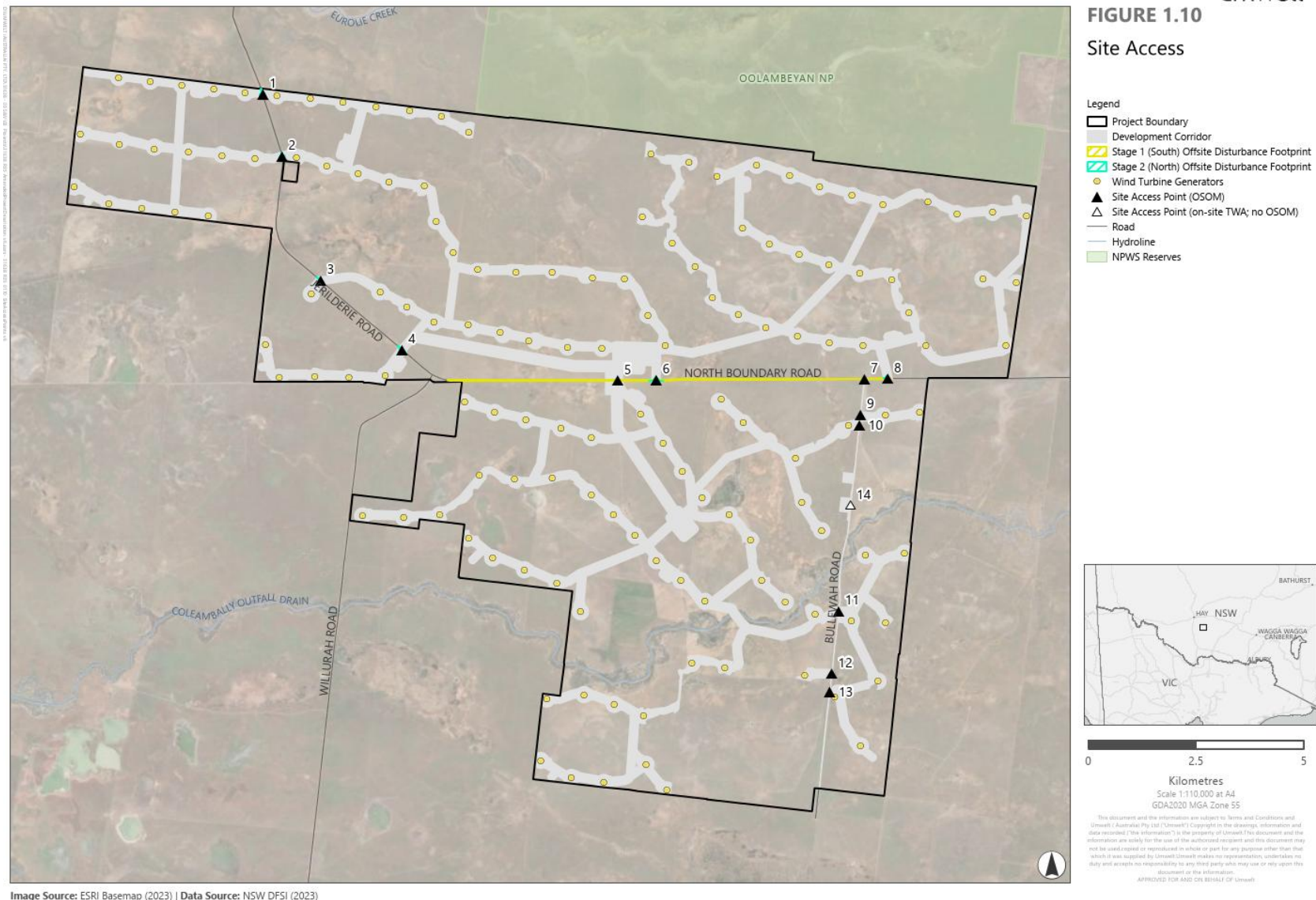


Image Source: ESRI Basemap (2023) | Data Source: NSW DFSI (2023)

Figure 7 | Site access points

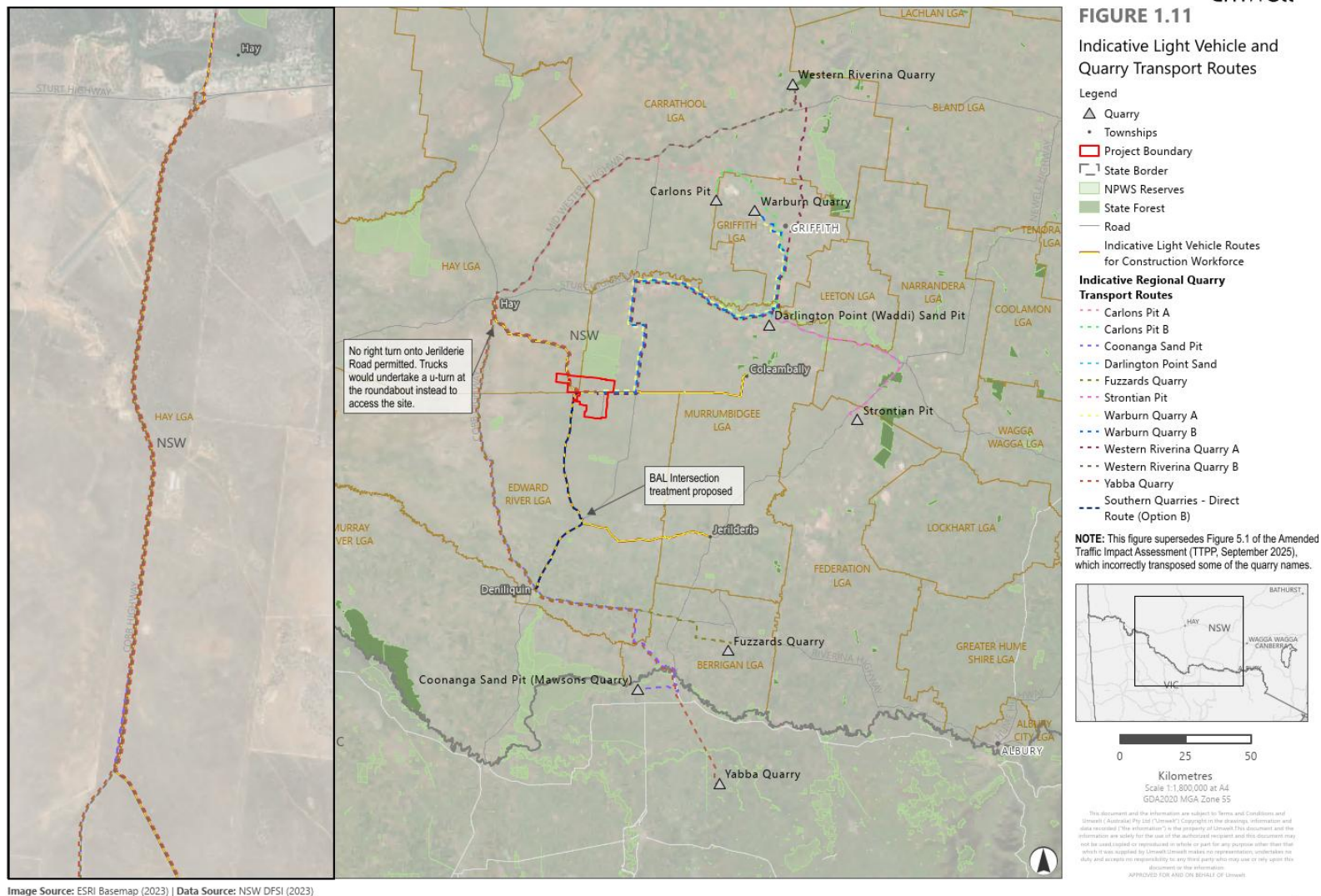


Figure 8 | Indicative quarry traffic routes

6.4.3 Assessment of Port to Hay OSOM routes

Off-site road works and upgrades

178. Based on the findings of route studies in the TIA which assessed the transport of a blade of up to 80 m in length and advice from TfNSW, road upgrades are proposed to facilitate use of the Port to Hay routes by project OSOM vehicles. These road upgrades are identified in Table 6-4. Additional required road upgrades between Hay and the project area are identified in Section 6.4.4.
179. BayWa provided further information in response to requests for information from the Department and TfNSW. This further information included a pinch point analysis at key intersections along the route, strategic concept designs for several road upgrades based on the outcomes of the pinch point analysis and TfNSW advice, further clarification of the upgrades at the intersections at Balranald and Euston and clarifications on the classification of the intersection upgrade at Cobb Highway and Jerilderie Road. The Department consulted with TfNSW on the additional information.
180. TfNSW recently announced funding for some of the intersections in the REZ to facilitate OSOM movements, however the details of which intersections and the timing for when they might be upgraded is still being developed. If the relevant intersections are upgraded by TfNSW, the conditions provide the flexibility that, subject to demonstrating that these components can be accommodated, BayWa could utilise those upgraded intersections.
181. The Department has also recommended conditions requiring BayWa to implement all necessary road modifications in accordance with the relevant standard and timing requirements, to the satisfaction of the relevant road authority.
182. TfNSW raised concerns with potential associated traffic delays along the Sturt Highway (including through townships of Wagga Wagga, Hay and Balranald) and along the Cobb Highway (south of Hay) for high-risk OSOM movements.
183. BayWa's route assessment identified suitable pull over locations between the Port of Newcastle and Wagga Wagga which would allow project vehicles to wait for traffic to clear and reduce delays to other traffic. BayWa's mitigation measures commit to detailed traffic modelling through townships as part of the project's Traffic Management Plan.
184. BayWa also provided indicative travel time delay modelling for areas along the Sturt Highway between Robinvale and Hay. BayWa proposed use of existing rest areas as pull over locations by project vehicles to allow opportunities for oncoming and through traffic to pass. If existing

rest areas are used, the highest average delay is predicted to be around 14 minutes between Zinder Park and Balranald.

185. TfNSW has recommended that the project's Traffic Management Plan include relevant mitigation measures and details of existing suitable locations to pull over along the transport route to keep the delays to oncoming and following traffic to a maximum of 15 minutes. Further, the Department has recommended conditions that require the Traffic Management Plan to demonstrate acceptable traffic delays as agreed by the relevant road authority for passing and oncoming traffic.
186. BayWa's route assessment analysis also identified several locations where additional traffic management measures would be required for safe travel of OSOM vehicles, such as assistance from a spotter and/or other traffic control measures. To manage this, the Department has recommended conditions requiring the utilisation of appropriate traffic controls.
187. BayWa has engaged with TfNSW to confirm that bridges and culverts along haulage routes can accommodate the proposed heavy vehicles transporting blades and tower turbine components. To confirm high-risk OSOM can traverse these bridges and culverts, the Department has recommended conditions for safe passage across the bridges and culverts which would be documented in the Traffic Management Plan.
188. The Department considers that access to the project area by OSOM vehicles is feasible, subject to the implementation of upgrades to key intersections/roads and the use of rest stops to allow safe passage of traffic. TfNSW supports the proposed State road network upgrades and has provided advice to inform the recommended conditions.

Table 6-4 | Port to Hay – required road upgrades

Road/Intersection	Approx. chainage	Treatment	Timing
Port Adelaide to Hay			
Murray Valley Highway onto Sturt Highway at Euston	546 km (Route from Port Adelaide)	Additional hardstand and embankment to be installed. Strengthened and sealed 1 m wide shoulder to be provided on section of the Sturt Highway. Signs to be made removable or relocated.	Prior to use by high-risk heavy vehicles requiring escort
Sturt Highway at Balranald	647 km to 648 km (Route from Port Adelaide)	Alterations to existing traffic islands. Signs to be made removable with flush base. Pavement to be assessed and upgraded where required.	Prior to use by high-risk heavy vehicles requiring escort
Right hand bend on Sturt Highway (at Market Street) at Balranald	623.7 km (Route from Port Adelaide)	BayWa has identified the following treatment options: Option 1: Hardstand to be installed on the inside of corner. Existing traffic islands to be strengthened and made trafficable for high-risk heavy vehicles requiring escort, with roll over kerbs. Light poles and property	Prior to use by high-risk heavy vehicles requiring escort

Road/Intersection	Approx. chainage	Treatment	Timing
		connections to be relocated. Signs to be made removable or relocated. Option 2: Hardstand to be installed on the outside of corner, within the existing road reserve. Existing traffic islands to be strengthened and made trafficable for high-risk heavy vehicles requiring escort, with roll over kerbs. Light poles and property connections to be relocated. Signs to be made removable or relocated.	
Roundabout on Sturt Highway onto Cobb Highway at Hay	750 km (Route from Port Adelaide)	Several light poles and signs to be removed or relocated. Hardstand to be installed on exit of corner.	Prior to use by high-risk heavy vehicles requiring escort
Port of Newcastle to Hay			
Roundabout at the corner of Tasman Road and Hammond Avenue (Sturt Highway), East Wagga Wagga	614.6 km (Route 1 from Port of Newcastle)	Existing apron on the roundabout to be traversed by the transporter. Centre of roundabout to be made trafficable. Sign to be made removable or relocated.	Prior to use by high-risk heavy vehicles requiring escort
Roundabout at the corner of Koorigal Road and Hammond Avenue (Sturt Highway), East Wagga Wagga	617.3 km (Route 1 from Port of Newcastle)	Existing apron on the roundabout to be traversed by the transporter. Centre of roundabout to be made trafficable. Sign to be made removable or relocated.	Prior to use by high-risk heavy vehicles requiring escort
Roundabout at the corner of Mason Street / Norton Street and Hammond Avenue (Sturt Highway), East Wagga Wagga	618.4 km (Route 1 from Port of Newcastle)	Existing apron on the roundabout to be traversed by the transporter. Centre of roundabout to be made trafficable. Sign to be made removable or relocated.	Prior to use by high-risk heavy vehicles requiring escort
Roundabout at the corner Edward Street (Sturt Highway) and Pearson Street, Wagga Wagga	621.5 km (Route 1 from Port of Newcastle)	Existing apron on the roundabout to be traversed by the transporter. Centre of roundabout to be made trafficable. Sign to be made removable or relocated.	Prior to use by high-risk heavy vehicles requiring escort
Left hand bend on the Sturt Highway at Gillenbah	711 km (Route 1 from Port of Newcastle)	Section of traffic island to be made trafficable. Several signs to be relocated or made removable. Light/power pole to be relocated out of swept path.	Prior to use by high-risk heavy vehicles requiring escort
Golden Highway through Merriwa	224.5 to 224.8 km (Route 2 from Port of Newcastle)	Pedestrian kerb crossing/ramp to be removed. Islands to be made trafficable or chevrons lines put in place. Several signs and bollards to be made removable.	Prior to use by high-risk heavy vehicles requiring escort

Road/Intersection	Approx. chainage	Treatment	Timing
Mitchell Highway onto Derribong Avenue, Narromine	450 km (Route 2 from Port of Newcastle)	Modifications to the existing hardstand on the outside of the corner to improve safety in all weather conditions.	Prior to use by high-risk heavy vehicles requiring escort

189. For the Port to Hay route, BayWa has noted that road upgrades to accommodate a larger turbine (with a blade length exceeding 80 m) may potentially be undertaken along some or all of the proposed Port to Hay transport routes, either by the NSW Government or by a third-party developer. Should these road upgrades be undertaken by a third-party, BayWa is seeking flexibility to transport and install larger turbines, provided that the wind turbine dimensions do not trigger the need for any additional off-site road works and do not exceed a tip height of 300 m, a hub height of 200 m and a blade length of 100 m.
190. The Department has recommended conditions of consent that would enable the transportation of a wind turbine blade greater than 80 m in length, subject to demonstrating that these components can be accommodated on the road network along the proposed route and that all relevant approvals have been obtained.

6.4.4 Assessment of local transport route

Off-site road works and upgrades

191. Based on the route study in the TIA for the EIS which assessed a 100 m blade length, the following off-site road works are proposed to be carried out by BayWa to provide access to the project area (see Table 6-5):
- widening of the hardstand at the intersection of the Cobb Highway and Jerilderie Road for a channelised Left-turn and some widening of North Boundary Road;
 - maintenance and use of roadside parking areas along Jerilderie Road during construction;
 - establishment or upgrade of 14 access points off Jerilderie Road, North Boundary Road and Bullewah Road; and
 - ground disturbance and clearing/pruning of vegetation associated with the aforementioned activities.
192. The intersection of the Cobb Highway and Jerilderie Road would be used as a primary access to the site from Hay. This intersection is also an access for the Pottinger Wind Farm which has a requirement to upgrade this intersection. In considering the potential cumulative impacts and BayWa's proposed intersection design, the Department, in consultation with TfNSW, recommended that the intersection of Cobb Highway and Jerilderie Road be upgraded to a

Channelised Left-turn (CHL) configuration, to align with the upgrade required for the Pottinger Wind Farm. The recommended conditions also require that the cost of this upgrade be shared with the Pottinger Wind Farm should the Pottinger Wind Farm complete construction of the intersection prior to the commencement of construction.

193. Murrumbidgee Council, Hay Shire Council and Edward River Council commented on the potential impacts of the project on road infrastructure and local traffic. Hay Shire Council raised concerns regarding the capacity of Jerilderie Road highlighting the potential need for additional works along Jerilderie Road to accommodate the proposed heavy vehicle loads and volumes and provided its road management plan and a geotechnical study.
194. In response to these concerns the Department requested that BayWa provide assurance, in consultation with an appropriately qualified road engineer, to confirm that BayWa's maintenance commitments would be sufficient to enable the project, in light of Council's geotechnical study and Council's concerns. BayWa provided a review confirming that maintenance commitments from BayWa were *"an appropriate management measure to address the concerns and provide a safe and functional road"* and committed to maintaining the existing condition of Jerilderie Road through assessing road conditions weekly and rectifying defects identified in accordance with Austroads guidelines, as outlined in BayWa's mitigation measures and commitments.
195. The Department considers the maintenance regime to be sufficient to support the functionality of Jerilderie Road is maintained throughout construction. The Department has recommended conditions requiring BayWa to undertake dilapidation surveys of utilised local roads along transport routes prior to the commencement of construction and one month following construction, and undertake any necessary repairs to return roads to an equivalent or improved condition. Additionally, the Department recommends that any damage to roads as a result of the development be rectified within seven days of identification.

Table 6-5 | Local transport route road works and other road works

Road/ Intersection	Approx. chainage	Treatment	Timing
Local transport route			
Intersection of Jerilderie Road and Cobb Highway	758 km (Route from Port Adelaide) 889 km (Route 1 from Port of Newcastle)	Channelised Left-turn (CHL) treatment to be installed on inside corner, to allow for OSOM movements turning left in from Cobb Highway onto Jerilderie and right out from Jerilderie Road onto the Cobb Highway.	Prior to commencement of pre-construction minor works
North Boundary Road	809 km from (Route from Port Adelaide)	Widening a 10 km long segment of North Boundary Road to a 4 m wide carriageway, with 1 m wide shoulders on both sides, plus associated roadside drainage.	Prior to use by high-risk heavy vehicles requiring escort

Road/ Intersection	Approx. chainage	Treatment	Timing
	940 km (Route 1 from Port of Newcastle)		
Site access points 1 to 13 (Jerilderie Road, North Boundary Road and Bullewah Road)	Various locations between: 800-825 km (Route from Port Adelaide) 937-961 km (Route 1 from Port of Newcastle)	Initially a temporary gravel treatment would be provided to accommodate semi-trailer use based on swept path analyses. Prior to use by OSOM vehicles, intersections at the access points would be formalised.	Prior to commencement of construction
Site access point 14 (Bullewah Road)	821 km (Route from Port Adelaide) 957 km (Route 1 from Port of Newcastle)	Initially a temporary gravel treatment would be provided to accommodate semi-trailer use based on swept path analyses. This would be followed by formalisation of access, turning right from Bullewah Road, to provide semi-trailer access to the on-site temporary workers accommodation camp.	Prior to commencement of construction
Quarry transport route			
Willurah Road / Carrathool Road intersection, within the Edward River LGA	~48 km south of the project	Basic Auxiliary Left (BAL) turn treatment, including line marking and repaving works.	Prior to use of the intersection by heavy vehicles associated with the development

6.4.5 Rail crossings

196. There are several rail crossings along the Port of Newcastle to Hay OSOM transport routes for wind turbine components including:

- Route 1 via NorthConnex and Route 3 via Pennant Hills Road: Selwyn Street at Mayfield North;
- Route 2 via Central West:
 - Selwyn Street at Mayfield North;
 - several locations on the Golden Highway at Denman, Dunedoo and Beni;
 - Boothernba Road at Dubbo;
 - several locations on the Newell Highway at Tichborne and Forbes;
 - Showground Road at West Wyalong;
 - Newell Highway at Mirrool; and
- on all routes there are several other crossings of redundant/disused rail lines as identified by TfNSW.

