

Victoria to New South Wales Interconnector West (VNI West) (NSW)

Technical paper 5 – Social Impact Assessment



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Transgrid

**Victoria to
New South Wales
Interconnector West
(VNI West) (NSW)**

Technical paper 5 –
Social impact
assessment

wsp

July 2025

Acknowledgement

Transgrid acknowledges Indigenous and Torres Strait Islander peoples as the Traditional Custodians of the land, water and sky throughout Australia on which we do business. We recognise their strength, diversity, resilience and deep connections to Country.

Transgrid acknowledges the Wiradjuri, Wamba, Perrepa Perrepa, Yorta, and Wagga Wagga people as the Traditional Owners of the lands on which the proposed transmission line is being considered and pays respect to Elders past, present and future. Traditional Owners of these lands have lived in the area for thousands of years and have an enduring custodianship and connection over the land and waterways of this region.

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Victoria to New South Wales Interconnector West (VNI West) (NSW) Technical paper 5 – Social impact assessment

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WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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Glossary

Acronym/phrase	Description
AEMO	The Australian Energy Market Operator (AEMO) is the national transmission planner.
Aboriginal Heritage Information Management System (AHIMS)	The Aboriginal Heritage Information Management System (AHIMS) is an electronic database in New South Wales (NSW) that records over 93,000 Aboriginal sites. It contains detailed information about cultural heritage, archaeological reports, and site cards.
ABS	Australian Bureau of Statistics
BESS	Battery Energy Storage System
Community Consultative Group (CCG)	The Community Consultative Group (CCG) is a continuation and refinement of an initial Regional Reference Group (RRG). It is a forum organised by Transgrid and where community members, stakeholders and local councils seek information from Transgrid and provide feedback to inform corridor refinement and the subsequent environmental assessment process.
CIBP	Community investment and benefits plan
CSP	A Community Strategic Plan (CSP) is the highest level of strategic planning undertaken by a local council. A 10-year plan, it identifies the community's main priorities and aspirations and provides a clear set of objectives to achieve this vision.
Cumulative impact	Cumulative impact is the combined impacts of a project on a matter with other relevant future projects.
Direct social locality	The area that could experience the most social change during the project's construction and/or operation. For this assessment, this comprises a 5-kilometre zone surrounding the project footprint.
DPHI (former DPIE)	Department of Planning, Housing, and Infrastructure (DPHI) is the former Department of Planning, Industry and Environment NSW (DPIE).
EIS	The purpose of an Environmental Impact Statement (EIS) is to assess the economic, environmental and social impacts of the project.
ELF	Extremely Low Frequency
EMF	Electric and Magnetic Fields
EP&A Act	<i>Environmental Planning and Assessment 1979</i> (NSW) (EP&A Act) requires the relevant planning authority to take into consideration the impacts to the environment (both natural and built) and the community of the proposed development or land-use change.
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth) (EPBC Act) is the Australian Government's environmental legislation that covers environmental assessment and approvals, protects significant biodiversity and integrates the management of important natural and cultural places.
Impact	Impact is influence or effect exerted by a project or other activity on the natural, built and community environment.

Acronym/phrase	Description
Indigenous Protected Area (IPA)	An Indigenous Protected Area (IPA) is a class of protected area used in Australia. Each IPA is formed by voluntary agreement with Indigenous Australians and declared by Aboriginal Australians and Torres Strait Islander representative organisations. These areas are formally recognised by the Australian Government as part of its National Reserve System. IPAs are land or sea country managed by Aboriginal and Torres Strait Islander groups, and they play a crucial role in biodiversity conservation and the protection of cultural heritage.
Interconnector	An electricity interconnector is a connection that allows power to flow in both directions between regions in the National Electricity Market (NEM), providing access to a larger number of electricity generators and greater ability to meet varying demand where and when it is needed most.
IRSAD	The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area. This index includes both relative advantage and disadvantage measures.
ISP	Integrated System Plan (ISP) is a whole-of-system plan that provides an integrated roadmap for the efficient development of the National Electricity Market (NEM) over the next 20 years and beyond.
kV	Kilovolt
LALC	Local Aboriginal Land Council (LALC) assists traditional owners to acquire and manage their land. LALCs can also provide a cultural and social function in the Aboriginal community.
LCZ	Landscape Character Zones as defined by <i>Technical paper 3 – Landscape character and visual impact assessment</i> (Iris, 2025) which forms part of the EIS.
LGA	Local government area (LGA) is a term used by the Australian Bureau of Statistics (ABS) to refer to local government administrative zones.
Local social locality	The local social locality is the area that could experience medium direct and indirect impacts during the construction and/or operation of the project. The local social locality extends well beyond the project footprint and includes the ABS Suburbs and Localities (SALs) intersected by the project.
NMLs	Noise Management Levels
NEM	National Electricity Market (NEM) incorporates around 40,000 km of transmission lines and cable in NSW, Victoria, Queensland, South Australia and Tasmania. It involves wholesale generation that is transported via high voltage transmission lines from generators to large industrial users and to local electricity distributors in each region that delivers it to homes and businesses.
NSW RFS	New South Wales Rural Fire Service
OSOM	Over-sized and over-mass

Acronym/phrase	Description
Project footprint (the)	Refers to the generally 200 m wide corridor area that may be directly impacted by the project including all proposed infrastructure elements (including the proposed transmission line corridor, substation site works and other ancillary works) as well as locations for proposed construction elements such as temporary worker accommodation facilities, construction compounds, access tracks and site access points, laydown and staging areas, concrete batching plants, brake and winch sites and site offices.
Project transmission line corridor	A general 200 m wide corridor along the length of the transmission line within which the transmission line, structures and easement would be located (sub set of the project footprint).
Regional social locality	Regional social identity is the area expected to experience low indirect or secondary benefits and/or impacts due to the project. The regional social locality includes seven LGAs across NSW and two in Victoria. The LGAs within NSW included are: Murray River, Berrigan, Edward River (also known as Kolety), Balranald, Murrumbidgee, Wagga Wagga and Hay. The two LGAs within Victoria include: Gannawarra and Swan Hill.
Regional Reference Group (RRG)	The Regional Reference Group (RRG) is a community and stakeholder group established as part of the broad corridor identification phase. Their role is to provide local advice and suggested issues that Transgrid should consider minimising impacts to communities, landholders and the environment during the determination of the preferred corridor.
Relevant future projects	Projects that may cause cumulative impacts with a project because they impact on the same matters, in the same area over the same or similar time period and meet the criteria in Section 3.4 of the <i>Cumulative Impact Assessment Guidelines for State Significant Projects</i> (DPIE, 2022).
Renewable Energy Zone (REZ)	A Renewable Energy Zone (REZ) is a geographic area with high-quality variable renewable energy resources (such as wind and solar), suitable topography and land use designations for development, and demonstrated interest from project developers. REZs are also areas in the NEM where clusters of large-scale renewable energy can be developed efficiently.
SALs	ABS Suburbs and Localities (SALs) are an ABS Mesh Block approximation of the officially recognised boundaries of suburbs (in the cities and larger towns) and localities (outside cities and larger towns) as defined by the State and Territory Governments of Australia.
SCENIHR	Scientific Committee on Emerging and Newly Identified Health Risks
SEARs	Secretary's Environmental Assessment Requirements
SES	State Emergency Service
Socio-Economic Index for Areas (SEIFA)	Socio-Economic Indexes for Areas (SEIFA) is the range of indices developed by the ABS. It combines Census data such as income, education, employment, occupation, housing and family structure to summarise the socio-economic characteristics of an area. Each area receives a SEIFA score indicating how relatively advantaged or disadvantaged that area is compared with other areas.

Acronym/phrase	Description
Social Impact Assessment (SIA)	A Social Impact Assessment (SIA) is a systematic process that involves identifying, predicting, and evaluating the potential social impacts resulting from a project. It aims to propose appropriate responses, such as management measures or mitigation strategies, to address these predicted impacts. The SIA serves as one component within the broader environmental impact assessment process, which also considers environmental, economic, social, and cultural factors.
Social impact assessment principles	The social impact assessment principles are 13 principles to be adopted in social assessment practice in accordance with the NSW Social Impact Assessment Guideline (DPIE, 2023a). These principles are action oriented, adaptative, distributive equity, human-rights oriented, impartial, inclusive, integrated, life-cycle focus, material, precautionary, proportionate, rigorous and transparent.
Social locality	Social locality refers to the geographical area where most social impacts are likely to materialise. It includes a direct, local and regional social locality (refer to section 3.3.1).
SBP	Strategic Benefits Payments
TCV	Transmission Company Victoria (TCV) is jointly developing the VNI West with Transgrid. TCV is responsible for the development of the Victorian component of the VNI West project from the crossing point on the NSW/Victorian border to a connection with the Western Renewables Link near Bulgana, via a new proposed substation near Kerang.
Transgrid	The manager and operator of the high voltage electricity transmission network in NSW and the Australian Capital Territory with connections to Victoria and Queensland. Transgrid manages the network that is the backbone of the NEM, which enables energy trading between Australia's three largest states along the east coast.
TSRs	Travelling stock reserves (TSRs) are parcels of Crown land designated for the movement, resting, or grazing of livestock. Some of these reserves are linear, providing a route for livestock to move from place to place. Other reserves are blocks of varying sizes providing a place for livestock to be temporarily grazed or held (e.g., for overnight yarding).
Transmission line easement	The area surrounding and including the transmission lines that allows access, construction and maintenance work to take place. The easement grants a right of access and for construction, maintenance and operation of the transmission line and other operational assets. The easements for the new 500 kV transmission line between the NSW/Victorian border and the expanded Dinawan substation would typically be 70 m wide. However, transposition locations would require wider easements up to 110 m wide. The replacement of the 330 kV transmission line generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road would occur within the existing 60 m wide easement.
Transmission line alignment	The location of the transmission line structures along the middle of the transmission line easement.
Transmission line structure	A free standing steel tower structure to support the transmission line cables. Structures can consist of two types of supporting steel lattice structures being: a suspension structure and strain structure (also known as tension structure).

Acronym/phrase	Description
Transposition	Transposition is the periodic swapping of positions of the conductors of a transmission line to improve transmission voltage balance.
VNI West	An interconnector of about 480 km between the power grids of NSW and Victoria. Specifically, VNI West would connect the EnergyConnect (NSW – Eastern section) project (at the future Dinawan substation in NSW) with the Western Renewables Link proposal (at Bulgana in Victoria) via a new substation near Kerang (in Victoria).
VNI West (NSW) (“the project”)	The NSW component of VNI West includes: — a new 500 kV transmission line connection between the NSW/Victorian border and the future Transgrid’s Dinawan substation (currently under construction as part of the EnergyConnect (NSW – Eastern section) project) — replacement of a section of existing single circuit 330 kV transmission line to a double circuit 330 kV line generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road (subject to separate planning approval as part of the HumeLink project) — expansion of the future Dinawan 330 kV substation to include a new 500 kV switchyard and two new 330 kV bays — connection and transmission line diversion works at both the existing Wagga 330 kV substation and the future Gugaa 500 kV substation, Livingstone Gully Road to connect the new transmission line infrastructure — ancillary activities to support construction and operation of the project.
WHO	World Health Organisation

Executive summary

Project overview

Transgrid and Transmission Company Victoria (TCV) are jointly developing a new electrical connection between NSW and Victoria called the Victoria to NSW Interconnector West project (VNI West). Transgrid is responsible for seeking the required planning approval and delivering the NSW component of VNI West (referred to as ‘the project’ or ‘VNI West (NSW)’ in the Riverina Region of NSW).

The project would provide the NSW 500 kV double circuit overhead transmission line component of the connection between the NSW/Victorian border near Murrabit and the future Dinawan substation (currently being constructed as part of the EnergyConnect (NSW – Eastern section) project). The project would also include replacement of around nine kilometres of an existing overhead single circuit 330 kV transmission line (Line 51) with a double circuit 330 kV transmission line generally between Ivydale Road (south of the existing Wagga substation) and the future Gugaa 500 kV substation, Livingstone Gully Road (which is subject to separate planning approval under the HumeLink project (SSI-36656827)). The project would also include an expansion of the future Dinawan substation and connection works at both the existing Wagga 330 kV substation and the future Gugaa 500 kV substation.

This technical paper assesses the potential social impacts from the construction and operation of the project and has been prepared to support and inform the Environmental Impact Statement (EIS) for the project.

The impacts have been assessed in accordance with the Secretary’s Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Housing and Infrastructure (DPHI) and against the relevant legislation and guidelines as they apply to social impacts.

Legislative and policy context

Social impacts from construction and operation of the project have been assessed in accordance with the relevant legislation and guidelines. Guidelines considered as part of this assessment included:

- *Social Impact Assessment Guideline* (DPIE, 2023a)
- *Technical Supplement Social Impact Assessment Guideline* (DPIE, 2023b)
- *Practice Note: Engaging with Aboriginal Communities* (DPIE, 2022)
- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI, 2024).

Methodology

This technical paper assesses the potential impacts from the project in relation to social matters and in accordance with the SEARs issued by DPHI for the project on 4 October 2024.

The assessment of social impacts is informed by primary and secondary research. Primary research included semi-structured face to face and online interviews with 30 community members and stakeholders, as well as the delivery of an online and paper-based survey with 23 responses received. Secondary research included a review of Census data from the Australian Bureau of Statistics (ABS), local planning documents and social impact studies.