197. There are no rail crossings within NSW along the transport routes between Port of Adelaide and Hay.
198. The TIA assessed the width and vertical curve of rail crossings and considered all to be suitable for required loads. Notwithstanding, approval from relevant authorities would be required prior to the use of rail crossings by construction traffic.

6.4.6 Road network performance

199. The TIA assessed mid-block road performance on surrounding roads on the local transport route, with the addition of the project's construction traffic, background traffic growth (to 2028), and projected traffic from nearby renewable energy developments. This assessment found that surrounding roads would operate at a Level of Service A in 2028 except for the Cobb Highway which would operate Level of Service B, indicating sufficient road network capacity.
200. The Department is therefore satisfied that the introduction of construction traffic would not have significant impacts on road network performance along the local transport route.

6.4.7 Cumulative impacts

201. Given the project's location in the South West REZ, there are several approved or proposed energy projects which have the potential to generate cumulative construction traffic impacts, including through heavy vehicle movements on the Cobb Highway and other routes between the South West REZ and Ports of Newcastle and Adelaide.
202. The Pottinger Wind Farm (approved), Pottinger Solar Farm (preparing EIS), the Plains Wind Farm (under assessment) and the Plains Solar Farm (under assessment) are expected to have their primary transport route along the Cobb Highway during the construction period. The TIA found that with peak cumulative construction traffic from these projects, roads on the local transport route would generally continue to operate with sufficient road network capacity.
203. The intersection of the Cobb Highway and Jerilderie Road would be used as a primary access from Hay for both the Pottinger and Bullawah Wind Farms and the Department, in consultation with TfNSW, has recommended a condition that this intersection be upgraded to a Channelised Left-turn (CHL) and that this upgrade be jointly funded by both the Pottinger Wind Farm and this project.
204. The Department has also recommended conditions that require consultation with TfNSW, Energy Corporation, local Councils and other renewable projects in the South West REZ as part of the Traffic Management Plan, to appropriately manage cumulative traffic movements..

205. TfNSW is also evaluating key intersections to facilitate construction of renewable projects within the South West REZ and is engaging with Applicant's that hold access rights to connect to the PEC 330 kV transmission line, regarding movement of high-risk OSOM vehicles to the South West REZ.

6.4.8 Recommended conditions

206. The Department has recommended conditions requiring BayWa to:

- restrict project related vehicles to the approved access route;
- undertake dilapidation surveys of the relevant local roads along the transport routes during, prior to and following construction, upgrades and decommissioning and repair any damage resulting from construction traffic;
- restrict the maximum blade length to 80 m, unless BayWa demonstrates that blades in excess of 80 m can be accommodated on the road network along the transport route;
- prepare a Traffic Management Plan in consultation with the relevant roads authority that includes provisions for:
 - temporary traffic controls;
 - notifying the local community about development-related traffic impacts;
 - a traffic management system for managing over-dimensional vehicles;
 - managing oncoming traffic delays as a result of heavy vehicles requiring escort; and
 - a drivers code of conduct that addresses fatigue management and includes procedures for drivers to adhere to the designated haulage routes and speed limits and implement safe driving practices.

6.4.9 Conclusion

207. The Department considers that should the Commission determine to approve the project, the project would not have unacceptable impacts on the capacity, efficiency or safety of the road network, subject to the implementation of BayWa's commitments and the recommended conditions developed in consultation with TfNSW and Councils, which include road upgrades, regular road maintenance and the implementation of a Traffic Management Plan.

6.5 Visual

208. Although no public objections relating to visual impacts were received from any receiver located within 15 km of the project, five submissions objecting to the project raised concerns about visual impacts. Concerns included the size and scale of the wind farm, its impact on the character of the landscape and its cumulative impacts with other wind farms in the surrounding area.
209. A Landscape and Visual Impact Assessment (LVIA) was prepared in accordance with *Wind Energy: Visual Assessment Bulletin (2016)* (the Visual Bulletin) as part of the EIS. An addendum LVIA was included in the submissions report to provide information on the potential impacts from night lighting on the Oolambeyan National Park, in response to advice received from NPWS.
210. BayWa reduced the number of proposed turbines from 143 to 141 through its design process after submitting the EIS (see Section 5.2). The LVIA assessed the 143-turbine design and a maximum turbine size with a tip height of up to 300 m as a worst-case assessment (see Table 2-1). The Department considers the removal of two turbines would have a minor reduction in the project's overall impact on the landscape (see Section 6.5.3).
211. As part of its detailed assessment of the proposal, including its potential visual impacts, the Department undertook a site visit on 26 November 2024 and considered the typical landscape character and representative views surrounding the project.

6.5.1 Avoidance and mitigation

212. The Visual Bulletin lists different visual impact mitigation options for consideration, including physical turbine alterations (re-siting and re-colouring), landscape alterations such as vegetation screening and landowner agreements for significantly affected landowners. The Department considers that re-siting or removing turbines is generally the most effective mitigation measure.
213. BayWa has secured neighbour agreements with three associated receivers within 4 km of a turbine. BayWa has advised that these agreements address visual impacts only.
214. BayWa proposes to address the residual impacts to non-associated receivers by:
- providing vegetation screening and/or supplementary plantings, if requested by landowners;
 - using turbines with a matte white, non-reflective finish, consisting of three blades with uniformity of colour, design, rotational speed, height and rotor diameter throughout;
 - avoiding necessary lighting, signage and logos; and
 - applying appropriate mitigation measures to lighting (including sensors, directional lighting and shielding).

6.5.2 Impact assessment approach

215. The Department assessed the visual impacts of the project against the Visual Bulletin's visual performance objectives. These consider the visual influence zone (VIZ) of a receiver which is a combination of viewer sensitivity, visibility distance as well as scenic quality class and comprise three zones: high (VIZ1), moderate (VIZ2) and low (VIZ3). The outcomes of the assessment are as follows:

- **visual magnitude** – black (4 km) and blue (5.9 km) distance thresholds based on turbines 300 m tall indicate where turbines may significantly impact a receiver. The Visual Bulletin recommends for residences in:
 - VIZ1 within the blue line: avoid turbines or provide detailed justification for turbines;
 - VIZ2 within the black line: manage impacts as far as practicable and justify residual impacts, describing mitigation measures for turbines,
 - VIZ2 between the blue and black line: consider screening; and
 - VIZ3 within the black line: consider screening.
- **multiple wind turbine effects** – considers the cumulative landscape and visual impacts. The performance objectives for each receiver are dependent on viewer sensitivity level (rather than VIZ). For level 1 (high sensitivity) receivers, turbines within 8 km should avoid being visible in more than one 60 degree sector and for level 2 (moderate sensitivity) receivers, turbines within 8 km should avoid being visible in more than two 60-degree sectors.
- **landscape scenic integrity** – considers how the project would alter the current landscape character and scenic quality of the visual catchment. For VIZ1, turbines should be very small or faint, or of a colour contrast that would not compete with major elements in the existing visual catchment. For VIZ2, wind turbines may be visually apparent and could become a major element, but not dominate the landscape. For VIZ3, turbines may be visually apparent or significantly modify the visual catchment.
- **key feature disruption** – describes how likely turbines are to disrupt the central line of sight and/or the central focal viewing fields surrounding identified key features of a landscape. For VIZ1, turbines should not remove, visually alter or disrupt an identified key landscape feature. For VIZ2, these impacts should be minimised. No objective applies to VIZ3.
- **shadow flicker and blade glint** – for each VIZ, shadow flicker to be limited to 30 hours per year and turbines must be finished with a low reflectivity surface treatment to minimise blade glint.
- **aviation hazard lighting** – where required, aviation hazard lighting must meet the requirements of *Australian Standard AS 4282 - 1997* and any prescribed or notified CASA

requirement. Shield all aviation hazard lighting within 2 km of a residence and avoid strobe lighting.

6.5.3 Impact assessment

216. Table 6-6 shows the Department's assessment of the project's impacts against the visual performance objectives outlined in the Visual Bulletin.
217. There are substantial separation distances between the proposed wind turbines and non-associated receivers. As shown on Figure 9, there are no non-associated receivers located within the black or blue line (4 km and 5.9 km from a turbine, respectively).
218. There is one non-associated receiver (R9) located 6 km from the closest turbine and an additional four non-associated receivers (R7a, R7b, R7c and R7d) located between 7.6 and 7.7 km from the closest turbine. R7a-d are separate residential dwellings on the same property. While these receivers are located outside of the blue line, the Department has considered these non-associated receivers in its assessment.
219. As shown in Table 6-6, the project would meet all the visual performance objectives in the Visual Bulletin for all receivers. The Department has determined the project would not result in significant visual impacts on the surrounding non-associated receivers.

Table 6-6 | Nearby non-associated receivers

Receiver	No. of turbines within black line (<4 km)	No. of turbines between black and blue (4 km - 5.9 km)	Turbines outside blue line (5.9 km and 8 km)	Visual Influence Zone (VIZ)	Department assessment – Aligns with visual performance objective?			Recommended mitigation
					Visual magnitude	Multiple wind turbine	Landscape scenic integrity / Key feature disruption	
R9	0	0	WTG 21 (6.0 km)	VIZ 2	Yes	Yes	Yes	No mitigation required
R7a	0	0	WTG 12 (7.6 km)	VIZ 3	Yes	Yes	Yes	No mitigation required
R7b	0	0	WTG 12 (7.7 km)	VIZ 3	Yes	Yes	Yes	No mitigation required
R7c	0	0	WTG 12 (7.7 km)	VIZ 3	Yes	Yes	Yes	No mitigation required

Receiver	No. of turbines within black line (<4 km)	No. of turbines between black and blue (4 km - 5.9 km)	Turbines outside blue line (5.9 km) and (8 km)	Visual Influence Zone (VIZ)	Department assessment – Aligns with visual performance objective?			Recommended mitigation
					Visual magnitude	Multiple wind turbine	Landscape scenic integrity / Key feature disruption	
R7d	0	0	WTG 12 (7.6 km)	VIZ 3	Yes	Yes	Yes	No mitigation required

6.5.4 Cumulative impacts

220. The Pottinger Wind Farm (approved) is located immediately to the west of the project. There are an additional three wind farm projects located in the vicinity of the project area: Yanco Delta Wind Farm approximately 14.9 km to the southeast (approved), Dinawan Wind Farm approximately 8.7 km to the east (under assessment) and The Plains Wind Farm approximately 6.74 km to the west (under assessment).
221. Four non-associated residences of the project are located within 8 km of both the project and the Pottinger Wind Farm. The LVIA identified that these four non-associated residences would have the potential to view turbines associated with the project in up to three 60 degree sectors (R7a, R7b, R7c, R7d), however these views would largely be screened by existing vegetation. Given this screening, the project is not expected to result in cumulative visual impacts on these residences with the Pottinger Wind Farm.
222. There are no residences identified within an 8 km buffer of the Yanco Delta Wind Farm, the Plains Wind Farm, Dinawan Wind Farm and the Bullawah Wind Farm and therefore no cumulative visual impacts from nearby renewable projects.

6.5.5 Key public viewpoints

223. BayWa identified and assessed the visual impacts of the project from 16 public viewpoints surrounding the project in accordance with the visual performance objectives in the Visual Bulletin (shown on Figure 10), including:
- VIZ1 viewpoints (VP06, VP09 and VP13) – views of the project from motorists travelling along nearby roads, including North Boundary Road, Jerilderie Road and Willurah Road;
 - VIZ2 viewpoints (VP01 and VP02) – views of the project from Oolambeyan Homestead and Oolambeyan Picnic area, located in Oolambeyan National Park; and

- VIZ3 viewpoints (all other viewpoints, 11 locations) – limited to views of the project from motorists travelling along local roads surrounding the project.
224. The public viewpoints assessed as VIZ1 are VP06, located on North Boundary Road (1.56 km from the nearest turbine), VP09 located at the intersection of Jerilderie Road and Willurah Road in Hay South (1.12 km from the nearest turbine) and VP13 on Jerilderie Road in South Hay (1.45 km from the nearest turbine). The LVIA found that the project would be a major feature of the visual catchment at these viewpoints. These roads have a low viewer sensitivity and low frequency of viewers, who would include road users and motorists and the visual impact therefore aligns with visual performance objectives.
225. The public viewpoints assessed as VIZ2 (VP01 and VP02) are located in the Oolambeyan National Park, each around 14 km from the nearest proposed turbine. The project would not be visible from these viewpoints, due to intervening vegetation.
226. The remaining 11 viewpoints have all been assessed as VIZ3 and range from around 7 km to 25 km from the nearest turbines. The Department considers that there would be limited traffic with views visible for only a short duration which would not have a significant impact on road users.
227. While some wind turbines would be visible from the public viewpoints assessed, the existing vegetation and distance from the turbines would align with visual performance objectives. The Department considers that the visual performance objectives would be achieved at all public viewpoint locations.

6.5.6 Ancillary infrastructure

228. The project's ancillary infrastructure includes a 330 kV internal transmission line, a 220kV internal transmission line, a 220kV switchyard, two operations and maintenance facilities, site substations and a battery energy storage system within the project area.
229. The Department considers the project's ancillary infrastructure is unlikely to have a significant visual impact, given the nature of the predominantly grazing landscape, existing presence of transmission infrastructure in the area, the distance of the ancillary infrastructure from non-associated residences, the intervening vegetation and selection of components with low visual contrast.

6.5.7 Shadow flicker and blade glint

230. Given the separation distance of turbines to non-associated residences, the project has limited potential for shadow flicker. The LVIA included a Shadow Flicker Assessment, which concluded that the proposed layout would not exceed the Visual Assessment Bulletin's recommended limit of 30 hours per year at all non-associated receivers.

231. BayWa has committed to minimising blade glint by ensuring turbines are finished with a low reflectivity surface treatment. The Department supports this approach to minimise blade glint where possible.

6.5.8 Aviation hazard lighting

232. Under the National Airports Safeguarding Framework (NASF) Guideline D – *Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms) / Wind Monitoring Towers* (National Airports Safeguarding Advisory Group, 2012), CASA must be notified if a proposed wind turbine or wind monitoring tower is higher than 150 m or infringes on the Obstacle Limitation Surfaces (OLS) of a certified aerodrome. The proposed turbines are up to 300 m high and the project area is 38 km from Hay Aerodrome (see Section 6.6). CASA was consulted as part of the assessment. CASA may determine and subsequently advise an Applicant and relevant planning authorities, whether it considers obstacle lighting is required.
233. Where lighting is required, the NASF Guidelines recommend that to minimise visual impacts “obstacle lights may be partially shielded, provided it does not compromise their operational effectiveness. Where obstacle lighting is provided, lights should operate at night, and at times of reduced visibility. All obstacle lights on a wind farm should be turned on simultaneously and off simultaneously.”
234. BayWa’s Aviation Impact Assessment (AIA) concluded that no obstacle night lighting would be required for the project to maintain an acceptable level of safety to aircraft. However, CASA advised that the project is required to be obstacle lit and that steady medium-low intensity red obstacle lighting would be required.
235. BayWa prepared an Obstacle Lighting Plan to accompany the submissions report. CASA accepted the amended AIA and its lighting plan, commenting that wind turbine WTG 116 would not require lighting.
236. The Department has recommended conditions requiring BayWa to install aviation hazard lighting in accordance with CASA requirements and in a manner that minimises any adverse visual impacts.

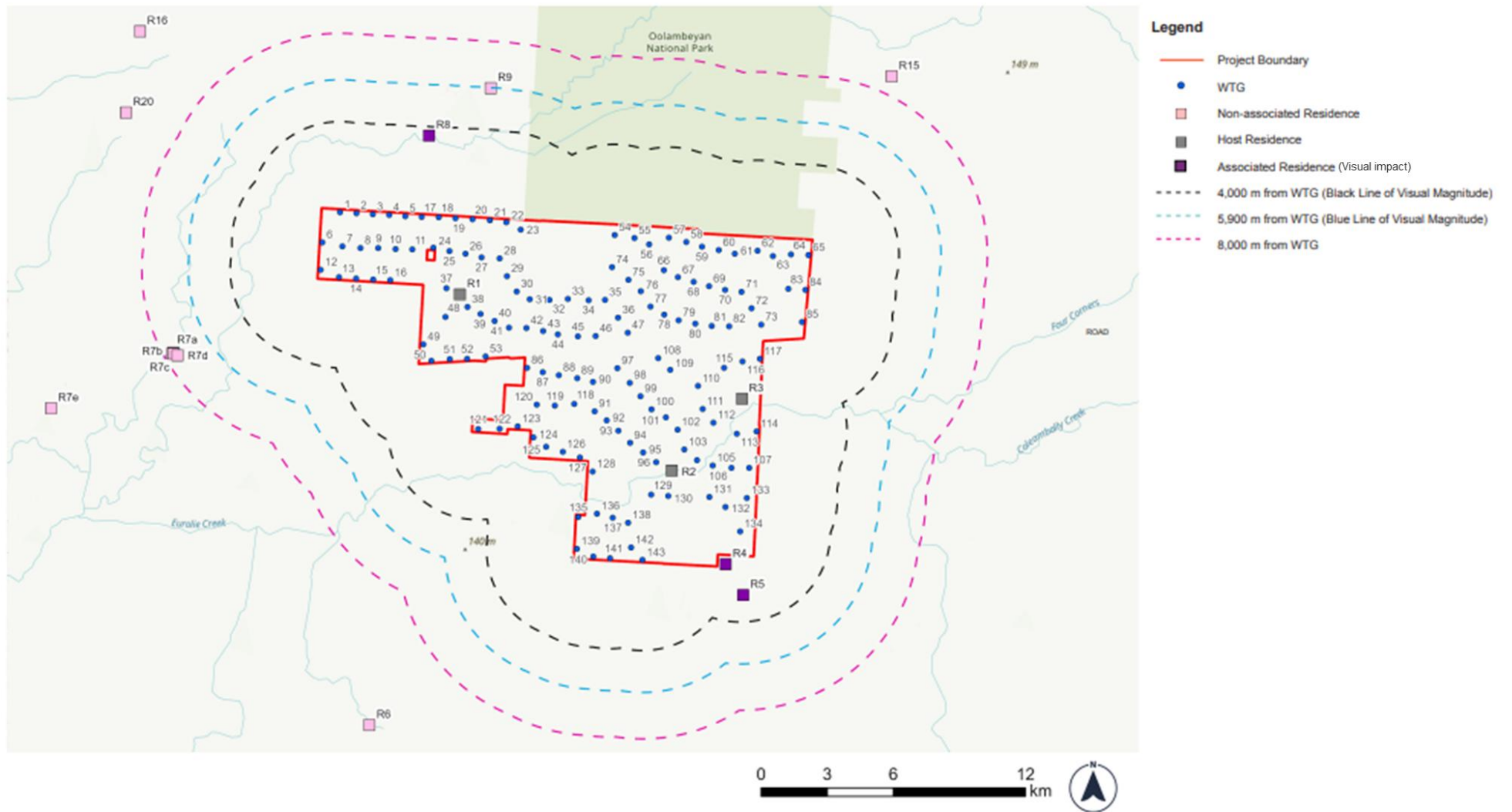


Figure 9 | Surrounding receivers

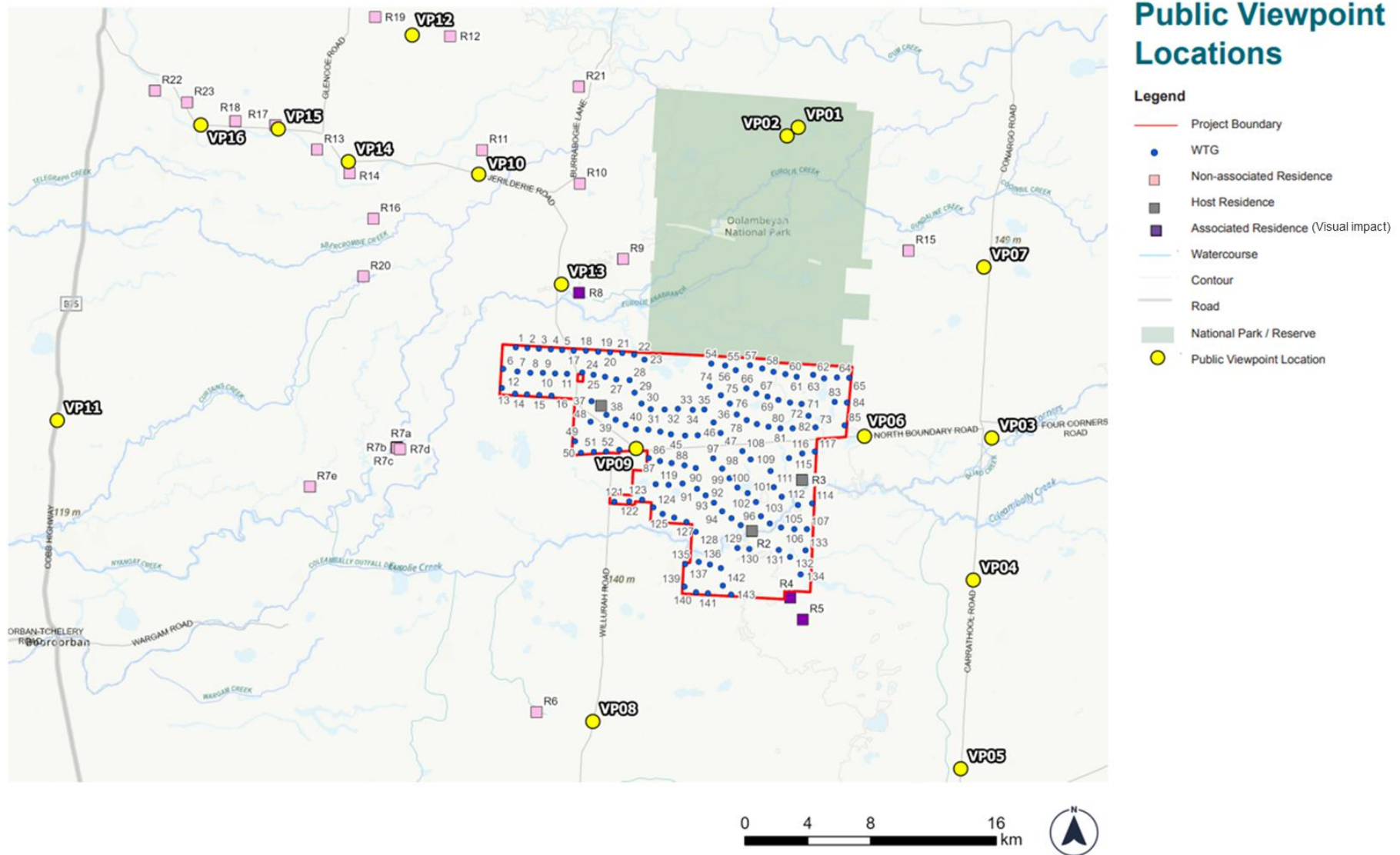


Figure 10 | Public viewpoint locations

6.5.9 Recommended conditions

237. To minimise and manage the residual visual and lighting impacts as far as practicable, the Department has recommended conditions requiring BayWa to:

- implement all reasonable and feasible measures to minimise the impacts of the visual appearance of the development;
- paint turbines off-white/grey and finish the blades with a treatment that minimises potential for any glare or reflection;
- blend the visual appearance of all ancillary infrastructure (including paint colours, specifications and screening) as far as possible with the surrounding landscape;
- minimise the off-site lighting impacts of the development; and
- limit shadow flicker associated with turbines to no more than 30 hours per annum at any non-associated residence.

238. The Department does not consider that any landscaping screening is required, given the distances of surrounding receivers.

6.5.10 Conclusion

239. The Department considers that the project would not result in significant visual impacts on surrounding non-associated residences and would meet the visual performance objectives in the Visual Bulletin and would not materially alter the landscape. The Department has, should the Commission determine to approve the project, recommended conditions to further minimise impacts.

6.6 Other issues

240. The Department's assessment of other issues is provided in Table 6-7.

Table 6-7 | Other issues

Findings	Recommended conditions
Noise and vibration	
- Seven objections raised concerns about construction, traffic noise and operational noise impacts. - Umwelt prepared a Noise and Vibration Assessment (NVA) to assess construction and operational noise of the project in accordance with the EPA's <i>Interim Construction Noise Guideline</i> (2009) (ICNG), the NSW <i>Road Noise Policy</i> (DECCW, 2011) and the Department's <i>Wind Energy: Noise Assessment Bulletin</i> (2016) (the Noise Bulletin).	
Construction noise and vibration	
- The NVA predicts that non-associated (for purposes of the noise assessment) receivers (R4 and R13) would experience exceedances of the 'noise affected' management level of 45 dB(A) during some construction activities and road works. Noise related to all other construction is predicted to be below the 'noise affected' and 'highly noise affected' management levels for non-associated receivers. - Nurses' accommodation / quarters are located approximately 35 m to 110 m from the proposed off-site road works on the Sturt Highway at Balranald and may be temporarily noise affected during these road upgrade works. BayWa has committed to careful planning and ongoing engagement with this stakeholder and all potentially affected non-associated receivers, with suitable actions (e.g. respite, agreed time for noisy activities, alternate accommodation) to be discussed and agreed prior to the commencement of works. - Construction vibration associated with the project was assessed and considered by BayWa to be manageable as vibration-generating activities are likely to be of short duration and would utilise adequate setback distances from sensitive receivers to minimise impacts.	- Restrict construction to standard construction hours (i.e. 7 am to 6 pm Monday to Friday, and 8 am to 1 pm Saturday). Construction outside of standard construction hours subject to approval from the Planning Secretary on a case-by-case or activity specific basis. - Minimise noise during construction by implementing noise mitigation measures set out in the ICNG. - Comply with relevant vibration criteria during construction. - Verify, through noise monitoring that the noise generated by the operation of the wind farm does not exceed 35 dB(A) or the existing background noise level (LA₉₀ (10-minute)) plus 5 dB(A) for each integer wind speed and submit copy of monitoring results to the Department and EPA.

Findings

Recommended conditions

- Predicted road traffic noise levels from construction vehicles travelling along the local transport route would comply with NSW *Road Noise Policy* requirements.
- The Department is supportive of ongoing engagement with affected receivers and has recommended conditions requiring BayWa to minimise noise during construction by implementing noise mitigation measures set out in the ICNG, including scheduling activities and considering respite periods, using quieter equipment, consulting with affected residences prior to undertaking noisy construction works and establishing a complaint handling procedure.
- The Department acknowledges that there may be some instances where construction activities, such as concrete pouring and turbine erection may be time or climate sensitive, requiring construction to occur outside standard construction hours. The Department considers that these activities may proceed where they are inaudible at non-associated receivers and the Department has recommended a condition that other instances be considered on a case-by-case or activity specific basis.

Operational noise

- In accordance with the Noise Assessment Bulletin, the noise assessment provided environmental noise criteria for the operation of wind turbines based on multiple wind speeds (wind speeds at each integer from 4 to 12m/s) modelled at the hub height of the turbines for a 'worst case' scenario in unconstrained generation modes. In summary, the criterion for each wind speed is the greater of 35 dB(A), or the background noise level plus 5 dB(A).
- The NVA indicates that predicted operational wind turbine noise impacts associated with the project, including low frequency noise, would comply with operational noise criteria for all non-associated receivers. BayWa has committed to verify compliance with the Noise Assessment Bulletin criteria following detailed design and selection of the final turbine model.
- Operational noise from ancillary infrastructure is predicted to be below the exceedance level of 35 dB LAeq at non-associated receivers.

Findings	Recommended conditions
• The cumulative impact assessment considered operational cumulative noise impacts with other wind farms within 10 km of the project, including the Pottinger Wind Farm, Dinawan Wind Farm and The Plains Wind Farm. The NVA found that the cumulative noise would not result in noise exceedances. • The Department concludes that the operational noise of the project, should the Commission determine to approve the project, would be acceptable with the implementation of the Department’s recommended conditions of consent and through the mitigations proposed by BayWa.	
Heritage	
• Two submissions raised concerns about impacts of the project to historic and Aboriginal heritage values at the site.	
Aboriginal heritage	
• BayWa prepared an Aboriginal Cultural Heritage Assessment Report (ACHAR) to assess the impacts of the project area on Aboriginal heritage. A Revised ACHAR for the project area was included in the submissions report to address Heritage NSW’s advice in relation to consultation, additional modelling and mapping of sites, boundary determination and mitigation measures. An Addendum ACHAR, specifically to assess impacts of off-site road works, was also included in the amendment report. • Surveys for the ACHAR identified 31 sites in the development corridor and surrounds, including 22 open artefact sites, six site complexes, one culturally modified tree, one earth mound and one hearth. Twenty-seven of the identified sites are in the development corridor and would have the potential to be impacted by the project. BayWa has committed to avoiding 20 of the 27 sites. • An archaeological test excavation program was carried out to inform the assessment. Heritage NSW requested justification for the exclusion of some sites (PEC-E PAD25 and PEC-E PAD24) from test excavations. BayWa confirmed that datasets of other fieldwork programs (Umwelt (2023-24) and Navin Officer (2022)) adequately tested the subsurface potential of all representative landforms represented by PEC-E PAD 25 and PEC-E PAD24. Heritage NSW raised no further comments.	• The development must not cause any direct or indirect impacts on any items located outside the approved development footprint. • Implement all reasonable and feasible measures to avoid and minimise harm to the identified Aboriginal heritage items located within the development corridor. • Salvage and relocate Aboriginal items identified for salvage to suitable alternative locations in consultation with Aboriginal stakeholders. • Undertake consultation with Aboriginal stakeholders prior to construction. • Prepare and implement a Heritage Management Plan in consultation with Heritage NSW and Aboriginal stakeholders, including procedures for unexpected finds and detailed photographic archival records.

Findings

Recommended conditions

- The Addendum ACHAR provided a more detailed assessment of impacts on Aboriginal heritage associated with road works outside of the project area and determined that no Aboriginal sites would be impacted.
- BayWa has committed to avoiding and minimising impacts where possible through detailed design of the project and by installing fencing, surface collection of heritage items and implementing an unexpected finds protocol for any previously unrecorded objects, including human remains. A revised list of Aboriginal heritage items that would be protected, salvaged and relocated was provided.
- The Department recommended conditions requiring BayWa protect sites and PADs located outside the project footprint, to avoid or minimise impacts on all sites and PADs and avoid impacts to heritage items identified during test excavations that are of high significance. BayWa would also be required to prepare and implement a Heritage Management Plan in consultation with RAPs and Heritage NSW.
- Both the Department and Heritage NSW consider that, subject to recommended conditions, if the Commission determine to approve the project, the project would not significantly impact Aboriginal cultural heritage values.

Historic heritage

- There are no World, Commonwealth, State or locally listed heritage places or items within or close to the project area. The nearest listed heritage item is over 35 km from the project area.
- Two potential heritage items were identified in the project area and met the threshold for local heritage significance – the South Burrabogie Woolshed Group (PHI 1) and Bullawah Homestead Group (PHI 3). A further potential heritage item was identified (South Burrabogie Homestead Group (PHI 2)) which did not meet the threshold for local heritage significance.
- Both the South Burrabogie Woolshed Group (PHI 1) and Bullawah Homestead Group (PHI 3) would be retained, with no physical impact to these structures. PHI 1 and PHI 3 are located 500 m and 100 m away from the disturbance footprint, respectively. BayWa has indicated 100 m is the minimum safe distance from the construction activities with potential vibration impacts proposed and as such, it is anticipated there would be negligible potential for construction vibration impacts. The Department's recommended conditions require BayWa to avoid impact to these items.

Findings	Recommended conditions
• Components of the project would be visible in select vistas to the potential heritage items, however primary views to the items would be maintained and impacts would not be significant (see Section 6.5). • The development corridor and disturbance footprint were identified as being of low archaeological potential. Two areas of moderate archaeological potential were identified in the project area, however both were outside of the disturbance footprint and would not be directly impacted. • BayWa has proposed to establish an exclusion or ‘no-go’ zones to avoid the potential for accidental damage. • The Department considers that should the Commission determine to approve the project, the impacts upon historic heritage would be manageable and minimal.	
Land use compatibility	
Agriculture • Twenty-four submitters raised concerns about the project being on agricultural land and impacts to the agricultural productivity of the surrounding region. • The project area and surrounding land is predominantly agricultural, the majority of which is used for grazing. There is no Biophysical Strategic Agricultural Land mapped within or adjoining the project area. The site is comprised of class 6 (low capability) and class 7 (very low capability) land and soil capability classes. • Wind harvesting is a passive land use that can coexist with grazing activities which can continue concurrently throughout the life of the project. Upon decommissioning the land would be rehabilitated and existing activities would be largely unaffected. • While the project would temporarily reduce the available land for agricultural uses during construction, the long-term use of the land for agricultural purposes would not be compromised during the operation of the project. Additionally, the Department notes that the project would provide an additional source of income for the landowners of the associated and host properties, mitigating any impacts. • Material being sourced on site in borrow pits would temporarily reduce available grazing land during construction, this would be temporary and limited to the construction phase of the project and rehabilitation of the borrow pits would occur as soon as practicable following construction.	• Rehabilitate the project area to a standard that makes it available for agricultural production following decommissioning. • Rehabilitate borrow pit sites as soon as practicable after the cessation of borrow pit activities.

Findings

- The Department considers that the project would not compromise or significantly alter the availability of agricultural land for primary production purposes within the project area or its surrounds.

Crown Land

- The project area contains several Crown roadways, an existing travelling stock route and an undetermined Aboriginal land claim.
- Crown Lands indicated that a licence would be required for the use or occupation of Crown Land or Crown Roads in accordance with the *Crown Land Management Act 2016*.
- BayWa has committed to securing the necessary authorisations prior to any works upon Crown Land and Crown roads.
- The Department acknowledges BayWa would be required to obtain necessary approvals prior to any works impacting Crown Lands and Crown Roads and considers that these impacts would be manageable as they would be undertaken in accordance with the *Crown Land Management Act 2016*.

Aviation safety

- BayWa undertook an Aviation Impact Assessment (aviation assessment) as part of the EIS and provided additional information as part of the amendment report. BayWa concluded that the project would not have an adverse impact to air safety of certified aerodromes, subject to the implementation of mitigation measures and administrative controls.
- The project area is located outside of any obstacle limitation surfaces (OLS) of certified airports however is approximately 38 km southeast of Hay Airport. Airservices Australia advised that the maximum height of the turbines would affect the lowest safe altitude of air route W762 and the 25 nm Minimum Sector Altitude instrument procedure at Hay Aerodrome and required these routes be amended. The Department has recommended a condition requiring BayWa to consult with Airservices Australia and secure an agreement for the amendments required prior to the commencement of construction.
- Carry out the development in accordance with the *National Airports Safeguarding Framework Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers*.
- Notify the relevant aviation authorities and local airstrip operators of the final location and specifications of the wind turbines and any wind monitoring masts.
- Install aviation hazard lighting in accordance with CASA's requirements.

Findings	Recommended conditions
• There are four private aircraft landing areas in proximity to the project. The project area is located outside the area of interest for aviation activity (3 nautical miles or 5.6 km) for these landing areas and would not be affected by the project. • One private airstrip is located on a host landholder's property which, in its current orientation and location, would be impacted by wake turbulence from the project. The host landholder is aware of these impacts and BayWa has committed to measures to mitigate impacts including amending the landing procedures and re-orientating the landing area. • In response to comments raised by National Parks and Wildlife Services (NPWS), BayWa submitted an addendum to its aviation assessment to demonstrate that the project would not impact NPWS aviation operations within the adjoining Oolambeyan National Park, nor would the project impact the use of existing NPWS helipads. Noting the importance of fire-fighting operations to NPWS, the Department has recommended the development of an Emergency Plan that would detail operational shut down procedures and blade positioning in the event of fires. • The Department considers the aviation assessment sufficiently considered aviation requirements in the vicinity of the project, would not affect ongoing operations of any certified aerodrome and would adhere to CASA regulations.	• Amend air route W762 and the Hay Aerodrome 25 nm Minimum Sector Altitude instrument procedure in consultation with Airservices Australia. • Minimise the off-site lighting impacts of the project. • Shut down turbines and position turbine blades to minimise interference with aerial firefighting operations. • Use aviation hazard lighting during firefighting.
Hazards and risks	
Hazard analysis • The revised Preliminary Hazard Analysis assessed the risks associated with the transport and storage of hazardous material as well as the risks associated with the BESS, in accordance with the <i>State Environmental Planning Policy</i> (Resilience and Hazards SEPP) and the relevant Hazardous Industry Planning Advisory Papers. • The Department is satisfied that the dangerous goods stored on site would be unlikely to exceed the threshold limits in the Department's Hazardous and Offensive Development Application Guidelines 'Applying SEPP 33' and the project is not potentially hazardous as per Chapter 3 of the Resilience and Hazards SEPP.	• Comply with relevant asset protection requirements in the RFS's <i>Planning for Bushfire Protection 2019</i> (or equivalent). • Provide suitable infrastructure on site to respond to fires on site, including the provision of a 100,000 litre water supply. • Prepare and implement a Fire Safety Study and an Emergency Plan.

Findings	Recommended conditions
- The project includes a 57 ha area for battery storage located north of North Boundary Road, with a total storage capacity of 718 MWh. The area identified for battery storage is sufficient to contain the BESS units with adequate separation distances between the BESS units and the onsite and offsite infrastructure for fire management and control. - The Preliminary Hazards Analysis found that, subject to the separation distances, design, installation and maintenance of BESS units in accordance with Australian Standards, installation and maintenance of a BESS fire protection/suppression system, installation of fencing and security and emergency management protocols, the project risk of a hazardous event occurring would be within acceptable levels. - The Department considers that, should the Commission determine to approve the project, its potential hazard risk can be adequately managed subject to the implementation of recommendations of the Preliminary Hazards Analysis and the Department's recommended conditions (which include bushfire management planning, preparation of a Fire Safety Study and Emergency Plan prior to construction).	- Comply with the applicable EMF criteria as per <i>International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines</i>. - Comply with section 120 of the POEO Act. - Demonstrate that the battery storage layout is consistent with the recommendations of the Preliminary Hazard Analysis prior to commencing construction of the battery storage facility, unless otherwise agreed in writing by the Planning Secretary.