Social locality

The social locality of the project has been defined to assess social impacts at three distinct impact areas:

- Direct social locality: focuses on the impacts to landholders and community members residing within 2.5 kilometres of the project, and community members residing at Moulamein, Wanganella, Conargo, Jerilderie and Gregadoo. This is the area where high direct and indirect impacts from the project are expected to occur.
- Local social locality: includes the communities where medium direct and indirect impacts are anticipated. These are represented by the 21 ABS Suburbs and Localities (SAL) intersected by the project. This area includes the localities of Argoon, Barratta, Bundure, Cobramunga, Cunninyeuk, Gonn, Gala Vale, Mallan, Mellool, Mabins Well, Moonbria, Steam Plains, Willurah and Wetuppa.
- Regional social locality: includes nine Local Government Areas (LGAs) in proximity to the project, represents the groups of people that could be impacted both positively and or negatively by employment and business opportunities, and transportation routes. In this area, low direct and indirect impacts from the project are anticipated. The LGAs within NSW included in the regional social locality are: Murray River, Berrigan, Edward River, Balranald, Murrumbidgee, Wagga Wagga and Hay. The LGAs within Victoria include: Gannawarra and Swan Hill.

Existing environment

Key characteristics of the social locality include:

- Major regional centres include Swan Hill, Balranald, Deniliquin, Hay, Berrigan and Wagga Wagga, which serve as hubs for education, health, and shopping for surrounding communities, and rural localities such as Conargo, Jerilderie, and Moulamein.
- Dispersed population at smaller towns like Moulamein (489 people), Jerilderie (922 people) and Conargo (117 people), small settlements with populations between 41 to 61 residents in Cobramunga, Gonn, Mallan, Mellool and Wanganella, and smaller communities ranging from eight to 24 people at Argoon, Barratta, Bundure, Gala Vale, Mabins Well, Moonbria and Wetuppa.
- Agricultural activities are recognised by the community as an important part of the community's culture and identity. Most people working on farms have a deep connection to the land they farm, choosing farming for both lifestyle and business reasons. Agricultural activities include grazing, irrigated horticulture and cropping (rice, cotton, sunflower, and corn).
- High levels of socio-economic disadvantage in some locations, with Moulamein and Jerilderie having the highest levels of socio-economic disadvantage, whereas Wagga Wagga LGA exhibits a moderate level of socio-economic advantage.
- 55.2 per cent of the population is part of the labour force, slightly lower than the NSW average at 58.7 per cent. Jerilderie and Moulamein have high levels of employment and low unemployment rates.
- A total of 26 relevant future projects across the social locality, including related, approved and proposed projects that may cause cumulative impacts.

Assessment of potential impacts

Construction impacts

The following social benefits have been identified during construction phase of the project:

- enhanced community wellbeing as a result of Community Investment and Benefits Plan (CIBP) and Community Partnerships Program already underway, noting that this benefit would extend through operations
- local business opportunities and economic stimulus due to project procurement opportunities and increased demand for goods and services within the local and regional social locality, including Aboriginal and Torres Strait Islander businesses
- improved livelihoods due to increased local employment opportunities for people within the local and regional social localities.

Negative social impacts are expected to occur during construction, affecting the community and key stakeholders in the direct and local social locality. These may be exacerbated by cumulative impacts associated with 26 relevant future projects in the local social locality. Potential negative social impacts may include:

- diminished community cohesion between landholders directly affected by the project footprint, adjacent neighbouring landholders and community members due to an increase of non-residential workers and due to conflicting views of the project impacts and benefits
- impacts to sense of place due to construction-related amenity impacts and to sense of safety due to the introduction of a non-resident workers and the increase in road traffic
- potential adverse mental health effects amongst landholders directly affected by the project footprint and neighbouring landholders to the project due to uncertainty, stress and concern about project impacts
- labour shortages within the community due to the project's increase demand on local workers and people leaving existing roles to work on the project – notable given the low unemployment rates
- potential pressure on health and hospitality services, emergency services, short-term accommodation during the construction of temporary worker accommodation facilities and disruption to telecommunications, especially phone and internet
- potential impacts on Aboriginal culture for Aboriginal and Torres Strait Islander communities within the local and regional social locality.

Operational impacts

During operations, the project is anticipated to improve landholders' economic and social well-being through payments from the Strategic Benefit Payments Scheme.

The following potential direct and indirect negative social impacts are expected to occur during operation of the project:

- landholders neighbouring transmission lines may experience unequal distribution of impacts and benefits
- landholders neighbouring transmission lines and landholders subject to compulsory acquisition may experience stress due to:
 - perceived uncertainty about potential changes to land/property prices and insurance costs
 - reduced sense of place and belonging due to project infrastructure (transmission lines and structures)
 - perceived health risks associated with electromagnetic fields.

Recommended management and mitigation measures

The following management plans will be developed and implemented for mitigating and managing the project social impacts:

- A Community wellbeing strategy will be developed and implemented throughout the construction to support landholders and community members mental health and identify activities to strengthen community cohesion and wellbeing.
- A Temporary worker accommodation facility management plan will be developed in consultation with the relevant local councils. This plan will outline how workers not housed within the temporary worker accommodation facilities during construction will be accommodated through pre-construction and construction periods. It will also include mechanisms to monitor any pressures on local temporary accommodation market.
- A Workforce and workforce development plan and a Local industry participation plan to promote local employment and procurement opportunities.
- A Community and stakeholder engagement plan will be prepared to set out mechanisms for the regular distribution of information and for managing enquiries and complaints in timely manner during pre-construction and construction.
- An Aboriginal and Torres Strait Islander peoples' participation plan to enhance and maximise opportunities for employment, procurement, education and other potential project related benefits. The plan will be informed by an Aboriginal and Torres Strait Islander peoples' advisory group.
- Community Investment and Benefits Plan (CIBP) to enhance surrounding communities' livelihoods and wellbeing.

A Social impact management sub-plan will be developed to adaptively manage social impacts; and quarterly monitoring and publicly report on progress.

1 Introduction

This chapter provides an overview and background to the NSW component of the Victoria to NSW Interconnector West (VNI West) project, including a summary of the project and the purpose and structure of this technical paper.

1.1 Project context and overview

Transgrid and Transmission Company Victoria (TCV) are jointly developing a new electrical connection between NSW and Victoria called the Victoria to NSW Interconnector West project (VNI West). VNI West would form a second transmission link between NSW and Victoria to harness clean, low-cost electricity from Renewable Energy Zones (REZ) in both states and improve the reliability and security of electricity supply. VNI West is a priority project for the Australian Energy Market Operator (AEMO), and the Commonwealth and NSW and Victorian governments.

VNI West proposes the construction, operation and ongoing maintenance of a high voltage, 500 kilovolt (kV) double circuit overhead transmission line that would connect the high voltage electricity grids in NSW and Victoria. Specifically, VNI West would link the Western Renewables Link proposal (at Bulgana in Victoria) with the EnergyConnect (NSW – Eastern section) project (SSI-9172452) at the future Dinawan substation in NSW (currently in construction). The connection would be made via a new substation near Kerang in Victoria (refer to Figure 1.1).

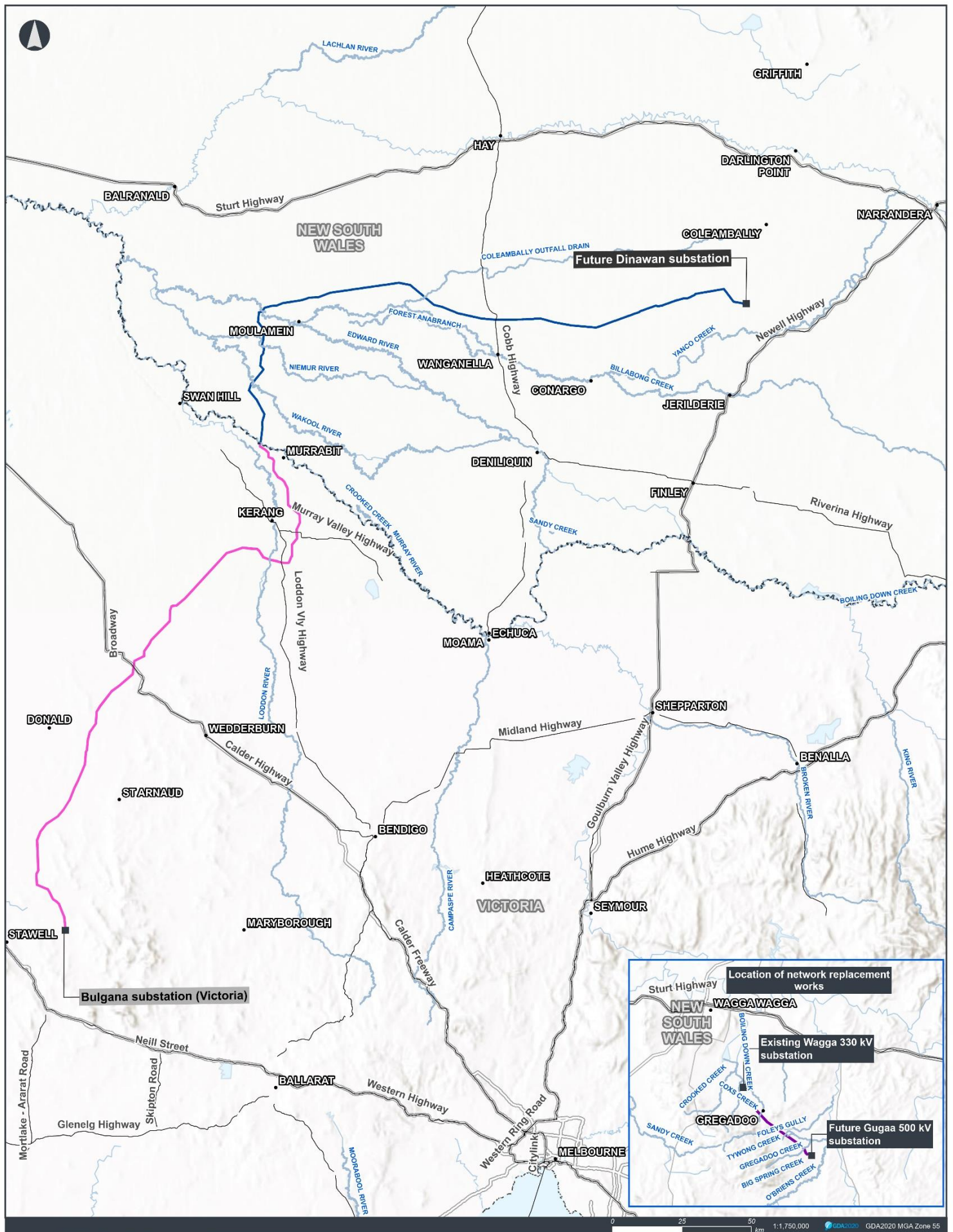
Transgrid (the proponent) is responsible for seeking the required planning approval and delivering the NSW component of VNI West (referred to as ‘the project’ or ‘VNI West (NSW)’) in the Riverina Region of NSW and would provide the 500 kV transmission line component of the connection for the VNI West project. The project would be located between the NSW/Victorian border near Murrabit in Victoria and the future Dinawan substation (the 330 kV component of which is being constructed under the EnergyConnect (NSW – Eastern section) project approval). The project would also include replacement of around nine kilometres of an existing single circuit 330 kV transmission line (Line 51) with a double circuit 330 kV transmission line generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road (the substation component of which is subject to separate planning approval as part of the HumeLink project (SSI-36656827)). The project would also include an expansion of the future Dinawan substation and substation connection works at both the existing Wagga 330 kV substation and the future Gugaa 500 kV substation, Livingstone Gully Road.

TCV, in association with the AEMO Victoria, is responsible for seeking the required planning approval and the delivery of the Victorian component of the VNI West project (VNI West (Victoria)), from the crossing point on the NSW/Victorian border to a connection with the Western Renewables Link near Bulgana, via a new proposed substation near Kerang. The Victorian component is subject to a separate planning and environmental approvals under the applicable Victorian State and Commonwealth jurisdictional requirements.

1.1.1 Project objectives

The primary objective of VNI West is to reduce the cost of providing secure electricity transmission between NSW and Victoria in the near term and facilitate the longer-term transition of the energy sector across the National Electricity Market (NEM) to low emission energy generation sources. More specifically, the project aims to:

- provide reliable and affordable electricity to customers
- improve energy security of the south western transmission network, enable greater sharing of energy between NSW and Victoria and help to unlock the potential capacity of proposed REZs in the region
- support the national transition to a lower carbon emission energy system by enabling more renewable energy generation to enter the market, supporting Australia’s emissions reduction targets
- support the development of a greater mix of renewable energy in the NEM.

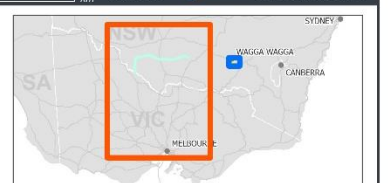


wsp
VNI West (NSW)

Figure 1.1
Overview of VNI West

Legend

- Project transmission line corridor (NSW/Victorian border to Dinawan substation)
- Victorian project transmission line corridor (subject to separate assessment)
- Network replacement between the existing Wagga 330 kV substation and future Gungahlin 500 kV substation
- NSW/Victorian border
- Substation
- Watercourse
- Roads



1.2 The project

Transgrid is seeking approval under Division 5.2, Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW) (the EP&A Act) to construct and operate the project. The project was declared as Critical State Significant Infrastructure (Critical SSI) under Section 5.13 of the EP&A Act on 19 June 2024.

The project was also declared a ‘controlled action’ on 4 September 2024 (EPBC Act 2024/09871) by the (Commonwealth) Department of Climate Change, Energy, the Environment and Water (Commonwealth DCCEEW) and as such also requires a separate approval under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). As a result of the need for Commonwealth approval, the project will be subject to the bilateral assessment process that has been established between the Australian and NSW governments.

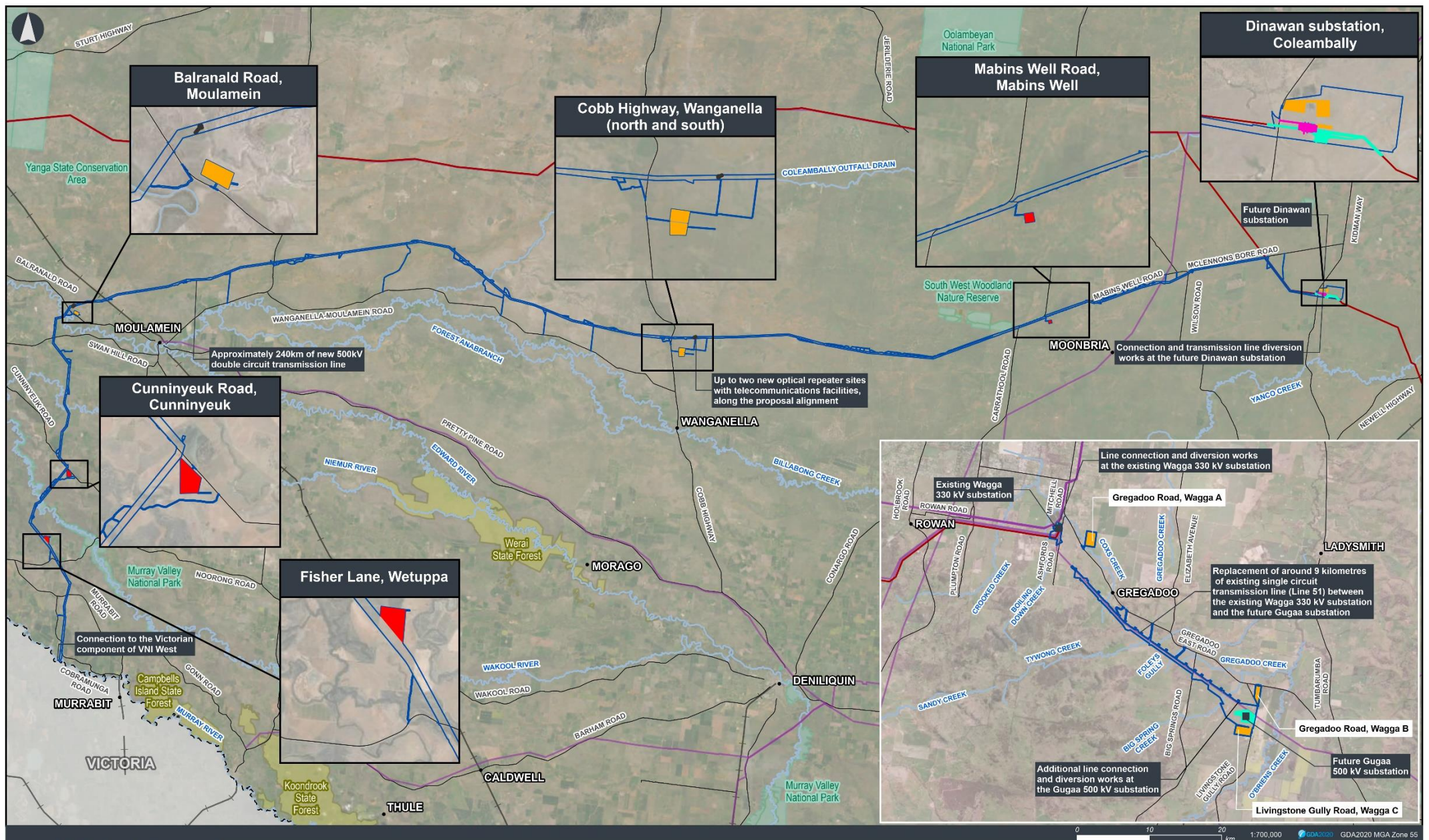
1.2.1 Key features of the project

The key elements of the project would be located within the project footprint and would include infrastructure such as the transmission lines and transmission line structures, the 500 kV expansion component of the future Dinawan substation and some additional ancillary features. The overall scope of the project includes the following key components:

- transmission line works comprising:
 - a new 500 kV double circuit overhead transmission line around 240 kilometres in length between the NSW/Victorian border near Murrabit, and the future Dinawan substation
 - replacement of around nine kilometres of an existing 330 kV single circuit overhead transmission line (Line 51), generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road with a new 330 kV double circuit overhead transmission line. The new transmission line structures for this section of the project would be up to around 56 metres in height
- substation works comprising:
 - connection and line diversion works at the future Dinawan substation to allow for connection of the proposed 500 kV switchyard
 - expansion of the future Dinawan substation to include a new 500 kV switchyard and two new 330 kV transformer bays
 - connection and line diversion work at the existing Wagga 330 kV substation and at the future Gugaa 500 kV substation, Livingstone Gully Road to allow for connection to the newly replaced Line 51
- ancillary activities comprising:
 - new and upgraded temporary and permanent access tracks
 - construction of utilities infrastructure and power supply
 - installation and operation of two telecommunication facilities (optical repeater sites) along the transmission line between the NSW/Victorian border and future Dinawan substation including connections to the local power supply
 - temporary facilities required for construction of the project including construction compounds, temporary worker accommodation facilities, laydown and staging areas, stockpiling areas, concrete batching plants, brake and winch sites, site offices, parking areas, and utilities supplies.

All components of the project would be located within the project footprint shown in Figure 1.2.

The project footprint is the area that has been assessed in this EIS as being directly affected by the construction, operation and maintenance of the project.



The 500 kV transmission line between the NSW/Victorian border and the future Dinawan substation would be located within an easement approximately 70 metres wide except at two transposition locations (where the conductors of a transmission line swap positions to improve transmission voltage balance) requiring a wider 110 metre easement for around one kilometre in length.

The section of the transmission line to be replaced generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road would be contained within the existing 60 metre easement. These easements would provide a legal right of access to construct, operate and maintain the transmission lines and other operational assets associated with these lines.

A detailed description of the project features and construction methods is further described in Chapter 3 (Project description) of the main EIS document.

1.2.2 Construction

1.2.2.1 Key construction work

Key construction work for the project would typically include (but not be limited to):

- pre-construction minor works which would include:
 - installation of mitigation measures, including but not limited to erosion and sediment controls, temporary exclusion fencing and monitoring equipment
 - property acquisition adjustment work including installation of property fencing, barricades and gates
- site establishment works, which may include (but not be limited to):
 - establishment of combined temporary worker accommodation facilities and construction compounds, including excavations, surface preparation, access roads and utility connections
 - vegetation clearing
 - road and intersection improvement works (where required)
 - establishment of access tracks and watercourse crossings
 - relocating, adjusting or protecting utilities
- construction of the proposed transmission lines, which would include (but not be limited to):
 - earthwork (including establishment of construction pads) and the construction of footings and foundations for each transmission line structure
 - erection of the new transmission line structures using crane(s) and/or helicopter(s), noting, where cranes are proposed, is assumed that the final height of the cranes would extend around 20 metres above the respective transmission line structure heights
 - stringing of the conductors and overhead earth wires and optical ground wire (utilising either ground-based and/or helicopter/drone stringing construction methods)
 - installation of earthing conductors
 - testing and commissioning of the transmission lines

- works to replace around nine kilometres of Line 51 generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road which would include (but not be limited to):
 - demolition of existing transmission line structures and footings and removal of waste materials
 - erection of the new transmission line structures
 - stringing of the conductors and overhead earth wires and optical ground wire
 - testing and commissioning of the new transmission lines
- expansion of the future Dinawan substation, which would include (but not be limited to):
 - civil construction works including earthworks
 - slab construction for the new 500 kV switchyard and 330 kV transformer bays
 - electrical fit out with new substation equipment
 - testing and commissioning of the new substation equipment
- utility service connections to telecommunication facilities (optical repeater sites) and construction compounds/temporary worker accommodation facilities, and adjustments of existing utilities that intersect the transmission line corridor (as required)
- connection and transmission line diversion works at the existing Wagga 330 kV substation and future Gugaa 500 kV substation, Livingstone Gully Road.

Prior to energisation of the infrastructure, a series of pre-commissioning activities would be conducted. This would include testing the new transmission lines and additional substation infrastructure.

A detailed description of construction work for the project is further described in Chapter 3 (Project description) of the main EIS document.

1.2.2.2 Construction program

Subject to NSW and Commonwealth planning approvals and potential construction staging, the project is expected to commence in late 2026 (site establishment works phase). Once construction has commenced, the project is estimated to take around two years to complete. Initial operation is anticipated to commence by early 2029, and at full capacity by late 2029. Site decommissioning and remediation would extend up to around six months beyond the initial commissioning (operational) phase, with estimated completion by the end of 2029.

The final construction program would be confirmed as part of the finalisation of the project development following approval of the project.

1.2.2.3 Indicative duration of transmission line construction activities

Construction at each transmission line structure would be intermittent and construction activities would not occur for the full duration at any one location. Figure 1.3 presents an indicative duration of construction activities associated with the transmission line structures. These durations could vary and breaks between activities may be shorter, which may lead to longer inactive periods in subsequent stages of construction at an individual transmission line structure. Duration of any particular construction activity, and respite periods, may vary for a number of reasons including (but not limited to), multiple work fronts, resource and engineering constraints, works sequencing, and location.

These activities would also have multiple work fronts, therefore (for example) foundation works, or structure erection would be occurring in several locations, along the transmission line easement, at the same time.

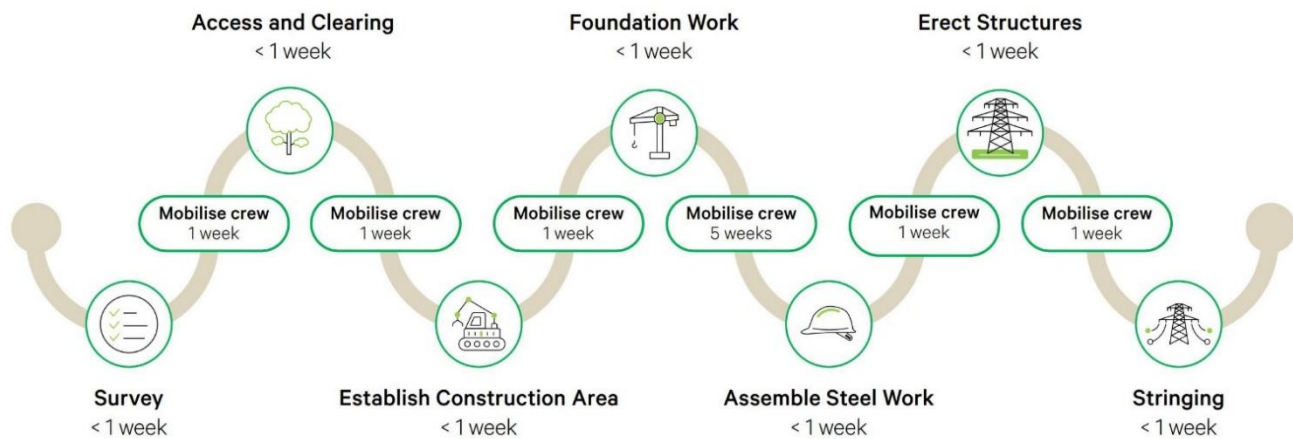


Figure 1.3 Indicative duration of construction activities at transmission line structures

1.2.3 Operation

Once operational, the new infrastructure would be inspected by field staff and contractors on a regular basis, with other operational activities occurring in the event of an emergency (as required). Key maintenance activities would include:

- regular inspection (ground and aerial) and maintenance of transmission lines and structures, including annual fly overs and routine ground inspections on an approximate six-yearly cycle
- vegetation clearing/trimming within the transmission line easement, and access along road/tracks
- inspection and maintenance of the future Dinawan substation including:
 - routine substation infrastructure inspection (such as transformers, electrical plant and equipment and fire detection systems) throughout the year
 - routine/planned substation maintenance of equipment, property and switchyard areas on a scheduled basis
 - ad hoc fault and emergency works for repair of any damaged infrastructure (for example through a weather event or other failure of infrastructure)
 - maintenance of asset protection zones (as required)
- inspection and maintenance of other ancillary infrastructure including the telecommunication facilities and associated asset protection zones
- stormwater drainage maintenance.

It is expected that these activities would only require light vehicles and/or small to medium plant (depending on the work required).

1.3 Purpose of this technical paper

The purpose of this technical paper is to identify and assess the potential social impacts (both positive and negative), in relation to the construction and operation of the project and has been prepared to support and inform the EIS. It responds directly to the project's Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning, Housing and Infrastructure (DPHI) on 22 May 2025 (refer to section 1.3.1).

This technical paper presents the second phase of undertaking a Social Impact Assessment (SIA) for state significant projects, in accordance with the SIA Guideline (NSW Department of Planning, Industry and Environment (DPIE), 2023a), and its associated Technical Supplement (refer to section 2.2). It builds upon the *Social Screening Assessment Report* (WSP, 2024b) which formed part of the *Scoping Report* (WSP, 2024a) for the project. In accordance with the SIA Guideline, this report has the following objectives:

- predict and analyse the extent and nature of likely social impacts of the project against baseline conditions using accepted social science methods
- evaluate and prioritise the social impacts that are important from the perspective of those affected by the project
- develop appropriate and justified responses (e.g., avoidance, mitigation and enhancement measures) to social impacts, and identify residual social impacts
- propose arrangements to monitor and manage residual social impacts, including unanticipated impacts, over the life of the project.