Fire safety

- Six submitters raised concerns regarding the impacts of the project on bushfire management.
- The southern part of the project area (south of North Boundary Road) is mapped as bushfire prone land with a Vegetation category of 3 (grassland), which is considered to pose a medium bushfire risk. The northern part of site is not identified as bushfire prone land.
- BayWa has committed to implementing Asset Protection Zones around all wind turbines and infrastructure associated with the project across the entire project area, in accordance with relevant guidelines and has committed to the provision of 100,000 L onsite water supply for firefighting and maintenance of asset protection zones.
- In consultation with the NSW Rural Fire Service and Fire and Rescue NSW, the Department has recommended conditions requiring BayWa to prepare and implement an Emergency Plan and Fire Safety Study for the project, in compliance with RFS's *Planning for Bushfire Protection 2019*. The Department is of the view that, if the Commission determines to approve the project, any fire risks would be adequately managed.

Electric and magnetic fields (EMF)

- Most operational infrastructure (including turbines, substations, BESS, transmission lines and interconnecting cables) are sources of electric and magnetic fields (EMF). Maximum EMF values would occur immediately below overhead power lines and at ground level immediately above underground cables.
- The EIS assessed EMF levels for operational infrastructure in accordance with public exposure guidelines. The results show that the project would comply with *the International Commission on Non-Ionising Radiation Protection* (ICNIRP) guidelines for electric, magnetic and electromagnetic fields and indicates that the levels of EMF would be lower than the current internationally acceptable level for human health.
- The Department notes that EMF levels reduce rapidly with distance from source. Radiation from transmission power lines becomes indistinguishable from background radiation within 50 m of a high voltage power line and within 5 to 10 m of a substation.
- Given the setback distances between project components that could generate EMF and location of residential dwellings (over 1 km), the Department considers the project is unlikely to have EMF related impacts.

Contamination

- The project area is not listed as a contaminated site in the NSW EPA Contaminated Land Record or the EPA's List of Notified Sites in NSW. A Preliminary Site Investigation was undertaken in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021*, confirming contamination from a contaminant of concern was not likely to be present in the project area.
- The site has historically been predominantly agricultural. Agricultural activities have the potential to cause contamination however no potentially contaminated locations were identified in preliminary searches or the Preliminary Site Investigation. Minor earthworks would be required for construction which could expose unknown contaminated land.
- BayWa has committed to the preparation of a Soil and Water Management Plan which would include procedures to manage unexpected contamination as recommended in the Preliminary Site Investigation. The

Findings	Recommended conditions
Department has recommended the development and implementation of the Plan be included as a condition of consent. • To manage unexpected finds, the Department has recommended an unexpected finds procedure be developed in accordance with NSW EPA guidelines, Australian standards and relevant industry codes of practice. • The Department considers the site would be suitable for the project and should the Commission determine to approve the project, any risks would be minimised and managed.	
Blade throw • BayWa submitted a blade throw risk assessment as part of the EIS which was updated in the submissions report to address comments from the Department’s Hazards Team regarding probability calculations. BayWa responded to the Department’s comments by removing two turbines (37 and 38) to mitigate the potential for blade throw risk to a residence. • The revised project layout resulted in setback distances of over 600 m to dwellings and over 250 m to the BESS, substation, operations facility, temporary workers accommodation and local roads from nearest turbines. • Given the distance of the turbines from occupied dwellings, project components and roads, the Department considers the project is unlikely to pose a significant blade throw risk.	
Water • Eleven submissions raised concerns about water use and impacts of the project on water and soils. Water supply • Approximately 224 ML of non-potable water would be required for the construction period of 35 months. This includes water for dust suppression, concrete production, vehicle and equipment washdown and amenities. Additionally, 11 ML of potable water per year would be required during construction.	• Provide adequate water supplies to the development and obtain any necessary licences under the <i>Water Act 1912</i> or <i>Water Management Act 2000</i>. • The development must:

Findings	Recommended conditions
• Water demands during operation would be limited to vehicle washdown, equipment and plant, vegetation management, site amenities and fire protection. • BayWa proposes to obtain water required for construction and operation from multiple sources, including; – licensed groundwater bores under agreement with host and neighbouring landholders; – potable water from commercial suppliers in the region; and – harvested run off from disturbed areas captured in excavations or sediment basins/traps. • BayWa confirmed that it is unlikely that the project would intercept an aquifer. The depth of the ground water table is 20 metres below ground level (mbgl). Turbine excavations would be limited to a maximum of 5 mbgl. The borrow pits would require excavation to a maximum of 17 mbgl, which would not intercept the water table. • The Department, NSW DCCEW and WaterNSW are satisfied that the project’s water use is unlikely to have significant impact on water supply and demand in the region, subject to BayWa obtaining relevant approvals and licences and adhering to the requirements of relevant water sharing plans.	– not materially alter the flood storage capacity, flows or characteristics in the development area or off-site; – be designed, constructed and maintained to reduce impacts on surface water and localised flooding at the site. • Prepare and implement a flood emergency response plan. • Works must be undertaken in accordance with <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRAR, 2018) and <i>Guidelines for Fish Habitat Conservation and Management</i> (2013). • Minimise any soil erosion in accordance with the <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) manual and avoid causing erosion on site.
Flooding • The project area is situated within the Murrumbidgee River floodplain, approximately 65 km south of the Murrumbidgee River. • The project area drains in a southwestern direction, through the Coleambally Outfall drain (9th order) in the south of the project area, into Billabong Creek. Flows from Billabong Creek flow onto the Edward River then to the Murray River. Waterways surrounding the project area can experience overland flow in flood events and as such pose a risk of flooding to the project. • Flood hazard category mapping shows varied levels of risk throughout the project area, with isolated areas of drainage channels recording a hazard level of H5 (unsafe for vehicles, people and structures vulnerable to failure). • Flood levels during the probable maximum flood (PMF) are variable with most watercourses and their riparian zones reaching H4 (unsafe for vehicles and people) and remaining areas either H3 (unsafe for vehicles, children and the elderly) or H2 (unsafe for small vehicles).	

Findings	Recommended conditions
• BayWa undertook detailed flood modelling for existing and as-built conditions of 10%, 1%, 0.5%, 0.2% Annual Exceedance Probability (AEP) and PMF events. The existing flood depth across the project area ranged from 0 m to around 1.7 m in 0.2%, 0.5% and 1% AEP flood events, increasing to a peak depth of about 2.1 m in the PMF event. • The modelling showed that during construction of the project, some of the temporary construction compounds, accommodation facilities, batching and laydown areas would experience a flood depth of up to 0.25 m during a 1% AEP event. While some wind turbines could experience flood depths of 0.3 m during the 1% AEP event, turbines are resistant to flooding at the tower base of up to several metres in depth and flooding would not impact the turbines. • BayWa has committed to a range of measures to be incorporated into the detailed design to mitigate potential flooding impacts, including minimising project infrastructure within the 1% AEP flood extent, designing the project to manage flood impacts and elevating flood sensitive ancillary infrastructure to above PMF levels. • The Department has recommended conditions requiring BayWa to design and operate the project with consideration of flood risk through the implementation of a Flood Emergency Response Plan, which would be consistent with relevant agencies flood emergency strategies. • The Department has recommended conditions in consultation with local Councils, EPA, SES and CPHR, should the Commission determines to approve the project, that would minimise the impacts on flooding.	
Erosion and sedimentation • The topography of the project area is characterised as relatively flat and homogenous and as a result the risk of erosion from high velocity surface water flows is considered low. Ground disturbing works including excavation for footings of the turbines, stockpiling of excavated material and imported material could increase the risks of erosion and sediment movement across the site and onto surrounding land. • BayWa has committed to preparing an Erosion and Sediment Control Plan prior to commencement of construction to support the implementation of erosion control measures (including construction works timing	

Findings	Recommended conditions
restrictions and enhanced measures) in accordance with relevant requirements in the <i>Managing Urban Stormwater: soils and construction (Landcom, 2004)</i> manual (the Blue Book). The Department considers that any erosion and sedimentation risks associated with the project can effectively be managed by complying with the relevant requirements in the Blue Book and has recommended conditions that erosion be minimised, should the Commission determine to approve the project.	
Waterfront land - BayWa has identified that access tracks and transmission cables may be located within 40 m of a watercourse. - The DPIRD – Fisheries recommended design and construction requirements of watercourse crossings and appropriate buffers be implemented adjacent to Key Fish Habitat. - BayWa has committed to managing Key Fish Habitat by complying with relevant policies and guidelines, including <i>Guidelines for Controlled Activities on Waterfront Land</i> and Fisheries NSW Policy <i>Guidelines for Fish Habitat Conservation and Management (NSW DPI, 2013)</i> during any construction or controlled activity near waterways inside the project area. - The Department considers that the commitments of BayWa in conjunction with the recommendations of DPIRD Fisheries would appropriately manage impacts upon watercourses and fish habitat. The Department has also recommended conditions requiring compliance with relevant guidelines and policies.	
Social and economic - Thirty-three objections raised concerns about the potential socio-economic impacts of the project on surrounding areas. While some submitters raised concerns about the socio-economic impacts, other submitters were supportive of the socio-economic benefits to the local community. - BayWa prepared a Social Impact Assessment (SIA) as part of the EIS, which identified a range potential social impacts, both positive and negative, including: - economic benefits for the surrounding community;	- Enter into a VPA with Hay Shire Council, Murrumbidgee Council and Edward River Council prior to commencing construction. - Prepare and implement an Accommodation and Employment Strategy for the on site workers

Findings	Recommended conditions
– increased demand for local goods and services; – reduced availability of accommodation and housing; and – reduced landscape character, amenity, health and wellbeing impacts. • The project would generate direct and indirect benefits to the local community including: – up to 380 construction jobs and 40 ongoing FTE operational jobs; – expenditure in the local economy by workers who would reside, either temporarily or permanently in the areas; and – the procurement of goods and services by BayWa and associated contractors. • BayWa is proposing to establish an on-site workforce accommodation camp to accommodate up to 345 FTE workers to manage the potential impacts to housing and short-term accommodation availability in the region. The facility would be maintained in accordance with an Accommodation Camp Management Plan and the Department has recommended a condition to this effect. This plan would also include detail of available health and medical services available to both the local community as well as those located at the accommodation camp. • To prioritise the employment of local workers for the construction and operation of the project, the Department has conditioned that BayWa prepare and implement an Accommodation and Employment Strategy that would also consider the cumulative impacts associated with other State significant developments in the area. • BayWa has committed to benefit sharing in accordance with the <i>Benefit-Sharing Guideline – Guideline for large-scale renewable energy projects</i> (November 2024) at a rate of \$1,050 per MW generated. – Consistent with the Guideline, 85% would be provided under a VPA to the three host Councils split broadly based on the turbines located in each LGA and 15% of the annual contributions would support First Nations, including organisational capacity building. – The three host Councils have agreed to split this funding with Hay Shire Council and Edward River Council each receiving 37.5% and Murrumbidgee Council receiving 25% based on anticipated impacts within each Council area.	camp prior to commencing construction, in consultation with Councils. • BayWa must implement the Accommodation Camp Management Plan. • Construct and operate the accommodation camp required in the EIS prior to commencing all other construction activities.

Findings	Recommended conditions
– The contributions to each Council include elements of upfront payments that would be staged in accordance with construction and proposed MW per stage. • Contributions would be as follows: – Hay Shire Council and Edward River Council – total up-front payments of up to \$1,075,953 (split across stages, should they proceed) with ongoing annual payments of up to \$233,123 per year (excl. GST and indexed to CPI) dependant on final capacity of the development. – Murrumbidgee Council – total up-front payments of up to \$717,302 (split across stages, should they proceed) with ongoing annual payments of up to \$155,414 per year (excl. GST and indexed to CPI) dependant on final capacity of the development. • The Department considers that the community and social impacts could be appropriately managed with the implementation of BayWa’s commitments and the Department’s recommended conditions, should the Commission determine to approve the project.	

Radiocommunication	
• Electromagnetic signals transmitted for telecommunication systems (such as radio and television broadcasting, mobile phone signals and mobile/fixed radio transmitters) function most efficiently where a clear line of sight exists between the transmitting and receiving locations. Wind farms and other infrastructure have the potential to cause interference with this line of sight. • BayWa undertook an assessment of electromagnetic interference as part of the EIS. The assessment concluded that the project could impact one communication link within a 2 km buffer of the project. Although the disturbance is considered unlikely, ongoing consultation with the Rural Fire Service who operate this link is recommended. • Telstra (the telco authority) provided advice, initially discussing potential impact to a single point to point link not recorded by the Australian Communications Media Authority. Investigations found this link was a disused phone line belonging to a host land holder who has agreed to terminate the line. Telstra did not raise any further concerns.	• If the project disrupts any radiocommunications services, BayWa must make good any disruption to these services as soon as possible, but no later than one month following the disruption of the service.

Findings	Recommended conditions
The Department considered feedback from relevant authorities and has recommended conditions of consent, including requiring BayWa to make good any disruption to services as soon as possible. Should the Commission determine to approve the project, it is considered that impacts on radiocommunications would be appropriately managed.	
Air quality	
- An increase in dust generation is expected during construction. Removal of vegetation for construction and access tracks exposes soil to the wind and may result in a decrease in local air quality. - BayWa has committed to a number of mitigation measures to manage potential air quality impacts, including dust suppression and controls and limiting construction during windy weather conditions. Cumulative air quality issues across the South West REZ can be effectively managed by conditioning appropriate mitigation measures. - Noting the above, and that any potential air quality impacts would be limited in duration, the Department considers that the project would not significantly impact the air quality in the locality should the Commission determine to approve the project.	- Minimise off-site dust and fume emissions. - Minimise surface disturbance of the site.
Waste	
- Nine objections were raised in relation to waste generated by the project. - BayWa has consulted with local councils to confirm the availability of waste facilities in the area. Murrumbidgee Council noted that it would not accept any waste generated by renewable energy projects at any landfill or wastewater treatment plant within the LGA. Edward River Council noted there are facilities available to support the management of project-related waste, however there are limitations to the amount of waste that can be accepted (including at the Deniliquin Landfill Depot). Hay Shire Council indicated there is capacity at the Hay Transfer Station to accept waste and wastewater and a new recycling facility opened in 2024 that can manage recycled material from the project.	Prepare and implement a Waste Management Plan to minimise waste, and handle in accordance with waste hierarchy and dispose of appropriately.

Findings	Recommended conditions
• Whilst the project is not anticipated to generate significant volumes of waste, BayWa has committed to the preparation of a Waste Management Plan in consultation with local councils that would detail how waste would be reduced and managed. • The Department has recommended a condition, should the Commission determine to approve the project, requiring BayWa to reduce waste, recycle where possible and to dispose of all wastes appropriately and in accordance with licence and council agreements.	
Decommissioning and rehabilitation	
• Fifty-four objections were submitted regarding decommissioning, waste and waste contamination during exhibition of the EIS. • The Department has developed conditions for wind farms to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objectives. • The Department has also provided guidance on how host landowner agreements should consider refurbishment, decommissioning and rehabilitation in the NSW Wind Energy Framework's Negotiated Agreement Advice Sheet. • With the implementation of these measures, the Department considers that project infrastructure would be suitably decommissioned, either at the end of the project life or if the project is not operating for more than a year, to enable the ongoing productive use of the land.	• Decommission wind turbines (and associated infrastructure) within 18 months of the cessation of operations. • Any individual wind turbines which cease operating for more than 12 consecutive months must be dismantled within 18 months after that 12 month period, unless the Planning Secretary agrees otherwise. • Decommission and rehabilitate the accommodation camp to the satisfaction of the Planning Secretary within 12 months of commencing operation of the project or 12 months of ceasing the use of the accommodation camp (whichever occurs sooner). • Rehabilitate the site and minimise the total disturbance area exposed at any time through progressive rehabilitation.

Findings	Recommended conditions
	• Comply with rehabilitation objectives, including removing redundant above-ground infrastructure, restoring rural land capability and vegetation, ensuring public safety and ensuring the site is maintained in a safe, stable and non-polluting condition.
Cumulative	
• Two submissions received raised concerns regarding the cumulative impacts of the project, particularly given the location of the project in the South West REZ and the number of other renewable projects located in close proximity. • BayWa prepared a cumulative impact assessment for the project, which assessed the impacts of the project in conjunction with the impacts of projects in the region. The construction of the project may coincide with construction of several other projects including Pottinger Wind Farm and Pottinger Solar Farm (both adjacent to Bullawah Wind Farm), the Plains Wind Farm (6.74 km west), Dinawan Wind Farm (8.7 km east) and Yanco Delta Wind Farm (14.9 km east). • The Department notes that three other wind farms and one solar farm were successful in gaining the rights to connect to Project EnergyConnect transmission line. Energy Corporation notes that, at this stage, there are no additional projects connecting in the short term. However, should there be other successful projects or projects connecting to the existing network, then the number of additional projects constructing at the same time may increase. • TransGrid has identified some capacity in the existing transmission infrastructure that may provide potential avenues for projects to commence construction and connect to the grid. This remaining capacity would also be available to his project, should it be approved and generate its full planned capacity. • Cumulative impacts may arise associated with biodiversity, noise, traffic, air quality and visual impacts during construction. These impacts would be temporary and varied depending on the extent of activity occurring at each project concurrently. Each project would implement mitigation measures to minimise their potential	• No specific conditions required.

Findings

Recommended conditions

impacts. Cumulative biodiversity, traffic and visual impacts are detailed respectively in **Section 6.3**, **Section 6.4** and **Section 6.5** of this report.

- BayWa proposes a temporary workers accommodation camp within the project area to facilitate the project and would therefore not compete with surrounding projects for accommodation.
- BayWa has committed to co-ordinating construction activities with other projects, where possible to minimise cumulative amenity impacts at nearest non-associated sensitive receivers.
- The Department has been involved in the preparation of a range of cumulative impact studies (Regional Major Infrastructure Studies) to respond to community concerns regarding cumulative impacts and provide relevant agencies a shared baseline of information in relation to the impacts of projects across the South West REZ. The results of these studies are due to be released in 2026.
- The Department has considered the cumulative impacts of the project and acknowledges that there would be some cumulative impacts associated with other projects should construction activities overlap in the South West REZ, however these impacts would be temporary in nature and managed. Cumulative impacts would be addressed through the implementation of committed mitigation measures and recommended conditions of this and any other projects within the South West REZ, should the Commission determine to approve the project.

7 Evaluation

241. The Department has assessed the development application, EIS, submissions report, amendment report and additional information and has carefully considered:
- submissions received from members of the community;
 - comments provided by councils; and
 - advice received from government agencies.
242. The Department has also considered the objectives of the EP&A Act, including the ESD principles and relevant considerations under section 4.15(1) of the EP&A Act. The Department has given consideration to BayWa's evaluation of the merits of the project against applicable statutory and strategic planning requirements.
243. The project is permissible with consent in accordance with the Transport and Infrastructure SEPP and is located on land which has been subject to historical land clearing for agricultural purposes.
244. The project has been designed to largely avoid high value assets, including higher quality native vegetation and threatened species habitat (particularly mapped Plains-wanderer habitat), visual amenity and impacts to Aboriginal cultural heritage sites. Any residual impacts would be relatively minor and can be managed through recommended conditions of consent, if approved.
245. The project would not significantly impact threatened species and/or ecological communities. The Department considers residual biodiversity impacts can be managed and/or mitigated by imposing appropriate conditions, management plans and retiring biodiversity offset credits should the Commission determine to approve the project.
246. In relation to traffic impacts, the Department considers that, with the implementation of recommended conditions, the proposed transport routes could be appropriately upgraded to facilitate the transportation of large turbine components to the site, if approved.
247. The project would meet the visual performance objectives of the Visual Bulletin and there would be no significant visual impacts from the project. The Department acknowledges the project is sited away from non-associated receivers, with no non-associated residences within 5.9 km of the project.
248. To address the residual impacts of the project, the Department has recommended a range of detailed conditions, developed in conjunction with government agencies and Councils, to effectively minimise, manage or offset residual impacts. BayWa has reviewed the conditions and does not object to them.