1.3.1 Secretary's Environmental Assessment Requirements

This technical paper addresses the SEARs relevant to the assessment of social impacts. The requirements specific to this assessment and where these aspects are addressed in this technical paper are outlined in Table 1.1.

Table 1.1 Secretary's Environmental Assessment Requirements – SIA

Reference	Secretary's environmental assessment required	Where addressed in the technical paper
Key issue – Social	An assessment of the social impacts in accordance with <i>Social Impact Assessment Guideline</i> (DPIE, 2023a) and <i>SIA Guideline – Technical Supplement</i> (DPIE, 2023b), and	Chapters 3, 6 and 7
	consideration of any increase in demand for community infrastructure and services, and	Sections 6.4.1 and 6.4.3
	details of how the construction workforce will be managed to minimise local impacts, including consideration of construction workforce accommodation.	Section 6.4.2
Key issue – Economic	An assessment of the economic benefits of the project for the region and the State as a whole, including: — an assessment of the impacts to State Forests; and	Addressed in <i>Technical paper 6 – Economic impact assessment</i> (Gillespie, 2025), noting the project would not directly impact any State Forests.
	— details of any proposed benefit sharing arrangements.	Sections 6.1.2 and 7.2.1

Reference	Secretary's environmental assessment required	Where addressed in the technical paper
Engagement	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landholders, Native Title holders, exploration licence holders, quarry operators and mineral title holders.	Section 3.3.3 and Chapter 5 Refer also to EIS Chapter 5 (Stakeholder and community engagement), EIS Appendix E (Community outcomes report) and <i>Technical paper 2 – Aboriginal Cultural Heritage Assessment Report</i> (Navin Officer, 2025a)

1.3.2 Related technical papers

Social impacts are often associated with other identified environmental or economic impacts of a project. This technical paper is linked to the assessments completed in the following technical papers:

- *Technical paper 1 – Biodiversity Development Assessment Report* (WSP, 2025a)
- *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a)
- *Technical paper 2a – Cultural Values Assessment* (EMM, 2025)
- *Technical paper 3 – Landscape character and visual impact assessment* (Iris, 2025)
- *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)
- *Technical paper 6 – Economic impact assessment* (Gillespie, 2025)
- *Technical paper 7 – Noise and vibration impact assessment* (WSP, 2025c)
- *Technical paper 8 – Traffic and transport impact assessment* (WSP, 2025d)
- *Technical paper 9 – Hydrology, flooding and water quality impact assessment* (WSP, 2025e)
- *Technical paper 10 – Groundwater impact assessment* (WSP, 2025f)
- *Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b)
- *Technical paper 12 – Bushfire impact assessment* (Australia Bushfire Protection Planners, 2025)
- *Technical paper 13 – Electric and magnetic fields (EMF) study* (Beca, 2025)
- *Technical paper 14 – Aviation impact assessment* (Aviation Projects, 2025)
- *Technical paper 15 – Air quality impact assessment* (WSP, 2025g)
- *Technical paper 16 – Greenhouse gas impact assessment* (WSP, 2025h)
- *Technical paper 17 – Contaminated land impact assessment* (WSP, 2025i).

1.4 Structure of this report

The structure and content of this report is as follows:

- Chapter 1: Introduction – introduces this technical paper (this chapter) and provides an overview of the project.
- Chapter 2: Legislative and policy context – provides an overview of the regulatory context for the assessment.
- Chapter 3: Methodology – outlines the methodology adopted for this SIA.
- Chapter 4: Existing environment – describes the existing social environment (known as the social baseline) across the local and regional social localities.
- Chapter 5: Engagement findings – provides the outcomes of engagement that was undertaken to inform this SIA.
- Chapter 6: Impact assessment – Construction – describes the potential social impacts associated with the project's construction, and the cumulative impacts with other relevant future projects.
- Chapter 7: Impact assessment – Operation – describes the potential social impacts associated with the project's operation and the cumulative impacts with other relevant future projects.
- Chapter 8: Management and mitigation measures – details recommended mitigation and management measures to address identified social impacts. It also includes residual impacts to evaluate the remaining effects of the social impacts of the project, considering the mitigation measures proposed.
- Chapter 9: References – identifies the key reports and documents used to generate this report.

The appendices to this report are:

- Appendix A: Social locality criteria
- Appendix B: Author declaration
- Appendix C: Social baseline disaggregated data
- Appendix D: SIA engagement questionnaire
- Appendix E: Checklist NSW SIA requirements
- Appendix F: Review of relevant future projects.

2 Legislative and policy context

This section provides a description of the strategic context of the project, and the relevant legislation and policies that are directly related to the SIA.

2.1 NSW Legislation

2.1.1 *Environmental Planning and Assessment Act 1979 (NSW)*

Section 1.3 of the EP&A Act lists the objects of the EP&A Act. The objects include a number of matters relevant to social considerations, including:

- the promotion of social and economic welfare of communities and a better environment by the proper management, development and conservation of the State's natural and other resources
- to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making
- to provide for increased opportunity for community participation in environmental planning and assessment.

This SIA supports the consideration of the project against the objects of the EP&A Act as they relate to social impacts (positive and negative). This has been discussed further in Chapter 26 (Justification and conclusion) and Appendix D of the EIS main body.

2.2 NSW planning policies and strategies

2.2.1 *Social Impact Assessment Guideline*

The *Social Impact Assessment Guideline* (NSW Department of Planning, Industry and Environment (DPIE), 2023a) (the SIA Guideline) and the *SIA Scoping Worksheet* (DPIE, 2023c) was released to support the preparation of SIAs for State Significant Projects. The SIA Guideline establishes the overarching assessment methodology to categorise and assess social impacts, as well as guiding principles to implement engagement and develop management measures. The assessment methodology within the SIA Guideline has been adopted for this SIA (refer to Chapter 3 for a detailed overview of the methodology).

2.2.2 *Technical Supplement Social Impact Assessment Guideline for State Significant Projects*

The *Technical Supplement Social Impact Assessment Guideline for State Significant Projects* (DPIE, 2023b) (the Technical Supplement) provides additional guidance for proponents and practitioners using the SIA Guideline for SSI. It contains the relevant criteria to assess the significance of negative and positive social impacts, which has been adopted throughout this report (refer to section 3.3.4 for further detail).

2.2.3 *Practice Note: Engaging with Aboriginal Communities*

The *Practice Note: Engaging with Aboriginal Communities* (DPIE, 2022a) (the Practice Note) summarises best practice methods when engaging with Aboriginal Communities when conducting SIA. The practice note sets the following principles when engaging with Aboriginal communities, which have been adopted for this SIA:

- relationship and trust: it is important to invest time into building relationships prior to seeking knowledge and information from communities
- ongoing conversations: provide multiple opportunities for sharing information and keeping the community up to date
- flexible approach: demonstrate a willingness to adapt to the needs of communities
- finding common ground: speak to a range of community representatives and organisations to understand different perspectives
- accessibility: seek advice on location and when and how engagement meetings would be best conducted (DPIE, 2022).

The Practice Note has been considered to inform targeted SIA engagement with Traditional Owner representative groups, including Local Aboriginal Land Councils (LALCs).

2.2.4 *Undertaking Engagement Guidelines for State Significant Projects*

The *Undertaking Engagement Guidelines for State Significant Projects* (DPHI, 2024) set out the requirements for proponents relating to the effective engagement on State significant projects in NSW, including guidance on:

- planning their approach to engagement
- undertaking engagement to inform the development of the project and contribute to better planning outcomes
- reporting back and demonstrating how engagement has shaped the project being assessed.

The guideline has informed the approach to targeted SIA engagement with the community and relevant stakeholders.

2.3 Regional planning

2.3.1 Riverina Murray Regional Plan 2041

The *Riverina Murray Regional Plan 2041* (The Plan) provides the NSW Government vision for land uses in the Riverina Murray Region. The Plan's key outcomes capitalising on a changing regional economy and championing catalyst projects such as the South West REZ, which supports the transition to a net zero carbon emissions by 2050 target committed to by the NSW Government.

The Plan also recognises stronger than expected population growth, particularly along the Murray River, and the related housing pressures and the need to plan for climate-change implications. It also identifies the need for resilient and sustainable communities.

2.4 Local government planning policies and strategies

Appendix C3 provides the output of a review of Community Strategic Plans (CSP) published by councils hosting the project. These include the Murray River Council, Edward River Council, Murrumbidgee Council, and Wagga Wagga City Council. Also included are councils located within the project's regional social locality (Hay Shire Council, Berrigan Shire and Balranald Shire Council) (refer to section 3.3.1.3).

The following priorities were the key themes identified as prominent amongst the communities across all these councils and relevant to the project are:

- sustained and resilient agriculture sector
- resilience to natural hazards and climate change
- supporting renewable energy projects' development
- supporting connectivity, tourism, education and training, and employment growth.

3 Methodology

This section outlines the methodology used to identify, predict, and assess social impacts during the SIA’s development.

3.1 Overview

The methodology of this technical paper was prepared in accordance with the SIA Guideline and the Technical Supplement. This technical paper is informed by two main phases of work (refer to Figure 3.1). A Phase 1 SIA assessment (Phase 1 SIA) is documented in the *Social Screening Assessment Report* (WSP, 2024b), which forms part of the *Scoping Report* (WSP, 2024a) for the project.

This technical paper presents the Phase 2 SIA, which provides an assessment of the potential positive and negative social impacts associated with the project. It recommends mitigation and enhancement measures in response to each of the identified impacts.

This technical assessment addresses the SIA Guideline requirements in the following ways:

- predicts and analyses the extent and nature of social impacts against baseline conditions, engagement and technical report findings (refer to section 3.3.4 and Chapters 6 and 7)
- evaluates, draws attention to and prioritises the social impacts that are important to people by analysing and categorising engagement findings (refer to section 3.3.3 and Chapter 5)
- develops appropriate and justified responses (e.g. avoidance, mitigation and enhancement measures) to social impacts, and identifies and discusses residual social impacts (refer to section 3.3.6 and Chapter 8)
- proposes measures to monitor and manage residual social impacts, including unanticipated impacts, over the life of the project (refer to section 8.3).

On 10 September 2024, a meeting with DPHI took place to introduce the Phase 2 SIA methodology and receive feedback. The methodology has been updated to respond to DPHI feedback (refer to section 3.3.1.1).

Figure 3.1 provides an overview of the phased SIA methodology that has informed this technical paper.

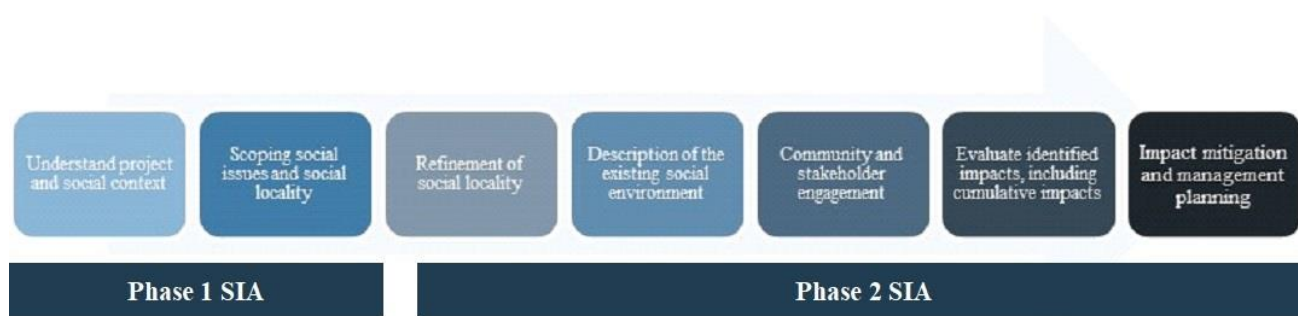


Figure 3.1 Overview of the SIA process

3.2 Phase 1 SIA

The Phase 1 SIA is documented in the *Social Screening Assessment Report* which was appended to the *Scoping Report* (WSP, 2024a) prepared for the project. The Phase 1 SIA involved the completion of the *SIA Scoping Worksheet* (DPHI, 2023b) and identified:

- the project's local and regional social locality
- potential social impacts (positive and negative) arising from the project
- the level of complexity and research methods needed to support the development of the Phase 2 SIA.

This was informed by a desktop review of:

- relevant literature, including regional planning policies and strategies relevant to the social locality
- five recent SIAs for energy transmission lines and renewable energy projects relevant to or in close proximity to the project, such as:
 - *Central West Orana Transmission project SIA* (WSP, 2023)
 - *EnergyConnect (NSW – Eastern section) project SIA* (WSP, 2022)
 - *Tchelery Wind Farm SIA Scoping Report* (WSP, 2022)
 - *Keri Keri Wind Farm Scoping Report* (Acciona, 2022)
 - *HumeLink Transmission SIA* (HillPDA Consulting & Aurecon, 2023)
- the *Victoria to New South Wales Interconnector West (VNI West) (NSW) Draft Route Report*, January 2024 (Draft Route Report) and community feedback received as part of the route selection process (at that point in time)
- the preliminary technical assessments completed as part of the project's *Scoping Report* (WSP, 2024a).