249. The Department considered the submissions made during the exhibition of the project and the issues raised by the community and agencies during consultation. These matters have been addressed through changes to the project and recommended conditions of consent.
250. The project is located in the South West REZ, which is aimed at encouraging investment in electricity infrastructure and unlocking additional generation capacity in order to secure reliable energy in NSW. The project has been granted Access Rights under the South West REZ Access Scheme.
251. Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emission sources and is consistent with the goals of the *NSW Climate Change Policy Framework* and the *Net Zero Plan Stage 1: 2020-2030*. It would have a generation capacity of 804MW of clean electricity, which is enough to power approximately 463,400 homes.
252. The inclusion of a BESS would enable the project to store energy for dispatch to the grid when the wind is not blowing and/or during periods of peak demand, increasing grid stability and energy security.
253. The project would also provide flow on benefits to the community including provision of 380 construction jobs and 40 operational jobs with a financial contribution of \$1050/MW/annum split across host Councils and for First Nations over the operational life of the development. In addition, there would be benefits to the state through an injection of \$2.507 billion in capital investment into the NSW economy.
254. The Department has carefully considered the likely environmental, social, and economic impacts of the project in accordance with the requirements of section 4.15 of the EP&A Act.
255. Overall, the Department's assessment concludes that the project would result in benefits to the State of NSW including providing renewable energy in the South West REZ and in an area that has available network capacity.
256. The Department has not provided an overall recommendation but rather has undertaken a comprehensive assessment and evaluation of the project to inform the Commission to make its decision on whether the project is in the public interest. Should the Commission determine to approve the project, the Department has provided recommended conditions (see **Appendix F**).
257. This assessment report is hereby presented to the Independent Planning Commission for determination.

Prepared by:

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27/07/2026

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Appendices

Appendix A – Environmental Impact Statement

Appendix B – Submissions and government agency advice

Appendix C – Submissions report

Appendix D – Amendment report

Appendix E – Additional information

Appendix F – Recommended development consent

Appendices A to F are available at:

<https://www.planningportal.nsw.gov.au/major-projects/projects/bullawah-wind-farm>

Appendix G – Biodiversity impact summary tables

Ecosystem credit requirements

Plant Community Type	Condition	Conservation status		Impact Area (ha)	Credit Liability
		BC Act	EPBC Act		
PCT 10: River Red Gum – Black Box woodland wetland of the semi-arid (warm) climatic zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Moderate - good	-	-	2.23	29
PCT 13: Black Box – Lignum woodland wetland of the inner floodplains in the semi-arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Moderate - good	-	-	0.08	3
PCT 17: Lignum shrubland wetland of the semi-arid (warm) plains (mainly Riverina Bioregion Murray Darling Depression Bioregion)	Moderate - good	-	-	2.05	77
PCT 24: Canegrass swamp tall grassland wetland of drainage depressions: lakes and pans of the inland plains	Moderate - good	-	-	1.97	27
PCT 26: Weeping Myall open woodland of the Riverina Bioregion and NSW South Western Slopes Bioregion	DNG	Endangered	-	17.88	307
PCT 26: Weeping Myall open woodland of the Riverina Bioregion and NSW South Western Slopes Bioregion	Moderate - good	Endangered	Endangered	4.92	135
PCT 28: White Cypress Pine open woodland of sand plains, prior streams and dunes mainly of semi-arid (warm) climate zone	DNG	Endangered	-	57.61	1,418
PCT 44: Forb-rich Speargrass – Windmill Grass – White Top grassland of the Riverina Bioregion	Moderate - good	-	-	169.25	4,077
PCT 46: Curly Windmill Grass – speargrass – wallaby grass grassland on alluvial clay and loam on the Hay Plain: Riverina Bioregion	Moderate - good	-	-	333.15	8,546
PCT 160: Nitre Goosefoot shrubland wetland on clays of the inland floodplains	Moderate - good	-	-	2.55	56
PCT 164: Cotton Bush open shrubland of the semi-arid (warm) zone	Moderate - good	-	-	40.97	746
Total				632.67	15,421

Species credit requirements

Species	Conservation status		Impact on habitat (ha)	Credit liability
	BC Act	EPBC Act		
Fauna				
Little Eagle (<i>Hieraaetus morphnoides</i>)	Vulnerable	-	34.63	643
Barking Owl (<i>Ninox connivens</i>)	Vulnerable	-	2.8	49
Southern Bell Frog (<i>Ranoidea raniformis</i>)	Endangered	Vulnerable	52.16	1,426
Flora				
Chariot Wheels (<i>Maireana cheelii</i>)	Vulnerable	Vulnerable	4.67	116
Silky Swainson-pea (<i>Swainsona sericea</i>)	Vulnerable	-	9.78	282
Slender Darling Pea (<i>Swainsona murrayana</i>)	Vulnerable	Vulnerable	445.21	13,058
Spike-rush (<i>Eleocharis obcis</i>)	Vulnerable	Vulnerable	7.31	193
Winged Peppercress (<i>Lepidium monoplocoides</i>)	Endangered	Endangered	3.52	88
Total			560.08	15,855

Appendix H – Statutory considerations

Objects of the EP&A Act

In line with the requirements of section 4.15 of the EP&A Act (at the time of lodgement), the Department's assessment of the project has given detailed consideration to a number of statutory requirements. These include:

- the objects found in section 1.3 of the EP&A Act; and
- the matters listed under section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all these matters in its assessment of the project and has provided this assessment below.

Consideration

Objects of the EP&A Act

The objects of most relevance to the Consent Authority's decision on whether to approve the project are found in sections 1.3(a), (b), (c), (e) and (f) of the EP&A Act.

The Department considers the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project:

- is a permissible land use on the subject land;
- is located in a logical location for efficient wind farm development;
- is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard;
- would contribute to a more diverse local industry, thereby supporting the local economy and community;
- would not fragment or alienate resource lands in the LGA; and
- is consistent with the goals of NSW's Climate Change Policy Framework and Net Zero Plan Stage 1: 2020-2030 and Implementation update (2022) and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions.

The Department has considered the encouragement of Ecologically Sustainable Development (ESD) (Object 1.3(b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences.

In addition, the Department considers that appropriately designed SSD wind development, in itself, is consistent with many of the principles of ESD. BayWa has also considered the project against the principles of ESD. As such, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD.

Consideration of environmental protection (Object 1.3(e)) is provided in **Section 6** of this report. The Department considers that the project can be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological

Consideration

communities of the locality. The Department considers that any residual biodiversity impacts can be managed and/or mitigated by imposing appropriate conditions, if approved, and retiring the required biodiversity credits.

Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in **Section 5.4** of this report. The Department considers the project would not significantly impact the built or cultural heritage of the locality, and any residual impacts can be managed and/or mitigated by imposing appropriate conditions.

State significant development

Under section 4.36 of the *EP&A Act*, the project is considered State significant development.

Under section 4.5(a) of the *EP&A Act* and Clause 1(b) of section 2.7 of the Planning Systems SEPP, the Commission is the consent authority for the development as the project received more than 50 unique public submissions by way of objection.

Under section 4.38(3) of the *EP&A Act*, development consent is allowed to be granted for SSD applications where the development is partially prohibited, noting that the proposed subdivision of the lots would be below the minimum lot size of 200 ha and prohibited under the LEPs.

Environmental Planning Instruments (EPIs) - LEPs

The *Hay Local Environmental Plan 2011*, *Edward River Local Environmental Plan 2013* and *Murrumbidgee Local Environmental Plan 2013* (LEPs) apply to the extent of determining the permissibility and land use zoning of the project. The project is located in RU1 land use zonings under these LEPs and is permissible with consent under the provisions of the Transport and Infrastructure SEPP. The Department provides its consideration of the relevant provisions within the LEPs below.

Heritage conservation (section 5.10 Hay LEP, Edward River LEP and Murrumbidgee LEP)

BayWa assessed Aboriginal cultural and historic heritage in Section 6.3 of the EIS and in the Aboriginal Cultural Heritage Assessment Report (ACHAR). These assessments concluded that the project would not significantly impact any items of Aboriginal or historic heritage significance. The Department's assessment of heritage is provided within Section 6.6.

Flood Planning (section 5.21 Hay LEP, Edward River LEP and Murrumbidgee LEP)

The Water Resource Impact Assessment and Section 6.9 of the EIS confirm that the site is not located within the Flood Planning Area.

Earthworks (section 6.1 Hay LEP, Edward River LEP and Murrumbidgee LEP)

Construction would involve earthworks within the defined development footprint. The Department considered these impacts throughout **Section 6** of this Assessment Report. The Water Resource Impact Assessment notes that the project is located on relatively level land and only minor earthworks are required. Erosion potential is low for sheet flows and higher for concentrated flows. The Department's consideration of these matters is included in **Section 6.6** and discussed further below.

- **Drainage patterns and soil stability**
 - Erosion from concentrated flows would be minimised through appropriate drainage, erosion and sediment control measures, as required under recommended conditions.

Consideration

- The Department has recommended conditions requiring that the project does not cause any increased water being diverted off the site and that the project does not alter localised hydrology.
- **Future use or redevelopment of the land**
 - The Department considers the site could be fully restored when the project is decommissioned and has recommended conditions requiring BayWa to restore the land capability to pre-existing productive capacity.
- **Quality of fill and its source**
 - The extent and volume of excavations and fill material, as well as its use, storage and management, would be identified during detailed design. As noted above, the extent of earthworks for the project would be minor, due to the level topography of the site. The Department considers that excavated and fill material can be appropriately managed through the recommended conditions, including minimising land disturbance, maximising salvage and reuse of soil resources and preparing and implementing a Waste Management Plan.
- **Amenity impacts on adjoining properties**
 - The Department's assessment concluded that should the Commission determine the project, the project would not have unacceptable visual amenity impacts on adjoining properties subject to the recommended conditions and implementation of landscape screening as requested (see **Section 6.5**). Construction noise impacts from earthworks would exceed the noise management level of 45 dB(A) at non-associated receivers; however, these impacts would be temporary (see **Section 6.6**).
 - With the implementation of the mitigation measures proposed by BayWa and the recommended conditions of consent, the Department considers that earthworks for the project would result in minimal and temporary impacts on the amenity of adjoining properties.
- **Likelihood of impacts on relics**
 - As noted above, the project would not significantly impact on Aboriginal or historic heritage items. The Department has recommended a condition requiring the preparation of a contingency plan to manage potential impacts to unexpected Aboriginal heritage relics.
- **Proximity and potential for adverse impacts on waterways**
 - Works near higher order watercourses, including Coleambally outfall drain, would be avoided and any works within 40 m of a watercourse would comply with relevant legislation (**Section 6.6**). Recommended conditions require BayWa to not alter surrounding hydrology, require the capture and removal of contaminants from stormwater basins and for BayWa to comply with relevant legislation. With the implementation of these conditions the Department considers that impacts to waterways are unlikely.

Essential services (section 6.2 Hay LEP, section 6.9 Murrumbidgee LEP and section 6.8 Edward River LEP)

The Department considered these matters in **Section 6** and is satisfied that any impacts can be managed and services can be delivered.

- **Supply of water**
 - As set out in **Section 6.6**, water for the project can be met through several water supply options, including groundwater bores, reuse of captured rainwater and a water supply arrangement with the relevant Councils.
 - The Water Group raised no concerns about the use of existing bores (GW415943, GW050414, GW048908 and GW052479). The Department has recommended a condition to this effect.
- **Supply of electricity**

Consideration

- During construction, electricity would be supplied by generators, which were assessed in the Noise and Vibration Impact Assessment. During operation, the project would connect to the grid, and the Department considers electricity supply arrangements adequate.
- **Disposal and management of sewage**
 - Sewage would be managed via on-site septic tank or transported for management off-site via tank. The Department considers there is adequate arrangements for waste management.
- **Stormwater drainage or on-site conservation**
 - Stormwater drainage and erosion and sediment controls would be designed, installed and maintained in accordance with the relevant guidelines and the Department has recommended a condition to this effect.
- **Suitable road access**
 - The project area would be accessed via one of 14 site access point off Jerilderie Road, North Boundary Road and Bullewah Road. Subject to required road upgrades and implementation of a Traffic Management Plan, the Department and the relevant roads authorities are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety.

Airspace operations (section 6.3 Hay LEP)

- The maximum height of the turbines would affect the lowest safe altitude (LSALT) of air routes W762 and the 25 nm Minimum Sector Altitude instrument procedure at Hay Aerodrome. BayWa has committed consulting with Air Services and Aerodrome operators to amend the LSALTs prior to construction. AirServices Australia supported this approach, and the Department recommended a condition of consent that the LSALTs for these routes be updated. The Department considers that the project would not impact any airspace operations.

Environmental Planning Instruments (EPIs) - SEPPs

State Environmental Planning Policy (Resilience and Hazards) 2021

- **Chapter 3 – Potentially Hazardous and offensive development**
 - The project is not categorised as potentially hazardous or potentially offensive development under the State Environmental Planning Policy (Resilience and Hazards) 2021 (Hazards SEPP).
 - A Preliminary Hazard Analysis (PHA) confirmed the transport and storage of hazardous materials for the projects would not exceed the relevant thresholds set out in the SEPP and that the project is not considered to be potentially hazardous in respect to dangerous goods. Consequently, the Department considers the project would not be considered hazardous or potentially offensive.
 - The PHA also confirmed that the fire risks associated with the BESS meet the qualitative risk criteria outlined in the Hazardous Industry Planning Advisory Paper No. 4 and that the implementation of the identified controls would appropriately minimise the risk of fire propagation between batteries. As such, the Department considers the project does not exceed the acceptable risk criteria and if determined to be approved by the Commission, would not significantly increase risk of fire in surrounding areas.
- **Chapter 4 – Remediation of Land**
 - The project area is not listed as a contaminated site in the NSW EPA Contaminated Land Records or the list of NSW contaminated sites. BayWa undertook a PSI and concluded the site was suitable for the development and the Department's assessment concluded the project area would be suitable for the project.

Consideration

State Environmental Planning Policy (Transport and Infrastructure) 2021

- Section 2.48 – Determination of development applications – or other development
 - The Department reviewed the project against the Transport and Infrastructure SEPP and considers the project is permissible under the SEPP. In accordance with the Transport and Infrastructure SEPP, the Department has given written notice of the project to EnergyCo and Transgrid as the electricity supply authorities and TfNSW (Section 5).

State Environmental Planning Policy (Primary Production) 2021

- The Department has considered the provisions of *State Environmental Planning Policy (Primary Production) 2021*. Of relevance to the project, the SEPP aims to facilitate the orderly economic use and development of lands from primary production to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land. The Department has considered all these matters in (Section 6.6) and concluded that the project is generally consistent with the broader and specific land use planning objectives for the project area and the region under the relevant planning instruments and strategies.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

- Edward River Council LGA is listed in Schedule 2 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*. BayWa's BDAR found no evidence of koalas and the Department has considered biodiversity in Section 6.3 concluding the koala population would not be impacted by the project.

Appendix I – Consideration of community views

The Department exhibited the EIS for the project from 27 August until 23 September 2024 (28 days) and received 87 public submissions, of which 87 were unique (68 objecting to the project and 17 in support). The Department also consulted with government agencies and relevant councils throughout the assessment process.

The key issues raised by the community (including in public submissions) are considered in the Department’s Assessment Report include decommissioning, waste and contamination impacts, impacts to biodiversity, socio-economic impacts, and loss of agricultural lands. Submissions in support of the project noted various benefits of the project, including alignment with the State’s objectives and contributions towards the renewable energy transition and a sustainable future; site selection, including the strategic siting of the project to minimise biodiversity impacts and the location of the project being situated away from residences. Detail of how the Department considered these matters is presented in the table below and throughout this assessment report.

Consideration of community views

Issue	Consideration
Decommissioning, waste and contamination	Impact assessment
- Waste management - Contamination from construction or operational activities	- Concerns about decommissioning, waste and contamination impacts were raised in 54 public submissions objecting to the project. - The project would not generate significant volumes of waste during construction. BayWa is committed to segregate, manage, reuse, recycle and safely dispose of all wastes. - During the operation of the project there would be negligible amounts of waste, except for repair and maintenance activities. - Waste streams produced by decommissioning activities include packaging, excess building materials, general refuse, as well as non-putrescible wastes. - During construction, there is a risk for soil to become contaminated through accidental chemical or fuel spills, leaks from construction plant and equipment and from inappropriate storage of hazardous materials. The ground disturbance would be limited to locations for temporary construction facilities and permanent operational infrastructure. Noting the minimal level of ground disturbance required for the project BayWa identified that the risk of exposing contaminated land during construction of the project is low. All areas impacted during construction would be sealed or rehabilitated and landscaped to prevent soil erosion. - BayWa has considered the decommissioning activities associated with the project and committed to the preparation and implementation of a Decommissioning and Rehabilitation Management Plan (DRP) that would include: - Refilling of excavated materials with clean, compatible subgrade material and topsoil to reflect the density and consistency of nearby terrain;

Issue	Consideration
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- Restoration of areas that have been impacted by heavy machinery through ripping and topsoil replenishment to reflect the nearby landscape; and
- Maintaining all revegetated through fertilisation during seeding and ensuring sufficient stabilising ground cover where required.

Recommended conditions

- Waste must be handled in accordance with the waste hierarchy:
 - avoid or reduce where possible;
 - re-use, recycle and recover;
 - treat or dispose of to a licenced facility.
- Remove all infrastructure above ground such as wind turbines, electrical infrastructure, buildings and equipment during decommissioning.
- Remove and dispose of all wastes and hazardous materials such as insulating oils and lubricants would be removed safely in accordance with relevant guidelines, including the NSW EPA's *Guideline Assessment Classification and Management of Liquid and Non-Liquid Wastes* (1999).

Biodiversity	Impact assessment
• Bird and Bat Strike • SAI impacts • Direct clearing of habitat • Disturbance of native vegetation	• Concerns about biodiversity impacts were raised in 53 public submissions objecting to the project and 15 times in submissions supporting the project. • DEECW CPHR considered the project would have the potential to cause Serious and Irreversible Impacts to the threatened species, the Plains-wanderer. Based on this, the Department sought independent advice from the IEAPET Panel that concluded that any impact of the project would not be SAI. • The project would directly impact an area of up to 637 ha which represents 3% of the native vegetation in the project area and 19 ha for the off-site road works. • The project has been designed and refined to avoid and minimise biodiversity impacts to areas of higher conservation value. The Department considers that the vegetation clearing impacts of the project would not be unacceptable, subject to a range of mitigation and adaptive management measures and by offsetting the residual biodiversity impacts • A prescribed impact assessment was prepared to consider the potential impacts from turbine strikes on significant bird and bat species. The primary bird and bats are made up of 144 bird and 18 bat species, of these a total of 12 bird and 17 bat species were considered for further assessment due to their activity in the project area including, 11 threatened species. • In consultation with NSW DCCEW CPHR, the Department has recommended conditions requiring a comprehensive regime of adaptive management to address the risk of bird and bat strike. • A Bird and Bat Adaptive Management Plan (BBAMP) would be developed in consultation with NSW DCCEW CPHR. Given this, the Department is satisfied that the project's impacts upon avifauna can be appropriately managed.