The Phase 1 SIA was also informed by community feedback provided at Transgrid community information session at Moulamein held on February 2024 as part of the engagement activities undertaken for the Route Selection Process.

3.3 Phase 2 SIA

The Phase 2 SIA (this technical paper) has been undertaken in accordance with the SIA Guideline and the SEARs issued for the project. This section describes the methodology applied to conduct the SIA.

Appendix E1 provides the SIA Guideline checklist which cross-references where all the SIA Guideline requirements have been addressed in this SIA.

The social locality for the SIA differs from the study area in *Technical paper 6 – Economic Impact Assessment* (Gillespie, 2025) due to different metrics, methods, and data inputs. The economic impact assessment study area aligns with the LGAs that the project traverses, as economic modelling requires the use of industry employment data which is only available at the LGA level. Further, the relevant SEAR for the economic assessment focuses on impacts within NSW, excluding Victoria, which the SIA does assess.

3.3.1 Social locality

The social locality for this SIA is composed of three levels:

- direct social locality
- local social locality
- regional social locality.

The social locality defined in the Phase 1 SIA was revised to reflect the refinements to the project and in response to stakeholder feedback, including DPHI. Revisions to the social locality since the Phase 1 SIA involved:

- inclusion of a direct social locality to assess the communities and groups of people that would be most impacted by the project. This new social locality was included in response to DPHI feedback
- removal of Big Springs, Lake Albert, and Rowan from the local social locality to reflect the refinements to the project footprint associated with network augmentation works between the existing Wagga 330 kV substation and future Gugaa 500 kV substation, Livingstone Gully Road. These localities continue to be considered as part of the regional social locality (Wagga Wagga LGA).

Section 3.3.1.1 to section 3.3.1.3 describes each social locality further. Appendix A shows the criteria used to define the social locality and Figure 3.2 shows the direct, local and regional social localities. Figure 3.2 and Figure 3.3 shows further detail of the direct and local social locality.

3.3.1.1 Direct social locality

The direct social locality comprises the communities and landholdings where high direct and indirect impacts from the project are expected to occur during construction and operation. This includes landholders directly affected by the project footprint, and neighbouring landholders within 2.5 kilometres of the project footprint. The local communities of Moulamein, Mallan, Wanganella, Wanganella, Conargo, Jerilderie and Gregadoo are also included in this area.

3.3.1.2 Local social locality

The local social locality is the area within 35 km of the project footprint that could experience medium direct and indirect impacts during the construction and/or operation of the project. The local social locality extends well beyond the project footprint and includes the ABS Suburbs and Localities (SALs) intersected by the project.

Table 3.1 lists the SAL groups within the local social locality in NSW and Victoria. SAL codes are provided in Appendix C1.

Table 3.1 Suburbs and localities (SAL) in NSW and Victoria

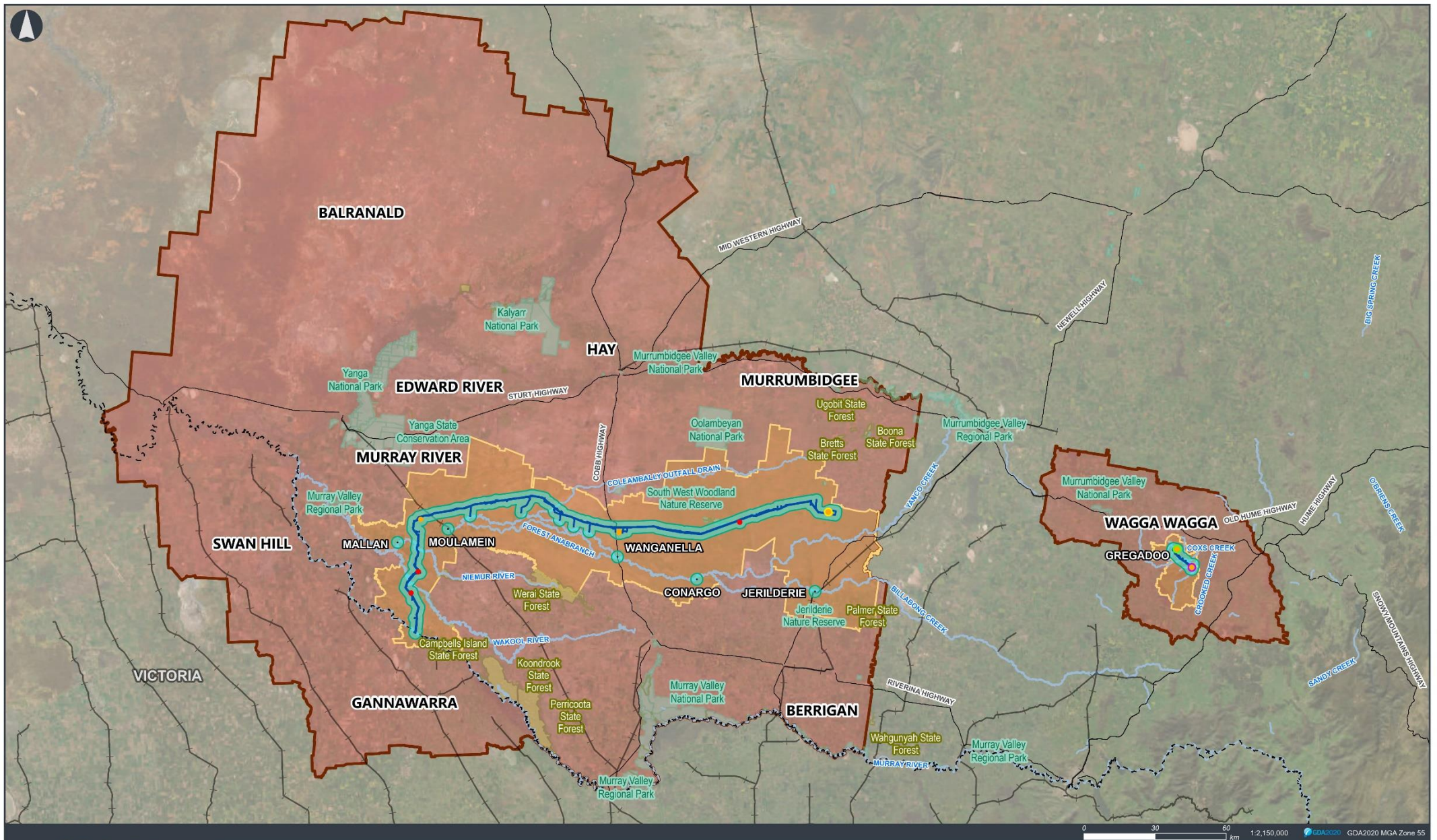
Suburbs and localities		
NSW		
— Argoon	— Gonn	— Moulamein
— Barratta	— Gregadoo	— Steam Plains
— Bundure	— Jerilderie	— Wanganella
— Cobramunga	— Mabins Well	— Wetuppa
— Conargo	— Mallan	— Willurah
— Cunninyeuk	— Mellool	
— Gala Vale	— Moonbria	
Victoria		
— Benjeroop	— Murrabit West	

3.3.1.3 Regional social locality

The regional social locality is the area expected to experience low indirect impacts during the construction of the project, in particular employment and supply chain opportunities. The regional social locality includes nine LGAs as outlined in Table 3.2. Employment and supply chain opportunities would be most relevant during construction, as this is when the most workers, goods, services and materials would be required. There would be significantly less demand on the local labour force and suppliers during operation for the project and relevant future projects considered. This is discussed in detail in Chapters 6 and 7.

Table 3.2 Local Government Areas (LGAs)

NSW	
— Murray River	— Berrigan
— Edward River	— Balranald
— Murrumbidgee	— Wagga Wagga
— Hay	
Victoria	
— Gannawarra	— Swan Hill



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Figure 3.2
Overview of the project and social
locality (direct, local and regional)

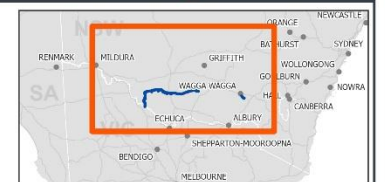
Legend

- Rail line
- Main road
- Named waterway

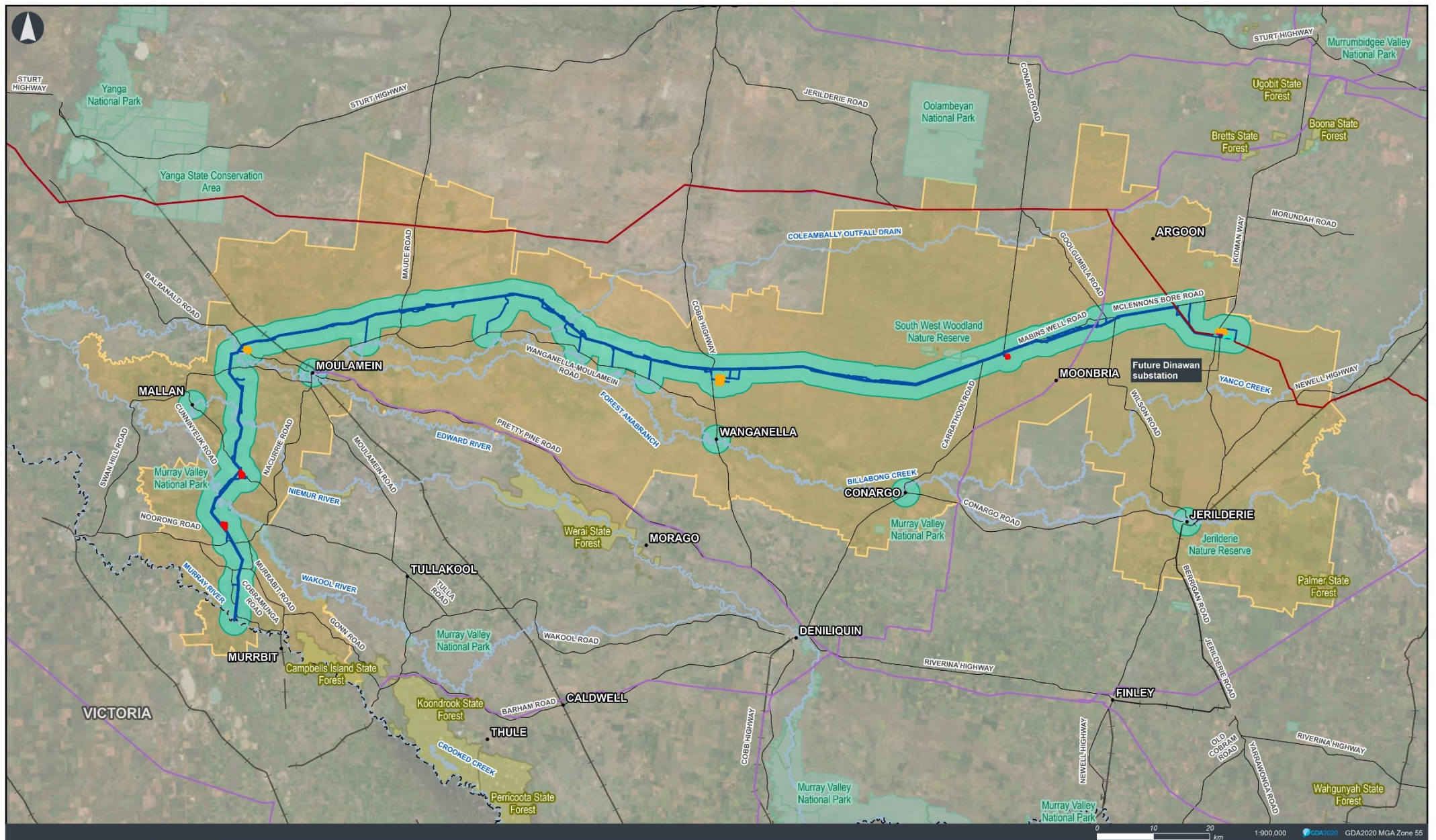
- Existing Wagga 330 kV substation
- Future Dinawaa 500 kV substation
- Future Gugaa 500 kV substation
- State forest
- National park

- Project footprint
- NSW/Victorian border
- Combined temporary worker accommodation facility
- Construction compound