Issue	Consideration
	Recommended conditions - Minimise the clearing of native vegetation and key fauna habitat, including hollow bearing trees, within the development footprint and protect native vegetation and key fauna habitat outside the approved disturbance area in accordance with limits in the recommended conditions. - Prepare and implement a Biodiversity Management Plan (BMP) which includes measures to: - minimise the potential indirect impacts on threatened flora and fauna species, - rehabilitate and revegetate temporary disturbance areas and maximise the salvage of resources within the approved disturbance area for beneficial reuse (such as fauna habitat enhancement) during the rehabilitation and revegetation of the site; - control weeds and feral pests; - detail the program to monitor and report on the effectiveness of these measures. - Prepare and implement a Bird and Bat Adaptive Management Plan in consultation with NSW DCCEEW CPHR. - Retire the applicable biodiversity offset credits in accordance with the NSW Offsets Policy prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset.
Socio-economic - Disruption to community values - Road safety and access - Dust and noise - Strain on local accommodation and housing	Impact assessment - Concerns about socio-economic impacts were raised in 40 public submissions objecting to the project and in 27 submissions supporting the project. - The project's construction phase would generate up to 380 construction jobs and 40 operational jobs. - BayWa has committed to enter a Voluntary Planning Agreement (VPA) with Hay Shire Council, Edward River Council and Murrumbidgee Shire Council. The total contribution payable would be \$1,050 per MW generation capacity installed per year for the duration of the project. - The VPA would support the provision and maintenance of local infrastructure and community groups. - The project would power approximately 463,400 homes per year. - A Temporary Workers Accommodation (TWA) would be established within the project area to cater for up to 345 employees for peak construction and provide essential services. This would minimise any strain on the housing supply in the area. Recommended conditions - Prepare and implement an Accommodation and Employment Strategy for the project in consultation with relevant councils, with consideration to prioritising the employment of local works. - Enter into a VPA with each relevant Council prior to commencing construction.

Issue	Consideration
Agricultural Impacts	Impact assessment • Concerns about agricultural impacts were raised in 24 submissions objecting to the project and 4 submissions supporting the project. • The project area and surrounds are dominated by agricultural land uses. • No Biophysical Strategic Agricultural Land (BSAL) is mapped within the project area or surrounding area. • The site is comprised of class 6 (low capability) and class 7 (very low capability) land and soil capability classes. • While the project would temporarily reduce the available land for agricultural uses during construction, the long-term use of the land for agricultural purposes would not be compromised during the operation of the project. Additionally, the Department notes that the project would provide an additional source of income for the landowners of the associated properties, whose land would be impacted. • Wind harvesting is a passive land use that can co-exist with grazing activities, which can continue concurrently throughout the project lifespan. As such, the Department considers that the project would not compromise or significantly diminish the availability of land for primary production purposes within the project area or surrounding LGAs. Recommended conditions • Rehabilitate the site to a standard that makes it available for agricultural production following decommissioning.

Appendix J – Assessment of Matters of National Environmental Significance

In accordance with the Bilateral Agreement with the Australian Government Department of Climate Change, Energy, the Environment and Water (AG DCCEEW), the Department provides the following additional information required by the Commonwealth Minister, in deciding whether to approve a development under the EPBC Act.

The Department's assessment has been prepared based on the assessment contained in the Bullawah Wind Farm Environmental Impact Statement (EIS), submissions report, amendment report, final Biodiversity Development Assessment Report (BDAR) and additional information provided during the assessment process as well as advice provided by NSW DCCEEW CPHR, other NSW government agencies and the Commonwealth DCCEEW.

This appendix is supplementary to, and should be read in conjunction with, the assessment included in Section 6.3 of this report which includes the Department's consideration of impacts to listed threatened species and communities and mitigation and offsetting measures for threatened species and communities, including Matters of National Environmental Significance (MNES).

Controlled Action Decision – EPBC 2022/09423

On 20 March 2023, the Bullawah Wind Farm was determined to be a Controlled Action by the AG DCCEEW for the controlling provision of listed threatened species and communities. The Commonwealth Referral Decision (EPBC 2022/09423) (Referral Decision) was based on likely significant impacts to:

- Plains-wanderer (*Pedionomus torquatus*) – critically endangered
- Natural Grasslands of the Murray Valley Plains Ecological Community – critically endangered
- Weeping Myall Woodlands Ecological Community – endangered.

The Referral Decision also identified 13 threatened species and communities that may be at risk of significant impacts, subject to further investigation by BayWa.

The final BDAR for the project identified and addressed all listed threatened species and communities included in the Referral Decision.

The AG DCCEEW determined that other matters under the EPBC Act are not controlling provisions with respect to the controlled action. These include listed World Heritage, National Heritage, wetlands of national importance, listed migratory species, Commonwealth marine areas, Great Barrier Reef Marine Park, nuclear actions, water resources (that relate to unconventional gas development and large coal mining development), or actions taken on/impacting on Commonwealth land or overseas.

Impacts on EPBC Act Listed Species and Communities

Section 6.3 of this report describes the biodiversity assessment undertaken for the project and the resulting BDAR.

All entities that were identified as requiring an assessment of significance were assessed.

The table below provides a summary of the likelihood of occurrence for each of the species identified by the Commonwealth DCCEEW as requiring consideration, as well as additional listed species considered by BayWa.

Impacts on MNES entities

Entity	Conservation Status	Likelihood of Occurrence	Comments
Threatened Ecological Communities			
Natural Grasslands of the Murray Valley Plains Ecological Community	Critically Endangered	Vegetation in the subject land was not found to conform to the ecological community.	Unlikely to have a significant impact.
Weeping Myall woodlands	Endangered	Recorded.	Community is associated with areas of PCT 26 which meet condition threshold requirements. The project would reduce the extent of the community in the landscape by 4.92 ha and result in a slight increase in fragmentation. The assessment of significance in the BDAR concluded that there would be a significant residual impact as the project would reduce its extent, increase fragmentation and interfere with the recovery of the ecological community. NSW DCCEEW CPHR has reviewed the information provided and conclude that a significant impact is unlikely.
Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	Endangered	Not recorded in the subject land.	Unlikely to have a significant impact.
Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions	Endangered	Not recorded in the subject land.	Unlikely to have a significant impact.
Plains mallee box woodlands of the Murray Darling	Critically Endangered	Not recorded in the subject land.	Unlikely to have a significant impact.

Entity	Conservation Status	Likelihood of Occurrence	Comments
Depression, Riverina and Naracoorte Coastal Plain Bioregions			
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Not recorded in the subject land.	Unlikely to have a significant impact.
Threatened Flora Species			
Slender Darling-pea (<i>Swainsona murrayana</i>)	Vulnerable	Recorded.	About 3,807 plants (445.21 ha) would be directly impacted. Similar habitat is available throughout project area. Unlikely to have a significant impact.
Chariot Wheels (<i>Maireana cheeli</i>)	Vulnerable	Recorded.	About 1,207 plants (4.67 ha) would be directly impacted. Similar habitat is available throughout project area. Unlikely to have a significant impact.
Mossgiel Daisy (<i>Brachyscome papillosa</i>)	Vulnerable	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.
Winged Peppercress (<i>Lepidium monoplocoides</i>)	Endangered	Recorded.	The project would involve removal of 3.52 ha (about 1,355 individuals), which is likely to result in habitat destruction and degradation across the inland plains where the species occurs. The project may also change hydrology, runoff and habitat degradation through weed invasion. The assessment of significance contained within the BDAR concluded that there would be a significant residual impact as the project would result in the long term decrease of a population, adversely affect habitat critical to the survival of a species and modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to significantly decline.
A spear-grass (<i>Austrostipa wakoolica</i>)	Endangered	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.
A burr daisy (<i>Calotis moorei</i>)	Endangered	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.

Entity	Conservation Status	Likelihood of Occurrence	Comments
Claypan Daisy (<i>Brachyscome muelleroides</i>)	Vulnerable	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.
Red Darling Pea (<i>Swainsona plagiotropis</i>)	Vulnerable	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.
Spike-rush (<i>Eleocharis obicis</i>)	Vulnerable	Recorded.	The project would lead to small, localised reductions in occupancy. Unlikely to have a significant impact.
Turnip Copperburr (<i>Sclerolaena napiformis</i>)	Endangered	Not recorded in the subject land, despite targeted survey effort.	Unlikely to have a significant impact.
Threatened Fauna Species			
Plains-wanderer (<i>Pedionomus torquatus</i>)	Critically Endangered	Recorded.	The project would avoid impact to mapped Important Habitat for the Plains-wanderer, however 170.86 ha of suitable supplementary habitat (as identified by BayWa) would be directly impacted. Indirect and prescribed impacts of the project on the species are uncertain. The assessment of significance contained within the BDAR concluded that there would be a significant residual impact as the project has potential to affect habitat critical to the species' survival; modify, destroy, remove, isolate or decrease the available of quality of habitat; interfere with the recovery of the species; and impact the breeding cycle of a population.
Superb Parrot (<i>Polytelis swainsonii</i>)	Vulnerable	Not recorded but predicted to utilise associated PCTs within the subject land.	Unlikely to have a significant impact.
Painted Honeyeater (<i>Grantiella picta</i>)	Vulnerable	Not recorded but predicted to utilise associated PCTs within	Unlikely to have a significant impact.

Entity	Conservation Status	Likelihood of Occurrence	Comments
		the subject land.	
Grey Falcon (<i>Falco hypoleucos</i>)	Vulnerable	Unlikely to occur.	Unlikely to have a significant impact.
Southern Bell Frog (<i>Litoria raniformis</i>)	Vulnerable	Recorded	The project would lead to a loss of 52.16 ha of suitable habitat within the development footprint (and 13.51% of suitable habitat in the project area). However, 374.05 ha of suitable habitat would remain within the Subject Land. The assessment of significance contained within the BDAR concluded that there would be a significant residual impact as the project would potentially lead to a long-term decrease in the population of the species; interfere with the recovery of the species; disrupt breeding cycle of an important population; and modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to significantly decline.
Grey Snake (<i>Hemiaspis damelii</i>)	Endangered	Not recorded during field survey.	Unlikely to have a significant impact.
Australian Painted Snipe (<i>Rostratula australis</i>)	Endangered	Not recorded but predicted to utilise associated PCTs within the subject land.	Species was not recorded in subject land, with limited potential suitable potential habitat impacted in development footprint (8.8 ha). Unlikely to have a significant impact.
Blue-winged Parrot (<i>Neophema chrysostoma</i>)	Vulnerable	Recorded	A pair was incidentally recorded during survey. There would be a minor risk of turbine collision during operation. Unlikely to have a significant impact.
Diamond Firetail (<i>Stagonopleura guttata</i>)	Vulnerable	Recorded	Species was recorded foraging, with other records existing in similar habitat in the region. Unlikely to have a significant impact.
Grey Falcon (<i>Falco hypoleucus</i>)	Vulnerable	Unlikely to occur	Unlikely to have a significant impact.
Latham's Snipe (<i>Gallinago hardwickii</i>)	Vulnerable, Migratory	Moderate likelihood	Species was not recorded in subject land, with 8.8 ha of suitable potential habitat impacted in development footprint. Unlikely to have a significant impact.
Pink Cockatoo (<i>Lophochroa leadbeateri</i>)	Endangered	Not recorded but predicted to utilise associated PCTs within	Unlikely to have a significant impact.

Entity	Conservation Status	Likelihood of Occurrence	Comments
		the subject land.	
Painted Honeyeater (<i>Grantiella picta</i>)	Vulnerable	Not recorded but predicted to utilise associated PCTs within the subject land.	Unlikely to have a significant impact.
Sharp-tailed Sandpiper (<i>Calidris acuminata</i>)	Vulnerable, Migratory	Moderate likelihood	Species was not recorded in subject land, and no relevant waterbodies would be impacted. Negligible risk of turbine collision is predicted. Unlikely to have a significant impact.
Southern Whiteface (<i>Aphelocephala leucopsis</i>)	Vulnerable	Recorded	Species was frequently recorded in the subject land, and there are other records in similar habitat in the region. Negligible risk of turbine collision is predicted. Unlikely to have a significant impact.
White-throated Needletail (<i>Hirundapus caudacutus</i>)	Vulnerable, Migratory	Not recorded but predicted to utilise associated PCTs within the subject land.	Unlikely to have a significant impact.
Koala (<i>Phascolarctos cinereus</i>)	Endangered	Not recorded during field survey.	Unlikely to have a significant impact.

Impacts on threatened ecological communities

As described in Section 6.3 of this report, BayWa has generally focused on avoidance of impacts through site selection and avoidance of higher quality native vegetation and threatened ecological communities and habitat during the preliminary design process for the project. This work has focused largely on avoiding and minimising impacts to the Weeping Myall Woodlands endangered ecological community (EEC).

Notwithstanding, the action would result in the clearance of 4.92 ha of Weeping Myall Woodlands in moderate-good condition, of the total of 42.56 ha mapped in the project area. The assessment of significance contained within the MNES assessment concluded that there would be a significant residual impact on the Weeping Myall Woodlands as the project would reduce its extent, increase fragmentation and interfere with the recovery of the EEC.

BayWa would offset the residual biodiversity impacts of the action in accordance with the requirements of NSW Biodiversity Offset Scheme. The Department considers that impacts to this community would be appropriately offset via the ecosystem credit requirements detailed in **Section 6.3** of this report. The Department has recommended conditions and additional measures to avoid or minimise impacts on threatened ecological communities as detailed in **Section 6.3.10** of this report.

Impacts on threatened flora species

Four EPBC Act-listed threatened flora species were recorded during targeted surveys in the project area, including Winged Peppercress, Spike-rush, Chariot Wheels and Slender Darling Pea. Assessments of significance were undertaken for these threatened flora species.

The assessments of significance for these species determined that the project is unlikely to have a significant impact on any threatened fauna species with the exception of the Winged Peppercress (3.52 ha of habitat impacted). The Department considers that impacts on these species would be appropriately offset via the species and ecosystem credit requirements detailed in **Section 6.3** of this report. The Department has recommended conditions and additional measures to avoid or minimise impacts on threatened flora species as detailed in **Section 6.3.10** of this report.

Impacts on threatened fauna species

BayWa determined that there is predicted habitat or identified known habitat within the project area for several threatened fauna species listed under the EPBC Act. Assessments of significance were carried out for these species, summarised in the BDAR.

The assessments of significance for these species determined that the project is unlikely to have a significant impact on these threatened fauna species, with the exception of the critically endangered Plains-wanderer and the Southern Bell Frog. While the project would avoid impact to mapped Important Habitat for the Plains-wanderer, 170.86 ha of suitable supplementary habitat (as identified by BayWa, see **Section 6.3.10**) would be directly impacted by the action. The project would also directly 52.16 ha of suitable habitat for the Southern Bell Frog.

The Department has recommended conditions and additional measures to avoid or minimise impacts on threatened fauna species as detailed in **Section 6.3.10** of this report. These include conditions requiring BayWa to participate in preparing and implementing a Regional Plains-wanderer Management Strategy to improve the regional monitoring and management of this species within the South West REZ, in consultation with relevant agencies. Impacts to the Southern Bell Frog would be appropriately offset via the species credit requirements detailed in **Section 6.3.5** of this report.

Conservation Advice

In its MNES assessment, BayWa has appropriately referred to the Conservation Advice for relevant species and ecological communities in relation to the habitat requirements, relevant recovery and threat abatement actions.

The Department notes the key threats to species and communities include landscape fragmentation, introduction of weeds, competition for land, habitat degradation, climate change, disease transmission (particularly by feral pigs), biological effects associated with invasive species and predations (particularly by feral cats and foxes).

The Department's recommended conditions require BayWa to prepare and implement a Biodiversity Management Plan detailing how these risks would be minimised and managed, including measures to:

- avoid adverse impacts of the development on native vegetation and habitat outside the disturbance footprint;
- minimise the clearing of native vegetation and habitat within the disturbance footprint;
- minimise the impacts of the development on threatened flora and fauna species within the disturbance footprint and its surrounds;
- rehabilitate and revegetate temporary disturbance areas;
- protect native vegetation and key fauna habitat outside the approved disturbance footprint;
- maximise the salvage of resources within the approved disturbance footprint – including vegetative and soil resources – for beneficial reuse (such as fauna habitat enhancement) during the rehabilitation and revegetation of the project area;
- collect and propagate seed (where relevant);
- control weeds and feral pests;
- control erosion; and
- manage bushfire.

BayWa would be required to prepare the Biodiversity Management Plan in consultation with DEECCW CPHR and the plan would be prepared by a suitably qualified and experienced biodiversity expert.

In addition, BayWa is required to avoid and minimise impacts on species and communities,, where practicable during detailed design, and offset the residual biodiversity impacts of the project in accordance with the NSW Biodiversity Offset Scheme.

Recovery Plans

Recovery plans for the relevant species and communities are referenced in throughout the MNES assessment. Recovery Plans have generally been referenced to inform the identification of areas of important habitat for the above species.

BayWa is required to minimise impacts on all species and communities and to offset residual impacts on a like-for-like basis in accordance with the Biodiversity Offsets Scheme.

Threat Abatement Plans

Relevant Threat Abatement Plans are referenced throughout the MNES assessment. The Department considers that the action can be carried out in a manner which is compatible with the relevant Threat Abatement Plans.

Subject to the recommended conditions, the Department considers that the project can be carried out in a manner that is consistent with the relevant conservation advice, recovery plans and threat abatement plans should it be approved.

Review of EPBC listed threatened species and communities

The table below provides a detailed review of whether the assessment documentation (i.e. the EIS, submissions report, amendment report and revised BDAR) includes all relevant required information.

BULLAWAH WIND FARM (SSD-50505215)

PROJECT ASSESSMENT OF EPBC ACT LISTED THREATENED SPECIES AND COMMUNITIES

South West Planning Team, Regional Delivery, Conservation Programs Heritage and Regulation

20 November 2025

Table 1: CPHR officer project advice to DPHI on EPBC Act listed threatened species and communities.

Requirement	Information	Reference /BAM/ BLA ¹ BDAR
Background & Description of Action	Does the EIS/BDAR²• ☑ clearly show how operational and construction footprints including clearing boundaries, structures to be built and elements of the action are situated with regard to MNES ☑ depict stages and timing of the action that may impact on MNES ☑ provide a map(s) of the subject land boundary showing the final proposal/disturbance footprint with respect to location of MNES, including GIS shape files Include references to where this detail is provided.	BAM Chapters 3, 4, 5 and 8 Final V3 amended BDAR dated 4 September 2025.
	Provide advice on the adequacy of the background and action description with respect to MNES and identify any recommended additional information requirements: The project was reviewed by Conservation Programs Heritage and Regulation (CPHR) for compliance with the Biodiversity Assessment Method (BAM), including the proponent’s use of the credit calculator (the Calculator) to produce a Biodiversity Development Assessment Report (BDAR). CPHR had ongoing consultation with the BAM assessors and Australian Government Department of Climate Change, Energy, Environment and Water (AG DCCEEW) officers during the preparation of the BDAR and RTS phase. CPHR considers the BDAR adequately describes the project that includes: (i) operational and construction footprints, (ii) structures to be built, (iii) elements of the action in relation to MNES. The project is proposed to be constructed in two stages and these stages have been adequately described and impacts for each stage are separately documented in the BDAR for MNES. GIS shapefiles and maps have been provided to CPHR/DPHI by the proponent that represent MNES matters and can be provided if required.	

	Chapter 1, Figure 1-2-1, shows the construction and operation footprint. Chapter 5, Figure 5-24-1, Figure 5-26-1, Figure 5-27-1, Figure 5-28-1, Figure 5-31-1 shows the known and assumed present EPBC Act species in relation to the construction footprint. Chapter 4, Figure 4-4-1 to 4-4-3 shows the location of TECs in the subject land including the construction footprint.	
Landscape Context of the MNES	Provide advice on the adequacy of the landscape context information and identify any additional information requirements: The proposal is for the construction and operation of the Bullawah Wind Farm which is a new wind farm consisting of 141 wind turbine (WTGs) generators as well associated access tracks, transmission lines, Battery Energy Storage Systems (BESS) and construction and operational facilities impacting about 655.61 hectares of the 20,628 hectare project area. The proposal, including the wind farm site and the transport route cover a single IBRA region being the Riverina Bioregion and all impacts to native vegetation (655.61 hectares) occurs in the Murrumbidgee IBRA subregion. CPHR confirms that details on landscape context have been provided in accordance with BAM requirements and the landscape assessment meets the requirements of Stage 1 (s3 and 4.1) of the BAM. The selection of a single IBRA subregion for BAM-C calculation purpose for each stage is consistent with guidance provided in Section 2.2.1 of the Biodiversity Assessment Method 2020 Operational Manual – Stage 1.	BAM Section 3.1 BLA clause 7.4 Final V3 amended BDAR dated 4 September 2025. Section 2 and 3
EPBC Act Listed Threatened Species & Communities	Verify that the EIS/BDAR includes relevant information on the identification of all EPBC Act listed threatened species and communities on the site or in the vicinity³ via • ☒ field based survey effort • ☒ published peer reviewed literature • ☐ local data • ☒ supporting databases (such as the NSW BioNet Vegetation Classification, NSW BioNet Threatened Biodiversity Data Collection, NSW BioNet Atlas, Commonwealth Species Profile and Threats Database search results) • ☒ Verify that the EIS/BDAR includes appropriate mapping of all EPBC Act listed threatened species and communities in accordance with the relevant Commonwealth Listing Advice. The EIS/BDAR should include important populations and critical habitat as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans. Provide advice on the adequacy of the identification methods and mapping information / any additional information requirements: Figures 4-4-1 to 4-4-3 shows the location of TECs in the subject land including the construction footprint. Sections 4.5.4 and 4.5.5 provides an adequate assessment of TECs against the Approved Listing Advice for Weeping Myall Woodlands and the Natural Grasslands of the Murray Valley Plains. Only Weeping Myall Woodland occurs on the subject land. While Tables 8-17, 8-19 and 8-20 of the BDAR outlines the MNES entities that will be impacted, some ecosystem credit MNES species are missing or have incorrect credits reported in this table but are included in the BAM-C credit reports. CPHR have accounted for the omissions in the BDAR and included all impacted species in Table 2 of this document as they have been entered in the BAM-C cases. The assessment of species and communities excluded (Appendix B) because they do not occur on or near the site is supported by robust analysis	BAM Chapters 4 and 5 Final V3 amended BDAR dated 4 September 2025. s4.5.4 and 4.5.5 – TECs

	and justification. The assessment of species and communities included/excluded were justified with supporting evidence including targeted survey effort consistent with industry guidelines and vegetation integrity plots to classify plant community types and TECs. Apart from databases searches over the project area, no local data was collected. However, wet benchmark data was applied to most PCTs due to rainfall being above the wet condition benchmarks thresholds for most of the survey periods (see Table 4-4). Supporting databases were used to inform the BDAR. A list of databases used is provided in Section 1.5.2 (Table 1-18) and s1.5.3 (Table 1-9) of the BDAR.	
	Confirm that all EPBC Act listed threatened species and communities that occur on the subject land, or in the vicinity, have been identified in the BDAR/EIS including those that are ecosystem credit species. If any species and communities identified in the referral documentation (provided by DAWE) have been ruled out because they don't occur on or near the site, verify that there is robust analysis and justification for why these species can be ruled out. Provide advice on whether there are any other MNES species or communities that are missing from the assessment based on BCS knowledge and experience. The following threatened entities NOT identified in referral decision EPBC 2022/09423 were added to the list of species and communities in the BDAR that have associated PCTs and/or known habitat that will be impacted (ecosystem and/or species credits): • A Spike-rush (<i>Eleocharis obicis</i>) • Blue-winged Parrot (<i>Neophema chrysostoma</i>) • Diamond Firetail (<i>Stagonopleura guttata</i>) • Pink Cockatoo (<i>Lophochroa leadbeateri</i>) • Southern Whiteface (<i>Aphelocephala leucopsis</i>) The following migratory species NOT identified in referral decision EPBC 2024/09722 were added to the list of species in the BDAR known and likely to occur that will have potential habitat impacted or have potential to be impacted by turbine collision: • Australian Painted Snipe (<i>Rostratula australis</i>) • Caspian Tern (<i>Hydroprogne caspia</i>) • Common Greenshank (<i>Tringa nebularia</i>) • Common Sandpiper (<i>Actitis hypoleucos</i>) • Curlew Sandpiper (<i>Calidris ferruginea</i>) • Fork-tailed Swift (<i>Apus pacificus</i>) • Gull-billed Tern (<i>Gelochelidon nilotica</i>) • Marsh Sandpiper (<i>Tringa stagnatilis</i>) • White-throated Needletail (<i>Hirundapus caudacutus</i>)	Final V3 amended BDAR dated 4 September 2025. Likelihood of occurrence assessment in Appendix B. Credit reports in Appendix C. Turbine strike prescribed impact assessment in Appendix D.

The following threatened entities identified in referral decision EPBC 2024/09722 were considered and excluded from the BDAR based on targeted survey outcomes or exclusion by habitat constraints or geographic limitations in the BAM-C:

- Buloke woodland of the Riverina and Murray-Darling Depression bioregions
- Grey Box (*Eucalyptus microcarpa*) grassy woodlands and derived native grasslands of southern eastern Australia
- Grey Snake (*Hemiaspis damelii*)
- Mossgiel Daisy (*Brachyscome papillosa*)
- Natural Grasslands of the Murray Valley Plains
- Plains mallee box woodlands of the Murray-Darling Depression, Riverina and Naracoorte Coastal Plain bioregions
- White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland

The following TECs, listed, and migratory species were **NOT** identified in referral decision EPBC 2024/09722 but were considered in the BDAR based on the Protected Matters Search Tool and/or BAM-C and then excluded from further assessment based on targeted survey outcomes and/or lack of suitable habitats:

- A Burr-daisy (*Calotis moorei*)
- A spear grass (*Aurolastipa wakoolica*)
- Australasian Bittern (*Botaurus poiciloptilus*)
- Black-tailed Godwit (*Limosa limosa*)
- Brown Treecreeper (*Climacteris picumnus victoriae*)
- Claypan Daisy (*Brachyscome muelleroides*)
- Corben's Long-eared Bat (*Nyctophilus corbenii*)
- Eastern Curlew (*Numenius madagascariensis*)
- Koala (*Phascolarctos cinereus*)
- Little Curlew (*Numenius minutus*)
- Malleefowl (*Leipoa ocellata*)
- Menindee Nightshade (*Solanum karsense*)
- Pectoral Sandpiper (*Calidris melanotos*)
- Pink-tailed Legless Lizard (*Aprasia parapulchella*)
- Red Darling Pea (*Swainsona plagiotropis*)
- Red-necked Stint (*Calidris ruficollis*)
- Regent Parrot (*Polytelis anthopeplus monarchoides*)
- Sandhill Spider Orchid (*Caladenia arenaria*)
- Satin Flycatcher (*Myiagra cyanoleuca*)
- Sharp-tailed Sandpiper (*Calidris acuminata*)
- Sloanes Froglet (*Crinia sloanei*)

	• Spotted-tailed Quoll (<i>Dasyurus maculatus</i>) • Turnip Copperburr (<i>Sclerolaena napiformis</i>) • Wood Sandpiper (<i>Tringa glareola</i>) • Yellow Wagtail (<i>Motacilla flava</i>). Advise whether there is appropriate justification and supporting evidence for the addition and/or exclusion of any EPBC Act listed threatened species and/or communities from the list (if applicable): Threatened species and communities included/excluded from the assessment were done so based on habitat constraints and/or survey results. A significant impact assessment (Appendix 2 of Appendix E) has not been provided for the following MNES entities listed in the Controlled Action determination because they were not recorded on site during targeted flora and fauna surveys or bird utilisation surveys: • Buloke Woodlands of the Riverina and Murray-Darling Depression bioregions • Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia. • Grey Falcon (<i>Falco hypoleucos</i>) • Grey Snake (<i>Hemiaspis damelii</i>) • Mossgiel Daisy (<i>Brachyscome papillosa</i>) • Natural Grasslands of the Murray Valley Plains • Plains mallee box woodlands of the Murray-Darling Depression, Riverina and Naracoorte Coastal Plain bioregions • White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland Although not recorded on site, the Grey Falcon listed above has ecosystem credits generated through associated PCTs as habitat surrogates in the BAM-C (see Table 2).	
Avoidance, Minimisation, Mitigation & Management	Verify that the EIS/BDAR demonstrates all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including an analysis of alternative: • ☒ designs and engineering solutions • ☒ modes or technologies • ☒ routes and locations of facilities • ☒ sites within the subject site • ☒ Verify that the EIS/BDAR identifies any other site constraints in determining the location and design of the proposal (such as bushfire protection requirements, flood planning levels, servicing constraints, etc) Verify that the EIS/BDAR provides feasible measures to mitigate and/or manage impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including:	BAM Chapters 6, 7 and 8 BLA clause 7.1

	☒ techniques, timing, frequency and responsibility- ☒ identify measures for which there is risk of failure ☒ evaluate the risk and consequence of any residual impacts ☒ any adaptive management strategy proposed to monitor and respond to impacts.	
	Provide advice on whether all feasible impact avoidance, minimisation, mitigation and management measures have been considered and are adequately justified: A tiered approach to biodiversity constraints assessment was completed in the initial stages of project planning to map areas of high priority constraint including Plains-wanderer Important Habitat Mapped areas and Supplementary Habitat as well as Weeping Myall Woodland. The proponent has worked to reduce overall impacts to native vegetation, though opportunities are minimal in the local setting where most vegetation is native. Section 7 of the BDAR outlines and demonstrates the steps used to avoid and minimise impacts to biodiversity, including MNES. This includes changes to the design of the proposal (s7.1.3) based on constraints that include biodiversity. These include but are not limited to: • Project Area reduced from Scoping Report to RTS amended BDAR from 30,603 hectares to 20,627 hectares (32% reduction) • Development Corridor reduced from Scoping Report to RTS amended BDAR from 5802 hectares to 4274 hectares (26% reduction) • Development Footprint reduced from Scoping Report to RTS amended BDAR from 1012 hectares to 656 hectares (42% reduction) • Impacts to Weeping Myall Woodland reduced from 6.78 hectares at Scoping Report to 4.92 hectares in RTS amended BDAR. • Locations of 13 separate WTGs moved outside constrained areas to avoid impacts to known habitat for various species including known habitat for Southern Bell Frog, stick nests, and existing threatened species records. Figures 7.2, 7.3 and 7.4 shows areas that were added or removed to the Project layout to avoid the high constraint areas. Section 8.5 of the BDAR outlines the impacts specifically to MNES and Table 8-9 summaries the potential impacts, the extent of impact within the different stages and the duration of impact for MNES. Mitigation measures are outlined in Section 9 and summarised in Table 9-1 for direct, indirect and prescribed impacts. This includes: • Proposed techniques, timing, frequency and responsibility for implementing the measures • Risk of failure • Analysis of consequences of any residual impacts. Table 9-1 in Section 9.1 of the BDAR provides information on mitigation measures for general measures and some species-specific measures. Adaptive Management Strategies for uncertain impacts are outlined in Section 9.2.1 and Table 9-2 and include: • A Bird and Bat Adaptive Management Plan (Section 9.2.2 and Appendix E s5.2) • Plains-wanderer Management Plan (Section 7.4.4) There is limited modes and technologies or design and engineering solutions that are relevant or specific to MNES.	Final V3 amended BDAR dated 4 September 2025. Avoidance and minimisation of impacts in s7 and Figure 7.2-7.5. Mitigation in s9 including Table 9-1, Table 9-2. Approach to adaptive management plans in s7.4.4 and s9.2.2.

Impact Assessment	Verify that the EIS/BDAR: ☒ identifies the residual adverse impacts likely to occur to each EPBC Act listed threatened species and/or community after the proposed avoidance and mitigation measures are taken into account ☒ provides adequate justification and evidence for the predicted level of impact, with reference to the: - Commonwealth's Significant Impact Guideline https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf - DPIE Guidance to Assist a Decision-Maker to Determine a Serious and Irreversible Impact (SAIL): (https://www.environment.gov.au/system/files/resources/42184df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf)	BAM Chapters 8 and 9 BLA clauses 6.2(b)(i)-(ii) and 7.1
Requirement	Information	Reference /BAM/ BLA¹
	Complete the following information for each EPBC Act listed threatened species and/or community (add/remove rows as necessary): - EPBC Act listed threatened species and/or community - nature and consequences of impacts (i.e. direct and indirect) - duration of impact (e.g. construction, operation, life of project) - quantum of impact - consequences of impacts on the species, the population and/ or extent of the community at local, state and national scales Confirm the level of predicted impact (cross appropriate): ☒ high risk of impact (requiring offsets)[#] or SAIL ☐ Low risk of impact (not requiring offsets) [#]For purposes of EPBC approval, as a minimum, significant adverse residual impacts must be offset (significant impact can be evaluated with reference to the significance impact guidelines) Provide advice on whether adequate justification and evidence is provided for species and communities that have been identified as being at low risk of impact. Section 8.5 (Tables 8.17, 8.18 and 8.19) and Appendix E (Table 6.1) of the BDAR outlines the MNES species at risk of impact including: - The name of the entity - The EPBC Act listing of the entity - The potential impacts including direct and indirect - The extent of impact in ha per stage of the Project - The duration of the impact - The Assessment of Significance (AoS) results (if it is significant or not) All MNES species at risk of impact by the proposal were assessed in accordance with the <i>Significant Impact Guidelines</i> (DoE, 2013) in Appendix E. Assessments of significance were completed 17 entities including one EEC and 16 threatened species. The BDAR (s8.2, Appendix 2 of Appendix E) identifies potential significant impacts for the following entities:	Final V3 amended BDAR dated 4 September 2025. Section 8.5 - Tables 8.17, 8.18 and 8.19 and Appendix E -Table 6.1

- Weeping Myall Woodland
- Winged Peppercress (*Lepidium monoplacoides*)
- Plains-wanderer (*Pedionomus torquatus*)
- South Bell Frog (*Litoria raniformis*).

There is some inconsistency between significance outcomes and the assessment criteria in the AoS for Weeping Myall Woodland and Plains-wanderer. CPHR agrees that impacts to Plains-wanderer are likely to be significant. However, some references to the small impacts to occupancy of the national population are misleading when considering the conclusion of the AoS. Similarly, a significant impact is concluded for Weeping Myall Woodland, yet the data presented in the AoS implies that impacts are very small in the national context and is inconsistent with the significant outcome. Based on the data supplied and application in the AoS, CPHR recommends that a significant impact is not likely to Weeping Myall Woodland.

The likely significant impact outcomes for Southern Bell Frog and Winged Peppercress are reasonable and based on reliable application of the AoS criteria.

In addition to the likely significant impacts outlined above, CPHR has:

- Recommended that a potential Serious and Irreversible Impacts (SAII) to Plains-wanderer is likely under the BC Act. The likely SAII advice is based on impacts to mapped supplementary habitat and associated PCTs as well as uncertainty of indirect and prescribed impacts.
- Noted the proponent has committed to a long-term adaptive Plains-wanderer Management Plan as part of mitigation of uncertain construction and operational impacts of the project, including indirect and prescribed impacts.

Section 8.5 of the BDAR provides a summary of MNES with potential for impact within the subject land. Detailed information is in Appendix 2 of Appendix E of the BDAR.

MNES entity	Local consequence	State consequence	National consequence
Threatened Ecological Communities			
Weeping Myall woodlands	The project will reduce the extent of the community in the landscape by 4.92 hectares and a slight increase in fragmentation.	Current NSW extent of 190,000–330,000 ha is known to occur within NSW (Benson 2006) (TSSC 2009). The amount of this community to be impacted is small in the context of the NSW community occurrence	Current national extent estimated to be between 220,000 and 361,000 ha. The amount of this community to be impacted is small in the context of the NSW and national community occurrence (4.92 ha). The AoS at s8.2.2 in Appendix 2 of Appendix E of the BDAR reports a likely significant impact on this species. The significant impact conclusion is

				based on a reduction in extent and increased fragmentation, despite the reduction in extent criteria being reported as unlikely (Table 2.1 Appendix 2 of Appendix E). There are therefore some inconsistencies between the AoS criteria and the conclusion reached. CPHR has reviewed the information provided and conclude that a significant impact is unlikely.	
	Threatened flora				
	A Spike-rush (<i>Eleocharis obicis</i>)	About 110 individual plants (7.31 ha) recorded in the Stage 2 subject land but even less recorded in the development footprint. Would lead to local small reductions in occupancy and other areas outside footprint of known and suitable habitat will not be impacted. Unlikely to have a significant impact.	Occurs within the southwest plains of NSW in locations including the Lachlan River Floodplain, near Condobolin and near Hay. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Chariot Wheels (<i>Maireana cheelii</i>)	Recorded throughout the development footprint in both Stage 1 and Stage 2 but in six discrete locations. About 1207 plants (4.67 ha) will be directly impacted. Widespread records across the site and broader locality.	Due to the small proportion to be impacted regarding the entire Project Area, it is likely that the species would still be able persist within the broader Project Area in similar suitable habitats. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Winged Peppergrass (<i>Lepidium monoplacoides</i>)	Removal of 3.52 hectares (about 1355 individuals) from suitable habitat of 42.09 hectares in the Subject Land. May also occur in wider area but not surveyed.	Likely to result in habitat destruction and degradation across the inland plains where the species occurs. May also change hydrology, runoff and habitat degradation through weed invasion.	AoS in Appendix 2 of Appendix E of the BDAR reports a likely significant impact on this species. It will result in a long-term decrease of a population, adversely affect habitat critical to the survival of a species and	

				modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to significantly decline.	
	Slender Darling-pea (<i>Swainsona murrayana</i>)	Recorded extensively throughout the development footprint in both Stage 1 and Stage 2. About 3807 plants (445.21 ha) will be directly impacted. Similar habitat available throughout project area.	Widespread in NSW on the Hay Plains and in woodland in the central west and into central Victoria. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Threatened fauna				
	Australian Painted Snipe (<i>Rostratula australis</i>)	Limited potential habitat (8.8ha) in Subject Land and species not recorded during surveys. Unlikely to impact a local population which may use site sporadically.	The extent of occurrence is estimated to be 7,100,000 km ² and stable. The area of occupancy was estimated to be 2,000 km ² and decreasing. Known from both permanent and temporary wetlands. Though the site does not support any permanent wetlands. Unlikely to be significant at state level.	The area of occupancy of the Australian Painted Snipe is 2,000 km ² . The removal of 8.88 ha (0.09 km ²) of potential habitat would result in a <0.01% reduction in the area of occupancy for this species. This is a negligible reduction in the area of occupancy of the national population. Unlikely to have a significant impact.	
	Southern Whiteface (<i>Aphelocephala leucopsis</i>)	Species frequently recorded in the subject land. Other records in similar habitat in the region. Negligible risk of turbine collision. Unlikely to have a significant impact.	Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Sharp-tailed Sandpiper (<i>Calidris acuminata</i>)	Species not recorded in subject land and no waterbodies being impacted. Negligible risk of turbine collision.	Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Latham's Snipe (<i>Gallinago hardwickii</i>)	Species not recorded in subject land with 8.8 ha of suitable potential habitat impacted in development footprint. Turbine collision potential but not assessed.	Unlikely to have a significant impact.	Unlikely to have a significant impact.	