- Direct social locality
- Local social locality
- Regional social locality



Data sources: NSW EPI, DELWP, WSP, EnergyConnect



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Social

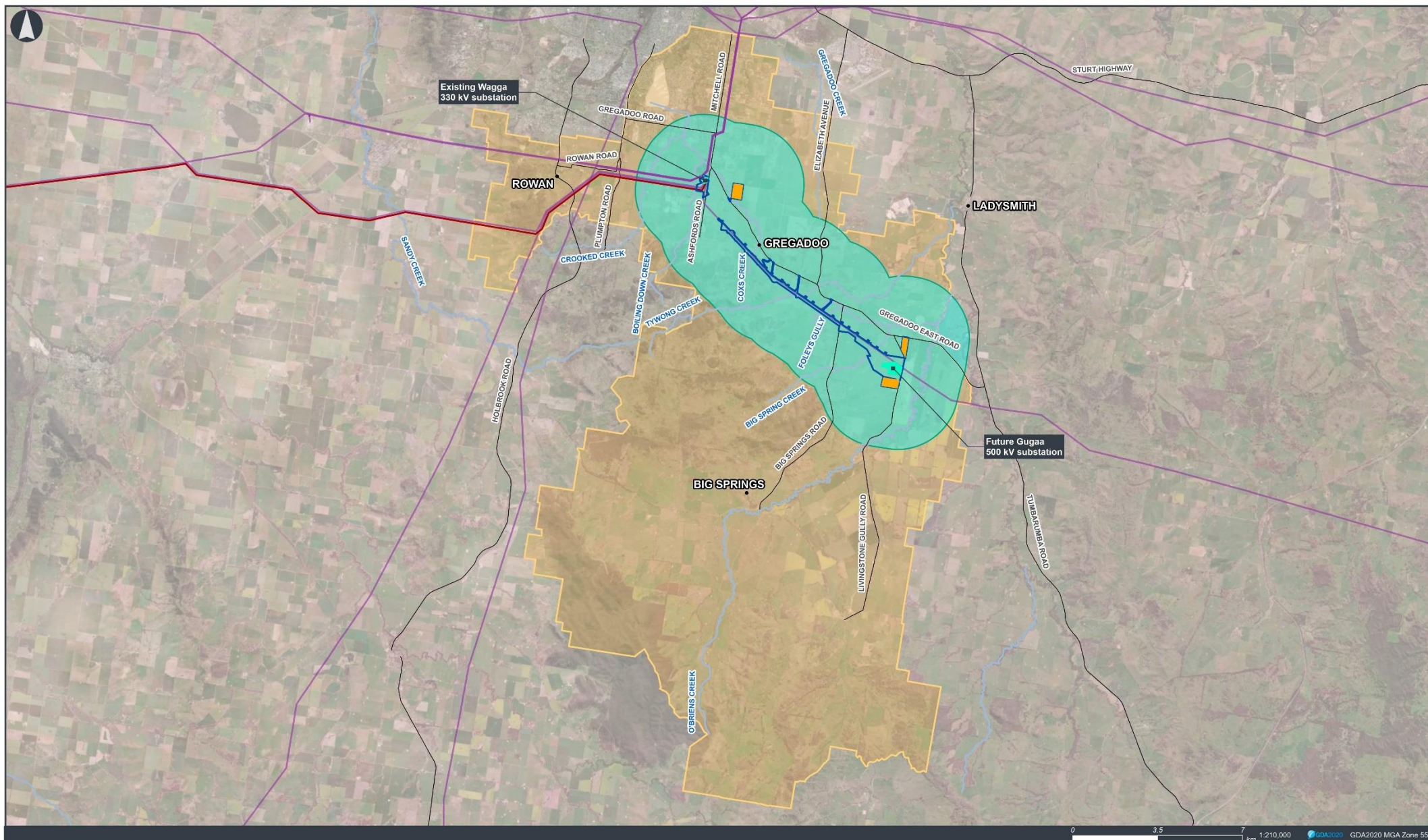
Figure 3.3

Overview of the NSW/Victorian border to the future Dinawan substation and social locality (direct and local)

Legend

- | | | | |
|--|--|--|--------------------------|
| — Rail line | — Existing transmission line | □ Project footprint | □ Local social locality |
| — Main road | — Dinawan substation works - proposed 500 kV | — NSW/Victorian border | □ Direct social locality |
| — Named waterway | — Dinawan substation works - existing 330 kV | ■ Combined temporary worker accommodation facility | |
| — EnergyConnect (NSW - Eastern section) project (under construction) | ■ National park | ■ Construction compound | |
| | ■ State forest | | |





wsp

VNI West – Technical Paper
Social

Figure 3.4

Overview of the network augmentation
works and social locality (direct and local)

Legend

— Main road
— Named waterway
— EnergyConnect (NSW -
Eastern section) project (under
construction)

— Existing transmission line
■ Substation

■ Project footprint
■ Combined temporary worker
accommodation facility

■ Local social locality
■ Direct social locality



3.3.2 Social baseline research

The description of the existing social environment was informed by desktop research and collection of primary data, including semi-structured interviews and field visits. Desktop research included Census data from the Australian Bureau of Statistics (2016, 2021), review of maps of Indigenous Australia (Australian Institute of Aboriginal and Torres Strait Islander Studies, 1996), Council strategic plans (Balranald 2022; Berrigan 2023; City of Wagga 2017; Edward 2022; Hay n.d.; Murray n.d.; Murrumbidgee n.d.; Wagga n.d.).

Public data sources from government agencies such as DPHI and the NSW Department of Climate Change, Energy, the Environment and Water is also included. Detailed references can be found in Chapter 9.

The description of the existing environment has been organised according to the eight impact categories of the SIA Guideline and the SIA Technical Supplement. The impact categories used for the development of this SIA are:

- community: provides a detailed description of the community composition and key townships within the local social locality
- way of life: describes community lifestyle, values and the land uses within the social locality
- livelihoods: described employment, industry, and income data, as well as an analysis of the socio-economic advantage and disadvantage indicators for the regional and the local social locality
- accessibility: includes newly released data related to housing and tenure, social infrastructure, education, health, medical and emergency services, and telecommunications
- health and wellbeing: provide an analysis of data related to pre-existing health conditions
- culture: describes both Aboriginal and non-Aboriginal culture
- surroundings: outlines community exposure to natural disasters, particularly flooding events
- decision-making systems: provides an analysis of community capacity and opportunities to participate and influence decisions that affect their life. This section is informed by the project Preferred Route Report (Transgrid, 2024c) which outlines the engagement activities that have informed the project.

3.3.3 SIA Stakeholder engagement

3.3.3.1 SIA engagement plan

A SIA engagement plan was developed to inform this SIA. The SIA engagement plan was developed with consideration of the broader engagement activities underway or planned for the project and/or those specifically required to inform other impact assessments in the EIS. This includes engagement activities to inform *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025) and *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a).

The plan was presented to DPHI for feedback on 10 September 2024. During the meeting, DPHI recommended that the SIA engagement plan clearly identified SIA engagement activities for both project components.

The SIA engagement plan identified the following stakeholder groups:

- landholders directly affected by the project footprint and neighbouring landholders
- local council representatives
- community members and organisations (including agricultural industry associations) of Moulamein, Wanganella, Jerilderie, Mallan, Conargo, Deniliquin, and Wagga Wagga
- Aboriginal and Torres Strait Islander peoples and Local Aboriginal Land Councils
- local businesses

- local services (including emergency services)
- institutional organisations or associations (such as chambers of commerce, industry associations).

3.3.3.2 SIA engagement implementation

Engagement methods included face-to-face and online meetings, establishment of an online and paper-based survey, and participation in focus groups and drop-in sessions.

Two field campaigns were undertaken to seek insights from landholders, community representatives, local councils, local business owners and services. A total of 58 key stakeholders and community members were engaged to inform the SIA between August 2024 and March 2025 (refer to Table 3.3 for detailed numbers per stakeholder group).

The first campaign took place in August 2024. During this field campaign the SIA team participated in four benefit sharing focus groups and a community information session, where the SIA study was introduced, and attendees were invited to participate in one-on-one interviews to inform the SIA. As a result, a total of 13 people were subsequently interviewed during this first field campaign.

The Transgrid's benefit sharing focus groups were conducted in the communities of Wanganella, Jerilderie, Moulamein and Mallan. Focus groups were attended by community members, landholders and representatives of local council. A total of 36 people participated: Wanganella (nine participants), Jerilderie (eight participants), Moulamein (nine participants) and Mallan (ten participants). Additionally, the community information session took place at Conargo Hall in Conargo (Edward River LGA) on that same week of August with the participation of the SIA team. A total of 14 people attended the meeting.

The second campaign was undertaken in November 2024, following the announcement of the preferred option for the transmission line corridor between the NSW/Victorian border to the future Dinawan substation in October 2024. The SIA study was introduced in the EIS community information sessions at Moulamein (nine participants), Mallan (four participants), Wanganella (four participants), Jerilderie (three participants), Deniliquin (two participants) and Wagga Wagga (no participants). Community information sessions were attended by landholders and community members. A total of 12 people were interviewed by the SIA team at those sessions.

A community survey was also made available to community members between October and December 2024 via Transgrid's website as well as paper-based forms. Copies of the survey were distributed at local libraries, business, and community centres. All landholders directly affected by the project footprint were invited to complete the survey. The survey was open between November 2024 and March 2025. A total of 23 responses to the survey were received from landholders, community members and local businesses relevant to the NSW/Victorian border to the future Dinawan substation component of the project.

Transgrid and the EIS team conducted community information sessions in February 2025 in Jerilderie (six participants), Conargo (two participants), Mallan (two participants), Moulamein (six participants), Wanganella (seven participants), and Wagga Wagga (six participants). During these sessions community members and landholders attending the event were provided with another opportunity to complete the SIA survey and to be interviewed for the SIA. As a result, two additional people were interviewed.

Landholder engagement for the purposes of the SIA occurred from November 2024 to March 2025. This engagement prioritised:

- landholders directly affected by the project footprint, including the largest proportion of the proposed transmission line and compounds
- dwellings/residences or businesses located up to one kilometre of the project footprint
- residences/dwellings that are identified as noise and/or traffic-sensitive receivers, which may potentially be impacted by construction and/or operation of the project
- dwellings/residences identified as being subject to potential visual impacts from the proposed transmission line.

Out of the 46 landholders directly affected by the project footprint in the NSW/Victorian border to the future Dinawan substation component, fourteen were contacted to be interviewed and seven agreed to be interviewed. For the network augmentation works, four landholders were contacted and three landholders agreed to be interviewed.

Table 3.3 SIA interviews per stakeholder group

Stakeholder group	In-person interviews (first field campaign)	In-person interviews (second field campaign)	In-person interview March 2025	Phone and online interviews	Survey	Total
Local council representatives	–	–	–	3	–	3
Landholders directly affected by the project footprint	2	2	1	5	2	12
Neighbouring landholders within 2.5 km of the project	–	5	–	–	5	10
Community members and representatives of community organisations	9	3	1	–	12	25
Aboriginal and Torres Strait Islander people	1	–	–	–	–	1
Local businesses	–	2	–	–	4	6
Public services (e.g. emergency services, health services)	1	–	–	–	–	1
Total	13	12	2	8	23	58

3.3.4 Evaluation of identified social impacts

Social impacts identified in the Phase 1 SIA were further refined based on the results of other investigations completed as part of the EIS and feedback received during SIA engagement.

The assessment determined the significance of each social impact based on their likelihood (Table 3.4) and magnitude (Table 3.5) in accordance with the SIA Technical Supplement (Table 3.6).

This SIA acknowledges that social impacts may affect people differently, depending on the nature of the impact, each individual's circumstances, and their proximity to the project (referred to as the distributive equity principle in the SIA Guidelines).

Table 3.4 Defining likelihood levels of social impacts

Likelihood level	Definition
Almost certain	Definite or almost definitely expected (e.g. has happened on similar projects)
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Source: Technical Supplement to SIA Guideline (DPIE, 2023b)

Table 3.5 Defining magnitude levels for social impacts

Magnitude criteria	
Transformational	Substantial change experienced in community wellbeing, livelihood, amenity, infrastructure, services, health, and/or heritage values; permanent displacement or additional of at least 20 per cent of a community.
Major	Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time, or affecting many people in a widespread area.
Moderate	Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people.
Minor	Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable.
Minimal	Little noticeable change experienced by people in the locality.

Source: Technical Supplement to SIA Guideline (DPIE, 2023b)

Table 3.6 Social impact significance matrix

Magnitude		1 Minimal	2 Minor	3 Moderate	4 Major	5 Transformational
Likelihood level	A Almost certain	Low	Medium	High	Very high	Very high
	B Likely	Low	Medium	High	High	Very high
	C Possible	Low	Medium	Medium	High	High
	D Unlikely	Low	Low	Medium	Medium	High
	E Very unlikely	Low	Low	Low	Medium	Medium

Source: Technical Supplement to SIA Guideline (DPIE, 2023b)

3.3.5 Cumulative impact assessment

Cumulative impacts are defined by the *SIA Technical Supplement* (2023b) as impacts that occur as a result of the project in combination with other relevant future projects (referred to as relevant future projects in this technical paper).

The assessment addresses the requirements of the *Cumulative Impact Assessment Guidelines for State Significant Projects* (NSW Department of Planning, Industry and Environment (DPIE), 2022). These guidelines define cumulative impacts as those arising as a result of incremental, sustained and combined effects of human action and natural variations over time that can be both positive and negative. These impacts can be caused by the compounding effects of a single project or multiple projects in an area, and by the accumulation of effects from past, current and future activities as they arise.

A standard, qualitative assessment was completed to assess cumulative social impacts. The methodology included:

- identifying relevant future projects that were considered as having the potential to result in cumulative impacts with the project within the local social locality; a total of 26 relevant future projects were identified with potential for cumulative impacts (refer to Appendix F)
- identifying which of these relevant future projects would overlap during the construction and operation phases of the project and their proximity to the project
- considering the social impact of the 26 relevant future projects within the social locality through a review of 13 available SIA reports (including scoping SIAs)
- considering the consultation findings in relation to cumulative impacts.

Further detail on cumulative impact assessment approach and the relevant future projects considered in the cumulative impact assessment is provided in EIS Chapter 24 (Cumulative impacts).

3.3.6 *Mitigation measures, management measures and influencing project design*

The process for identifying recommended mitigation and management measures included:

- considering community and stakeholders' suggestions to address concerns and maximise benefits
- reviewing the mitigation and management measures provided in SIAs for projects of a similar nature
- reviewing preliminary mitigation and management measures to determine the feasibility of implementation
- reviewing the mitigation and management measures provided by other technical specialists informing the EIS.

Recommended mitigation and enhancement strategies have been informed by the SIA Guideline. The approach to mitigation sought to avoid and/or minimise potential negative impacts by amending the project design. Where this was not possible or reasonably practicable, measures to mitigate potential negative impacts were developed.

A residual impact rating has been applied to identify the social impact's significance after the proposed mitigation measure or enhancement measure has been implemented.

3.3.7 *Monitoring and evaluation*

A preliminary plan for monitoring and adaptively managing social impacts is proposed in line with the NSW SIA Guideline. A process to release monitoring results and associated information for periodic audit of monitoring activities and for reviewing the plan itself is also proposed.

Monitoring and adaptive management includes mechanisms for the community to collaborate wherever possible and to easily access monitoring information.

3.4 SIA team and lead author

This report has been developed by an experienced team of social scientists: Carla Martinez (lead author), Maite Reyes and Kim-Cherie Davidson. The qualifications of this team are presented in Appendix B.

3.5 Limitations

Table 3.7 identifies the limitations of this technical paper and measures that were applied to address these limitations.

Table 3.7 Limitations of the SIA and measures to address them

Limitation	Measures applied to address limitations
No ABS statistical boundaries match the direct social locality; therefore, no demographic data is presented in the social baseline for the direct social locality.	— Used the SAL ABS statistical boundary for the local social locality, which overlaps with the direct social locality. — Undertook targeted primary source research with key stakeholders and community members residing within the direct social locality during SIA engagement.
Limited participation of landholders in one-on-one interviews. Landholder engagement was scheduled for November 2024, given that during October 2024, landholders were provided with confirmation letters of the transmission line corridor for the project between the NSW/Victorian border to the future Dinawan substation component.	— SIA team extended engagement period to March 2025, conducting interviews by phone or online meetings with directly affected landholders. — Used of complementary engagement methods, including an online survey that was active and promoted to all landholders from 24 September to 12 December 2024. — Integrated the findings from Transgrid landholder engagement activities to inform the SIA.
Limited engagement with Aboriginal and Torres Strait Islander peoples. At the time of writing this report, only one interview with an Aboriginal person had been possible as part of the SIA engagement.	— Integrated engagement findings from <i>Technical Paper 2 – Aboriginal Cultural Heritage Assessment Report</i> (Navin Officer, 2025a), which engaged seven different organisations of Traditional Owners and LALCs. — Integrated engagement findings from the <i>Technical paper 2a – Cultural Values Assessment</i> (EMM, 2025), where eight Aboriginal individuals and organisations were involved, to inform SIA.
Limited employment ABS data for the local social locality, due to very low population or lack of residents during the 2021 ABS Census. Employment data in the existing environment section (refer to section 4.1.3.1) is only available for Jerilderie, Moulamein and Conargo as they are the most populated localities within the local social locality.	Employed data at the LGA level has been sourced to address this limitation, and targeted questions about employment were directed during engagement.
Limited detailed SIA reports to inform cumulative impact assessment. Out of the 26 relevant future projects identified for cumulative impact assessment, twelve of these projects are currently in the pre-EIS stage, including the VNI West (Victoria), Wilan Wind Farm, Tchelery Wind Farm, Pottinger Solar Farm, Romani Solar Farm, West Nyangay Solar Farm, Argoon Wind Farm, Belhaven Battery Energy Storage System (BESS), Abercrombie Wind Farm, Wanganella Wind Farm, Livingstone Solar Farm and the Mangoplah Battery Energy Storage System (BESS). As such, only preliminary information on social impacts of these projects is available.	— Reviewed the scoping reports for each of these projects to provide insight into preliminary social impacts identified, developing a high-level assessment. — <i>Cumulative Impact Assessment Guidelines for State Significant Projects</i> (DPIE, 2022b) acknowledges possible challenges in obtaining information and data from other projects.

3.6 Assumptions

The following assumptions concerning accommodation for construction workers have been made in the analysis to inform the SIA:

- during the construction of temporary worker accommodation facilities up to 30–40 workers would be accommodated locally, for a period of up to six months and most likely to be accommodated in larger centres such as Wagga Wagga, Deniliquin and Balranald
- a limited number of construction workers, such as project managers and technical specialists, may occasionally choose to reside off-site in short-stay accommodation such as hotels and motels (if available) during the peak construction period and most likely to be accommodated at Wagga Wagga, Deniliquin and Balranald
- the potential use of local rental properties in the local social locality during construction would be temporary and limited
- the relocation of workers and their families to the local social locality during construction and operation would be limited.

4 Existing environment

This chapter provides an overview of the socio-economic characteristics of the local and regional social localities. Given the project is split across two main components, the description of the existing environment has been organised as follows:

- NSW/Victorian border to the future Dinawan substation, which includes NSW's Murray River, Edward River, Murrumbidgee, Hay, Berrigan and Balranald LGAs. It also includes Swan Hill and Gannawarra LGAs.
- Network augmentation between the existing Wagga 330 kV substation and future Gugaa 500 kV substation, Livingstone Gully Road (referred to as network augmentation works), which is within the Wagga Wagga LGA, and the Gregadoo SAL.

4.1 NSW/Victorian border to the future Dinawan substation social locality

This section provides an overview of social and economic characteristics of the local and regional communities within the NSW/Victorian border to the future Dinawan substation component. Given that there are no ABS statistical boundaries that match the direct social locality no statistical data is presented in the social baseline for the direct social locality.

4.1.1 Community

This section provides an overview of the local and regional community regarding population, age groups and Aboriginal population.

4.1.1.1 Population

The regional social locality has a total population of 70,500 with 18,231 families across 26,814 occupied private dwellings (ABS, Census 2021). The regional social locality population resides in regional centres and rural localities, which range in population size from large regional centres like Swan Hill with 10,869 people (Swan Hill LGA, Victoria) and Deniliquin with 6,431 people (Edward River LGA, NSW). Table 4.1 shows the population in the major regional centres.

The regional population has grown 0.6 per cent from 2011 to 2021. Among the eight LGAs included in this component of the project, four have experienced an overall decrease in population from 2011 to 2021 (refer to Figure C.1 in Appendix C). However, Murray River has experienced the largest population increase, with an overall growth of 13.6 per cent.

Table 4.1 Major population centres population and dwellings in the social locality (ABS, 2021)

	Swan Hill	Balranald	Deniliquin	Hay	Berrigan
Population	10,869	1,063	6,431	2,208	957
Occupied private dwellings	4,246	411	2,646	899	407

Source: *Urban Centres and Localities*, ABS, 2021.

The local social locality within NSW/Victorian border to the future Dinawan substation component is characterised by a generally rural nature. The local social locality comprises of a population of 1,961 people, 484 families, and 728 occupied private dwellings, as reported in the 2021 ABS Census.

Conargo (Edward River LGA, NSW), Jerilderie (Murrumbidgee LGA, NSW), and Moulamein SALs have the highest populations (refer to Table 4.2), while Cobramunga (Murray River LGA, NSW), Gonn (Gannawarra LGA, NSW), Mallan (Murray River LGA NSW), Mellool (Murray River LGA, NSW) and Wanganella (Edward River LGA, NSW) SALs have between 41 to 61 people. The SALs with the lowest population are Argoon (Murrumbidgee LGA, NSW), Barratta (Edward River LGA, NSW), Bundure (Murrumbidgee LGA, NSW), Gala Vale (Murrumbidgee LGA, NSW), Mabins Well (Murrumbidgee LGA, NSW), Moonbria (Edward River LGA, NSW) and Wetuppa (Murray River LGA, NSW), ranging from eight to 24 people (refer to Appendix C for further information).

Table 4.2 Most populated SALs in the local social locality (ABS, 2021)

	Conargo	Jerilderie	Moulamein
Population	117	922	489

4.1.1.2 Age

The regional social locality has a slightly higher proportion of residents aged 50 and over, indicating an older population. Both the regional and local social localities have older median ages: 46.63 years and 42.35 years, respectively, compared to the median ages in NSW and Victoria, which are 39 years and 38 years, respectively (refer to Figure C.2 in Appendix C2). This data might suggest consistent demand for healthcare in the local and regional social localities, including facilities for aged care, hospitals, general practitioners, and specialists.

The local social locality has a slightly higher proportion of children aged 5 to 11 (8.45 per cent) when compared to the same age bracket in the regional social locality (7.98 per cent). Notably, the local social locality has a significant lower proportion of adults aged 35 to 49 when compared to the regional social locality (15.63 per cent).

When comparing the local and regional social locality, the following observations emerge:

- The local social locality has a lower proportion of children aged 0 to 4 years (1.17 per cent) and 12 to 17 years (2.77 per cent).
- Young people aged 18 to 24 (1.68 per cent) and 25 to 34 (1.65 per cent) are very scarce in the local social locality.
- The regional social locality also has a slightly lower proportion of young adults aged between 18 to 24 and 25 to 34 (6.34 per cent and 10.7 per cent, respectively).
- The regional social locality has a higher proportion of residents aged 60 to 69 (15.29 per cent), 70 to 84 (14.67 per cent), and 85 and over (3.11 per cent).

4.1.1.3 Aboriginal population

In the regional social locality, there is a relatively high proportion of Aboriginal and Torres Strait Islander peoples (five per cent) compared to NSW (3.4 per cent) and Victoria (one per cent). Meanwhile, the local social locality has a 1.49 per cent representation of Aboriginal and Torres Strait Islander peoples, which is higher than Victoria but lower than NSW.

Table 4.3 details the Aboriginal and Torres Strait Islander populations across the LGAs in the regional social locality. In NSW, the Murray River and Edward River LGAs have the highest populations of Aboriginal and Torres Strait Islander peoples. However, Swan Hill LGA in Victoria stands out with the highest population overall.

Table 4.3 Aboriginal and Torres Strait Islander population in the regional social locality

Locality	NSW LGAs						Victoria LGAs	
	Berrigan	Balranald	Edward River	Hay	Murray River	Murrumbidgee	Gannawarra	Swan Hill
Population	263	141	410	238	492	290	268	967
Percentage	3%	6.4%	4.8%	8.3%	3.8%	8.6%	2.5%	4.5%

4.1.2 Way of life

This section offers an overview of the community's way of life within the project's local social locality, encompassing core community values and how they work which is reflected in land use.

4.1.2.1 Community values

The following community values were highlighted during SIA engagement:

- Community members and landholders identified agricultural activities as an important part of the community's culture and identity. Most people working on farms have a deep connection to the land they farm, choosing farming for both lifestyle and business reasons. Reasons for this lifestyle include having room for their children to play, proximity to the river, being part of a small, close-knit community, and participating in community groups such as sporting clubs and fire brigades.
- Community members value a countryside lifestyle, which involves everyday connection with nature and the landscape. Large open spaces are identified as one of the key features of the landscape. Communities value the peace and quiet, appreciating the space and tranquillity of their surroundings.
- Community members identified the Edward River as a focal point for various recreational activities such as fishing, boating, and birdwatching.
- Community members emphasised that living in small communities where there is strong reliance on and engagement with one another is a central part of their lifestyle.

From the councils' CSPs, the regional social locality's core values are identified as the natural environment, being a close-knit community and having pride in their health and infrastructure services. Refer to Table 4.4 for a detailed description for each Council.

Table 4.4 Community values per Council

Council	Community values
Murray River	The CSP 2022–2032 identifies as community values, the natural environment, their ability to enjoy the great outdoors, regional economic growth including tourism, community infrastructure and access to medical, health and wellbeing programs.
Edward River	The Council's CSP 2022–2050 presents as core values, a community that works together for changing their future, a prosperous and vibrant economy, a valued and enhanced natural environment, and a region with quality and sustainable infrastructure.
Murrumbidgee	The CSP 2022–2032 outlines key themes for the future: thriving community identity, sustainable living in a natural environment, well-planned infrastructure, a thriving economy, and proactive civic leadership.
Hay Shire	In the CSP 2022–2032, the community described as valuable, the unique environment of Hay and the need to ensure long-term sustainability. It also mentioned water security, suitable housing, skilled labour force, and well-maintained community infrastructure as important areas for the community.
Berrigan Shire	The CSP 2032 is very much focused on the countryside lifestyle and agriculture, the Murray River and tourism. It envisions a harmonious blend of community well-being, sustainable practices, and economic growth.
Balranald Shire	The CSP 2032 describes its people valuing the strong sense of community, the availability of facilities for older generations, family-friendly environment, quality healthcare services, natural beauty, and the willingness of residents to volunteer for various causes.

Council	Community values
Gannawarra Shire Council	The CSP 2021–2025 identified what is most valued in the community including the natural environment, the community and the lifestyle provided by living in Gannawarra.
Swan Hill Rural City Council	The CSP Plan 2021–2025 describes the community as friendly, caring and inclusive, providing great sporting events and attractions with a variety of opportunities for the promotion of local tourism and cultural events.

4.1.2.2 Land use

The way people work in the local social locality is largely reflected by the land use. The local social locality features a large proportion of grazing native vegetation land and a mix of land uses between Moulamein and Cobramunga, including cropping, grazing on irrigated modified pastures, seasonal horticulture, and irrigated cropping (NSW Land Use, 2017).

Between the NSW/Victorian border and Moulamein, there is a high proportion of cropping, irrigated cropping and grazing of both modified pastures and native vegetation. During SIA engagement, the use of aerial irrigation was highlighted as important component of the way landholders and farmers work, with many properties having their own airstrip. From Moulamein to Carrathool Road, land uses are dominated by grazing of native vegetation with little other agricultural uses evident. From Carrathool Road to the future Dinawan substation land is mainly used for grazing of native vegetation with some irrigated cropping and grazing of modified pastures.