	Southern Bell Frog (<i>Litoria raniformis</i>)	Recorded throughout the subject land. The project would lead to a loss of 13.51% (52.16 ha) of suitable habitat within the Project. This reduction of habitat may lead to a long-term decrease in the population of the Southern Bell Frog.	52.16 ha of suitable habitat occurs within the Development Footprint and would be removed, including 4.02 ha of ephemeral wetlands and 1.8 ha of vegetation at the Coleambally Outfall Drain. However, 374.05 ha of suitable habitat would still remain within the Subject Land. May lead reductions in occupancy, disruption of breeding cycle	Likely to have a significant impact and would: • interfere with the recovery of the species, • lead to a long-term decrease of an important population, • adversely affect habitat critical to the survival of the species, • disrupt the breeding cycle of an important population, • and modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	
	Painted Honeyeater (<i>Grantiella picta</i>)	Not recorded in the subject land but 7.23 ha of suitable habitat would be impacted. Potential risk of turbine collision but not assessed.	Minor loss of potential breeding habitat and weeping myall woodland. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Pink Cockatoo (<i>Lophochroa leadbeateri</i>)	Not recorded in the subject land but 636 ha of suitable foraging habitat would be impacted. Potential risk of turbine collision but not assessed.	Loss of suitably sized nest trees but no nest trees were recorded. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Blue-winged Parrot (<i>Neophema chrysostoma</i>)	A pair was recorded incidentally during site surveys. Minor risk of turbine collision during operation.	Migratory and at-risk during migration to turbine collision. Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Plains-wanderer (<i>Pedionomus torquatus</i>)	23 birds recorded in the subject land including breeding birds and juveniles. There is 1,456.26 ha of mapped IHM within the Project Area. No IHM directly impacted but indirect and prescribed impacts are uncertain. The project would impact 138.21 ha of secondary habitat (15% of the available	• Secondary habitat impact = impact to 1-4 individuals. • Supplementary habitat impact = impact to 0.3 to 5 individuals. • Associated PCTs impact = impact to 1-19 individuals. Likely significant impact at NSW level.	Will reduce occupancy in national context about 6.48 km ² (2%). While direct impacts are clearly documented, indirect and prescribed impacts are highly uncertain. The development footprint fragments large areas of IHM.	

		secondary habitat across the Subject Land). The project would impact 170.86 ha of supplementary habitat (15% of the mapped supplementary habitat across the Subject Land). The project would impact 618.87 ha of associated PCTs (15% of the associated PCTs across the Subject Land). Likely to have locally significant impacts.		Likely to have a significant impact as the proposal will: • Adversely affect habitat critical to the species survival, • modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, • interfere with the recovery of the species, • impact the breeding cycle of a population.	
	Superb Parrot (<i>Polytelis swainsonii</i>)	Not recorded during surveys. But development footprint has 636 ha of suitable foraging habitat. Minor risk of turbine collision	Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	Diamond Firetail (<i>Stagonopleura guttata</i>)	Species recorded foraging in the subject land adjacent to riparian areas. Other records in similar habitat in the region. Unlikely to have a significant impact.	Unlikely to have a significant impact.	Unlikely to have a significant impact.	
	White-throated Needletail (<i>Hirundapus caudacutus</i>)	Not recorded during surveys. But development footprint has 636 ha of suitable foraging habitat. Minor risk of turbine collision	Unlikely to have a significant impact.	Unlikely to have a significant impact.	
The quantum of residual impacts to individual species (ecosystem and species credit species) are documented in Table 2 below.					

Offsets	Verify that the EIS/BDAR: ☐ identifies any MNES that haven't been offset using the BAM ☒ identifies how impacts requiring offsets correlate to MNES impacts ☒ identifies the plant community types (PCTs) requiring offset and the number and type of ecosystem credits required for impacts to MNES ☒ identifies threatened species requiring offset and the number of species credits required for impacts to MNES ☒ correctly uses the BAM (and BAM calculator) to identify the number and class of biodiversity credits that need to be offset to achieve a standard of 'no net loss' of biodiversity ☐ identifies if ecological rehabilitation and/or biodiversity conservation actions are proposed for offsetting ☒ if known, identifies any other offsetting approach proposed, such as land-based offsets, retiring credits by payment into the Biodiversity Conservation Fund and/or through supplementary measures[#] [#] In accordance the BAM there is no longer a requirement to define the offsetting approach at EIS stage. Complete the Impacts and Offsets Summary table below (Table 2)	BAM Chapter 10 BLA clauses 71 and 7.2 Final V3 amended BDAR dated 4 September 2025. Appendix E
Other Considerations	Provide advice on the adequacy of the proposed offsets in meeting the requirements of the BAM: In accordance with the BAM there is no longer a requirement to define the offsetting approach at EIS stage. The biodiversity offsets will be finalised prior to project construction impacts occurring. The project offset requirements will be met through a combination of: - Biodiversity Stewardship Sites strategically located within the impact and adjacent sub-regions to the project site. - Payments directly to the Biodiversity Conservation Fund. Verify if any relevant Commonwealth guidelines and policy statements are applicable to the action and listed threatened species and/or community, including but not limited to: - International environmental obligations - Recovery Plans - Approved Conservation Advice - Threat Abatement Plans The relevant Commonwealth guidelines and policy statements for each species and community are available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl	BLA clauses 6.2(b)(iv), 7.2(c), 7.3 and 7.4
	For each EPBC Act listed threatened species and/or community, provide advice on whether the assessment has been adequately informed by applicable Commonwealth guidelines and/or policy statements. For example, the interaction between the proposed action and important populations or critical habitat identified in policy documents and/or the interaction between the proposed action and threatening processes or recommended conservation actions outlined in Commonwealth policies and plans. Appendix 2 of Appendix E (Significant Impact Criteria assessments) of the BDAR includes reference to Commonwealth guidelines and policy statements as well as discussion of populations and important populations (depending on the species listing status). These assessments are made with reference to recovery plans and other relevant documents where they are available. CPHR considers that the MNES assessment has	Final V3 amended BDAR dated 4 September 2025. AoS in Appendix 2 of Appendix E of the BDAR

	been informed by Commonwealth guidelines and policy statements. <u>International environmental obligations</u> The proponent does not specifically discuss impacts to MNES in relation to Australia's international obligations. However, the proposal site does not impact on any Ramsar wetlands, and this is mentioned in relevant assessments for migratory species. <u>Recovery plans</u> Recovery plans for the following entities are referenced in Appendix 2 of Appendix E of the BDAR: • Winged Peppercress (<i>Lepidium monoplacoides</i>) • Australian Painted Snipe (<i>Rostratula australis</i>) • Chariot Wheels (<i>Maireana cheelii</i>) • Southern Bell Frog (<i>Litoria raniformis</i>) • Plains-wanderer (<i>Pedionomus torquatus</i>) • Painted Honeyeater (<i>Grantiella picta</i>) • Superb Parrot (<i>Polytelis swainsonii</i>) <u>Conservation Advice</u> Conservation advice was used to prepare the significance assessments the following entities referenced in Appendix 2 of Appendix E of the BDAR: • Weeping Myall Woodlands • Winged Peppercress (<i>Lepidium monoplacoides</i>) • Australian Painted Snipe (<i>Rostratula australis</i>) • Pink Cockatoo (<i>Lophochroa leadbeateri</i>) • Plains-wanderer (<i>Pedionomus torquatus</i>) • Slender Darling-pea (<i>Swainsona murrayana</i>) • A Spike-rush (<i>Eleocharis obicis</i>) • Chariot Wheels (<i>Maireana cheelii</i>) • Blue-winged Parrot (<i>Neophema chrysostoma</i>) • Diamond Firetail (<i>Stagonopleura guttata</i>) • Latham's Snipe (<i>Gallinago hardwickii</i>) • Painted Honeyeater (<i>Grantiella picta</i>) • Sharp-tailed Sandpiper (<i>Calidris acuminata</i>) • Southern Bell Frog (<i>Litoria raniformis</i>) • Southern Whiteface (<i>Aphelocephala leucopsis</i>) • Superb Parrot (<i>Polytelis swainsonii</i>) • White-throated Needletail (<i>Hirundapus caudacutus</i>) <u>Threat Abatement Plans (TAPs)</u> Relevant Threat Abatement Plans are documented for most species that has significance assessments prepared in the Appendix 2 of Appendix E	
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of the BDAR and are listed before the application of the significance criteria for each species. However, some species are missing all relevant TAPs. CPHR has listed the additional TAPS below.

Threatened Species/ Community listed under EPBC Act	Relevant Threat Abatement Plan
A Spike-rush (<i>Eleocharis obicis</i>)	- Threat abatement plan for competition and land degradation by rabbits. - Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs
Blue-winged Parrot (<i>Neophema chrysostoma</i>)	Threat abatement plan for predation by feral cats.
Diamond Firetail (<i>Stagonopleura guttata</i>)	Threat abatement plan for predation by feral cats.
Latham's Snipe (<i>Gallinago hardwickii</i>)	- Threat abatement plan for predation by European red fox. - Threat abatement plan for predation by feral cats.
Pink Cockatoo (<i>Lophochroa leadbeateri</i>)	Threat abatement plan for predation by feral cats.
Plains-wanderer (<i>Pedionomus torquatus</i>)	- Threat abatement plan for predation by feral cats. - Threat abatement plan for competition and land degradation by rabbits. - Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs. - Threat abatement plan for predation by European red fox.
Sharp-tailed Sandpiper (<i>Calidris acuminata</i>)	Threat abatement plan for predation by feral cats.
Slender Darling-pea (<i>Swainsona murrayana</i>)	- Threat abatement plan for competition and land degradation by rabbits. - Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs - Threat abatement plan for competition and land degradation by unmanaged goats.
Southern Bell Frog (<i>Litoria raniformis</i>)	- Threat abatement plan for predation by feral cats. - Threat Abatement Plan for infection of amphibians with chytrid fungus resulting in chytridiomycosis.
Southern Whiteface (<i>Aphelocephala leucopsis</i>)	Threat abatement plan for predation by feral cats.
Weeping Myall Woodland	- Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs. - Threat abatement plan for disease in natural ecosystems caused by <i>Phytophthora cinnamomi</i>.
Winged Peppercress (<i>Lepidium monoplocoides</i>)	- Threat abatement plan for competition and land degradation by rabbits. - Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs.

Recommended Conditions	Provide advice on any recommended conditions and reasons for imposing the conditions: <u>EPBC Approval 1</u> CPHR recommends an EPBC condition that minimises the impacts of the action on protected matters by not clearing more than the amounts (ha) and credits specified in Tables 10-1 and 10-2 of the final V3 amended BDAR dated 4 September 2025. <u>EPBC Approval 2</u> CPHR recommends that any NSW conditions relating specifically to Plains-wanderer be prepared in consultation with the Australian Government DCCEEW because the Project will have potential significant impacts on this species.	BLA clause 6.2(c)(iii)
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¹ Bilateral agreement (BLA) made under section 45 of the EPBC Act, including Amending Agreement No. 1 (2020)

² Or revisions of the BDAR and associated documentation made as a result of previous reviews or project changes post-exhibition.

³ On land to which impacts may extend.

Table 2: MNES impact and offset summary for Stage 1 and 2 and Euston road upgrades (combined).

Threatened species/ Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community	Area of impact (ha)	Credits required	Offsetting approach	Reference (EIS, BDAR)
Australasian Bittern (<i>Botaurus poiciloptilus</i>),	PCTs 10, 13, 17, 24 and 160	8.88 ha	191 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 17 – 77 ecosystem credits, • PCT 24 – 27 ecosystem credits, • PCT 160 – 56 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Australian Painted Snipe (<i>Rostratula australis</i>)	PCTs 10, 13, 17, 24 and 160	8.9 ha	191 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 17 – 77 ecosystem credits, • PCT 24 – 27 ecosystem credits, • PCT 160 – 56 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Blue-winged Parrot (<i>Neophema chrysostoma</i>)	PCTs 13, 17, 24, 26, 28, 44, 46 160 and 164.	636.40 ha	15,391 ecosystem credits consisting of: • PCT 13 – 2 ecosystem credits, • PCT 17 – 77 ecosystem credits, • PCT 24 – 27 ecosystem credits, • PCT 26 – 442 ecosystem credits, • PCT 28 – 1418 ecosystem credits, • PCT 44 – 4077 ecosystem credit, • PCT 46 - 8546 ecosystem credits, • PCT 160 – 56 ecosystem credits, • PCT 164 – 746 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Chariot Wheels (<i>Maireana cheelii</i>)	PCTs 10, 28, 44 and 46	4.67 ha	116 species credits consisting of: • PCT 10 – 1 species credit, • PCT 28 – 88 species credits, • PCT 44 – 20 species credits, • PCT 46 – 7 species credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Curlew Sandpiper (<i>Calidris ferruginea</i>)	PCT 24	2.0 ha	27 ecosystem credits for PCT 24	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12

Threatened species/ Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community	Area of impact (ha)	Credits required	Offsetting approach	Reference (EIS, BDAR)
Diamond Firetail (<i>Stagonopleura guttata</i>)	PCTs 10, 13, 26, 28, 44 and 46	585 ha	14,514 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 26 – 442 ecosystem credits, • PCT 28 – 1418 ecosystem credits, • PCT 44 – 4077 ecosystem credit, • PCT 46 - 8546 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Grey Falcon (<i>Falco hypoleucos</i>)	PCTs 13, 17, 24, 26, 28, 44, 46, 160 and 164.	636.40 ha	15,391 ecosystem credits consisting of: • PCT 13 – 2 ecosystem credits, • PCT 17 – 77 ecosystem credits, • PCT 24 – 27 ecosystem credits, • PCT 26 – 442 ecosystem credits, • PCT 28 – 1418 ecosystem credits, • PCT 44 – 4077 ecosystem credit, • PCT 46 - 8546 ecosystem credits, • PCT 160 – 56 ecosystem credits, • PCT 164 – 746 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Latham's Snipe (<i>Gallinago hardwickii</i>)	Not yet listed - likely PCTs 10, 13, 17, 24 and 160 (like Australian Painted Snipe)	8.9 ha	191 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 17 – 77 ecosystem credits, • PCT 24 – 27 ecosystem credits, • PCT 160 – 56 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Painted Honeyeater (<i>Grantiella picta</i>)	PCTs 10, 13 and 26	7.23	473 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 26 – 135 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Pink Cockatoo (<i>Lophochroa leadbeateri</i>)	PCTs 10, 13, 26 and 28 (foraging only).	82.1 ha	1891 ecosystem credits consisting of: • PCT 10 – 29 ecosystem credits, • PCT 13 – 2 ecosystem credits, • PCT 26 – 442 ecosystem credits, • PCT 28 – 1418 ecosystem credits	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Plains-wanderer (<i>Pedionomus torquatus</i>)	PCTs 44 and 46 (foraging only)	502.4 ha	12,623 ecosystem credits consisting of: • PCT 44 – 4077 ecosystem credits	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or	Final V3 amended BDAR dated 4

Threatened species/ Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community	Area of impact (ha)	Credits required	Offsetting approach	Reference (EIS, BDAR)
			PCT 46 – 8546 ecosystem credits.	Payment into the Biodiversity Conservation Fund (or possible combination of these options)	September 2025. Section 12
Slender Darling-pea (<i>Swainsona murrayana</i>)	PCTs 28, 44, 46, 160 and 164	445.21 ha	13,058 species credits consisting of: - PCT 10 – 20 species credits, - PCT 13 – 3 species credits, - PCT 17 – 6 species credits - PCT 24 – 37 species credits, - PCT 26 – 367 species credits, - PCT 28 – 944 species credits, - PCT 44 – 2633 species credit, - PCT 46 – 8157 species credits, - PCT 160 – 18 species credits, - PCT 164 – 873 species credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
South-eastern Hooded Robin (<i>Melanodryas cucullata cucullata</i>)	PCTs 10, 13 and 26.	7.2 ha	473 ecosystem credits consisting of: - PCT 10 – 29 ecosystem credits, - PCT 13 – 2 ecosystem credits, - PCT 26 – 135 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Southern Bell Frog (<i>Litoria raniformis</i>)	PCTs 10, 24, 26, 28, 44 and 46	52.16 ha	1,426 species credits consisting of: - PCT 10 – 33 species credits, - PCT 24 – 2 species credits, - PCT 26 – 100 species credits, - PCT 28 – 244 species credit, - PCT 44 – 371 species credits, - PCT 46 – 676 species credits, - PCT 160 – 152 species credits, - PCT 164 – 1346 species credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Southern Whiteface (<i>Aphelocephala leucopsis</i>)	PCTs 10, 13, 17, 24, 26, 28, 44, 46, 160 and 164.	636.40 ha	15,420 ecosystem credits consisting of: - PCT 10 – 29 ecosystem credits, - PCT 13 – 2 ecosystem credits, - PCT 17 – 77 ecosystem credits, - PCT 24 – 27 ecosystem credits, - PCT 26 – 442 ecosystem credits, - PCT 28 – 1418 ecosystem credits, - PCT 44 – 4077 ecosystem credit,	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12

Threatened species/ Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community	Area of impact (ha)	Credits required	Offsetting approach	Reference (EIS, BDAR)
			- PCT 46 - 8546 ecosystem credits, - PCT 160 – 56 ecosystem credits, - PCT 164 – 746 ecosystem credits.		
Spike-rush (<i>Eleocharis obicis</i>)	PCTs 28, 44 and 46	7.31 ha	193 species credits consisting of: - PCT 28 – 37 species credits - PCT 44 – 103 species credits - PCT 46 – 53 species credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Superb Parrot (<i>Polytelis swainsonii</i>)	PCT 10, 13, 26, 28 and 46 (foraging only)	415.2 ha	10,437 ecosystem credits consisting of: - PCT 10 – 29 ecosystem credits, - PCT 13 – 2 ecosystem credits - PCT 26 – 442 ecosystem credits, - PCT 28 – 1418 ecosystem credits, - PCT 46 - 8546 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Swift Parrot (<i>Lathamus discolor</i>)	PCT 10, 13, 24 and 26 (foraging only)	27.1 ha	500 ecosystem credits consisting of: - PCT 10 – 29 ecosystem credits, - PCT 13 – 2 ecosystem credits - PCT 24 – 27 ecosystem credits, - PCT 26 – 442 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Weeping Myall Woodlands	PCT 26	4.92 ha	41 ecosystem credits for PCT 26	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
White-throated Needletail (<i>Hirundapus caudacutus</i>)	PCTs 10, 13, 17, 24, 26, 44, 46 and 160	534.1 ha	13,256 ecosystem credits consisting of: - PCT 10 – 29 ecosystem credits, - PCT 13 – 2 ecosystem credits - PCT 17 – 77 ecosystem credits, - PCT 24 – 27 ecosystem credits, - PCT 26 – 442 ecosystem credits, - PCT 44 – 4077 ecosystem credit, - PCT 46 - 8546 ecosystem credits, - PCT 160 – 56 ecosystem credits.	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or Payment into the Biodiversity Conservation Fund (or possible combination of these options)	Final V3 amended BDAR dated 4 September 2025. Section 12
Winged Peppergrass (<i>Lepidium monoplacoides</i>)	PCTs 10, 26, 28, 44 and 46	3.52 ha	88 species credits consisting of: PCT 10 – 1 species credit	Establishment of a Biodiversity Stewardship Site, or purchase of credits on the open market, or	Final V3 amended BDAR dated 4

Threatened species/ Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community	Area of impact (ha)	Credits required	Offsetting approach	Reference (EIS, BDAR)
			• PCT 26 – 13 species credits • PCT 28 – 38 species credits • PCT 44 – 11 species credits, • PCT 46 – 25 species credits.	Payment into the Biodiversity Conservation Fund (or possible combination of these options)	September 2025. Section 12