There are several travelling stock reserves (TSRs) within the local social locality, some of them would be traversed by the project. The project would intersect a number of linear Category 2 TSRs in Bullock Hide (Noorong Road, near Mellool), 8 Mile Balranald Rd (Balranald Road near Moulamein), Raubelle Tank (Maude Road), Wanganella-Halfway (Cobb Highway) and Moonbria-Steam Plains (Carrathool Road). Category 2 TSRs are defined as those used for travelling stock, emergency management or biosecurity purposes. They are also important for other reasons and uses such as biodiversity conservation, Aboriginal cultural heritage and/or recreational purposes (NSW Department of Industry, 2018).

Carrathool Road, Cobb Highway, Maude Road and Balranald Road are also designated 'livestock highways'. The NSW Department of Industry defined 'livestock highways' as a key network of livestock routes connecting key agricultural regions within NSW, and with Queensland and Victoria (Department of Industry, 2017).

The project may also intersect with two category 3 TSRs, namely Caroonboon, and Widrington (both located south of Wanganella-Moulamein Road). A category 3 TSR is described as 'rarely, if ever used for travelling stock or emergency management, but is important, valued and used for other reasons such as biodiversity conservation, Aboriginal and Torres Strait Islander communities' heritage or recreation' (LLS 2022) (*Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)).

Shearing was also identified during SIA consultation as a key characteristic of the way people work in the local social locality. During specific times of the year, there is an influx of workers to farms and local communities who specialise in conducting shearing across local farms.

The regional social locality hosts several parks and forests, including the Southwest Woodland Nature Reserve (near the project's eastern end) and the Murray Valley National Park (Wetuppa Forest) (near the project's western end). Other nearby reserves within the regional social locality include the Niemur State Forest (approximately five kilometres to the east) and Werai State Forest (approximately four kilometres to the south).

4.1.3 Livelihoods

Livelihoods encompass local and regional economies, as well as the individuals who depend on them. The SIA Guideline defines livelihoods to include ‘people’s capacity to sustain themselves through employment or business’ (DPHI, 2023). This section provides an overview of employment, income, socio-economic advantage and disadvantage and key industries within the local and regional social localities.

4.1.3.1 Employment

The ABS classifies individuals as ‘employed’ if they work one hour or more during the ‘reference week’ which is the specific week during which data was collected. Those ‘not in the labour force’ are defined by the ABS as ‘persons aged 15 years and over, who are neither employed nor unemployed (without work, actively looking for work or available to start work)’.

In the regional social locality, 55.2 per cent of the population is part of the labour force. This percentage is slightly lower than NSW at 58.7 per cent and significantly lower than Victoria at 62.4 per cent. Furthermore, 41.2 per cent of the population is not in the labour force. This percentage is higher than both NSW (35.5 per cent) and Victoria (32.2 per cent).

Among the population in the labour force in the regional social locality, 58.9 per cent worked full-time and 31.1 per cent worked part-time. These figures are higher than those in NSW, where 55.2 per cent worked full-time and 29.7 per cent worked part-time. Compared to Victoria, the full-time employment rate is slightly higher (56.2 per cent), but the part-time employment rate is lower (32.2 per cent). In addition, the LGAs with the highest unemployment rates in the regional social locality are Hay (four per cent) and Edward River (3.6 per cent) (refer to Table 4.5).

Table 4.5 Regional social locality employment by LGAs (ABS, 2021)

LGA	Employed (full time, part time and away from work)	Unemployed	Not in the labour force
Murray River	5,654 (97%)	181 (3.1%)	3,970 (37.2%)
Edward River	3,782 (96.5%)	140 (3.6%)	2,382 (34.2%)
Murrumbidgee	1,648 (97.1%)	49 (2.9%)	805 (28.9%)
Hay	1,284 (96%)	54 (4%)	778 (32.2%)
Berrigan	3,457 (97%)	111 (3.1%)	2,940 (40.1%)
Balranald	968 (96.7%)	31 (3.1%)	496 (27.9%)
Swan Hill	9,862 (96.5%)	357 (3.5)	5,606 (32.2%)
Gannawarra	4,390 (96.4%)	163 (3.4)	3,715 (41.2%)

Note: Employment data excludes residents younger than 15, and those who did not state their employment status or participation in the labour force.

Regarding the local social locality, Jerilderie and Moulamein SALs exhibit high employment levels and low unemployment percentages. Conargo SAL presents a 93.4 per cent of people employed, which is slightly lower than the other localities mentioned and the regional social locality. Notably, the proportion of the population not in the labour force is 32.6 per cent for Moulamein SAL and 22.5 per cent for Conargo SAL, which is lower than the broader regional social locality of 34.24 per cent and aligns with the NSW figure of 35.5 per cent. During SIA engagement, community members identified the aged care centre (around 28 employees) and the Balpool Station Piggery (around 30 employees) in Moulamein as the largest employers in the township (refer to Table 4.6).

Table 4.6 Comparison of key local social localities with regional social locality employment data (ABS, 2021)

SAL	Employed (full time, part time and away from work)	Unemployed	Not in the labour force
Jerilderie	383 (98%)	14 (3.6%)	271 (35.7%)
Moulamein	193 (99.6%)	4 (2.1%)	130 (32.6%)
Conargo	56 (93.4%)	0 (0%)	20 (22.5%)
Regional social locality	64,327 (96.7%)	1,086 (3.4%)	20,692 (34.24%)

Note: Employment data excludes residents younger than 15, and those who did not state their employment status or participation in the labour force.

4.1.3.2 Income

In the regional social locality, the median weekly household income varies from \$1,071 in Gannawarra LGA to \$1,401 in Murrumbidgee LGA (ABS, 2021). This income range is lower than the median weekly household income in NSW (\$1,829) and Victoria (\$1,759).

Within the local social locality, household incomes exhibit significant variation. The top three SALs with high median weekly household incomes are Argoon (\$2,750), Bundure (\$2,624), and Gala Vale (\$2,374). However, it is important to note that these SALs have fewer than 20 inhabitants each. Conversely, the three SALs with the lowest median weekly household incomes are Jerilderie (\$1,166), Moulamein (\$1,116), and Cobramunga (\$974). Notably, Moulamein and Jerilderie are the most populated SALs within the local social locality (refer to Table 4.7).

Table 4.7 Top three SALs with highest and lowest median weekly household income (ABS, 2021)

SAL with highest income		SAL with lowest income	
Argoon	\$2,750	Jerilderie	\$1,166
Bundure	\$2,624	Moulamein	\$1,116
Gala Vale	\$2,374	Cobramunga	\$974

4.1.3.3 Socio-economic advantage and disadvantage

The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) provides insights into the economic and social conditions of residents and households within an area. It combines both relative advantage and disadvantage measures. A low IRSAD score (where one is the lowest and five the highest) indicates greater disadvantage, while a high score reflects greater advantage and lower levels of disadvantage (ABS, 2023). A low IRSAD score means that there are many households with low incomes, or many people in unskilled occupations (ABS, 2023).

According to IRSAD scores, the regional social locality exhibits a higher level of socio-economic disadvantage. Most LGAs fall within the second and third quintiles, except for Murray River LGA, which falls into the fourth quintile (refer to Table 4.8).

Table 4.8 Regional social locality IRSAD scores by LGAs (ABS, 2021)

LGA	Quintiles	Scores
Gannawarra	2	919
Hay	2	926
Berrigan	2	927
Swan Hill	2	927
Balranald	2	934
Edward River	2	939
Murrumbidgee	3	951
Murray River	4	965

At the local social locality, socio-economic disadvantage appears to be concentrated in Moulamein (first quintile) and Jerilderie (second quintile) in NSW, and in Benjeroop and Murrabit West on the Victoria side (refer to Table 4.9). Bundure, Gala Vale and Argoon exhibit the highest levels of socio-economic advantage.

Table 4.9 Most and least socio-economically disadvantaged SALs in the local social locality (ABS, 2021)

SAL with lowest IRSAD scores (lowest quintiles)			SAL with the highest IRSAD scores (highest quintiles)		
SAL	Quintile	Score	SAL	Quintile	Score
Moulamein	1	904	Bundure	5	1095
Benjeroop	1	913	Gala Vale	5	1095
Murrabit West	1	913	Argoon	5	1070
Jerilderie	2	933			

4.1.3.4 Local business, industry and economy

The local and regional social locality's economy is undergoing unprecedented growth from renewable energy investments, including the development of the South West REZ, which will enable the development of large-scale wind farm and solar farm developments.

However, the main source of employment for both the regional and local social locality remains as agriculture, forestry, and fishing. These industries account for 23.6 per cent and 40.8 per cent of employment, respectively.

In the most populated SALs within the local social locality, Jerilderie, Moulamein, and Conargo primarily engage in agriculture, forestry, and fishing, with respective percentages of 30.37 per cent, 31.58 per cent, and 55.56 per cent. As their second largest industry, Jerilderie SAL has retail trade (11.78 per cent), while Moulamein and Conargo SALs have public administration and safety (11.58 per cent and 20.63 per cent, respectively). (refer to Table 4.10).

Other primary industry sectors are supported by the rural character and natural resources in the regional social locality; these include forestry, manufacturing, and mining (DPHI, 2023).

Table 4.10 Key industries of employment within local social locality, detail on Jerilderie, Moulamein and Conargo (ABS, 2021)

SAL	Agriculture, forestry and fishing	Public administration and safety	Health care and social assistance	Retail trade
Jerilderie	30.37%	10.99%	–	11.78%
Moulamein	31.58%	11.58%	11.05%	–
Conargo	55.56%	20.63%	–	–

Agriculture

The regional social locality of the project is characterised by agricultural diversity that includes:

- cropping, beef, pigs, poultry, and dairy, primarily through irrigated agriculture near the Murray River (within Berrigan and Edward River, Murray River LGAs)
- cotton, rice and horticulture (citrus, grapes and nuts) in the Western Riverina plains (within the Murrumbidgee LGA).

These sectors illustrate an historical investment and reliance on water, particularly in Berrigan, Edward River, Hay, Murray River, and Murrumbidgee LGAs. For example, in Berrigan LGA, irrigation infrastructure services more than 75 per cent of the area (DPHI, 2023).

As mentioned earlier within this section, the primary industry of employment in the local social locality is agriculture, forestry, and fishing. Specifically, Jerilderie and Conargo SALs have the highest percentages of employment in grain-sheep or grain-beef cattle farming, at 12.6 per cent and 15.9 per cent respectively. Moulamein SAL has 12.6 per cent employment in sheep farming. This data highlights the diversity of activities within agriculture, forestry and fishing (refer to Table 4.11).

During SIA engagement, the NSW and Wakool branch of the Rice Growers Association of Australia was identified as a key organisation for the agricultural industry in the area. The Wakool branch has 192 members and is actively involved in water policy. Approximately 75 per cent of rice growers in Wakool are members.

Table 4.11 Top industry of employment in Jerilderie, Moulamein and Conargo SALs (ABS, 2021)

Industry of employment	Jerilderie	Moulamein	Conargo
Grain-sheep or grain-beef cattle farming	6.5%	9.5%	15.9%
Other grain growing	5.8%	–	–
Sheep farming (specialised)	3.4%	12.6%	14.3%
Pig farming	–	5.3%	–
Beef Cattle Feedlots (specialised)	–	–	7.9%

Relevant future projects

The South West REZ is expected to receive up to \$2.8 billion in private investment by 2030, and at its peak it is expected to support over 2,000 construction jobs in the region (EnergyCo NSW, n.d.).

Nineteen relevant future projects (refer to Figure 4.1) have been identified in proximity to this component of the project. Most of these projects are related to renewable energy generation and transmission infrastructure. The only non-energy project is the Billabong Creek Regulators project which would replace two existing weirs along Billabong Creek with two new environmental water regulators.

Sixteen projects are anticipated to have some overlap in construction timeframes with the project, while two have unknown project construction timeframes. These sixteen projects may result in a cumulative number of workers of more than 5,000 employees between the third quarter of 2025 and the second quarter of 2030 during construction (refer to Appendix F). However, only seven of these sixteen projects would overlap throughout the whole of the project construction period: VNI West (Victoria), Baldon Wind Farm, Junction Rivers Wind Farm, Keri Keri Wind Farm, Pottinger Wind Farm, Bullawah Wind Farm and Dinawan Wind Farm, resulting in a potential combined number of workers of more than 2,000 employees between the third quarter of 2026 and the first quarter of 2029.

The projects with no overlap during construction are the West Nyangay Solar Farm and Argoon Wind Farm. However, they have been considered as potential cumulative impacts regarding operational activities for the assessment.

Out of the nineteen projects, two projects are proposing to accommodate their workers locally, fourteen would have temporary worker accommodation facilities, and three have not declared their worker accommodation strategy (refer to Appendix F). The projects that would house their workers locally are Yanco Delta Wind Farm (300 workers), and the Billabong Creek Regulators project (26 workers). It is unknown how the VNI West (Victoria), West Nyangay Solar Farm and Argoon Wind Farm would accommodate their workers.

The operational workers of all nineteen relevant future projects are estimated to exceed 245 employees (refer to Appendix F).

A recent study by the Institute for Sustainable Futures at the University of Technology Sydney identified skill and housing shortages as the two primary barriers to the industry's development in the South West REZ. According to the study, technology is the highest projected employment demand in the South West REZ for Utility Solar and Utility Batteries. For these technologies, the top three occupations are construction labourers, electricians, and mechanical trades (Briggs et al. 2022).

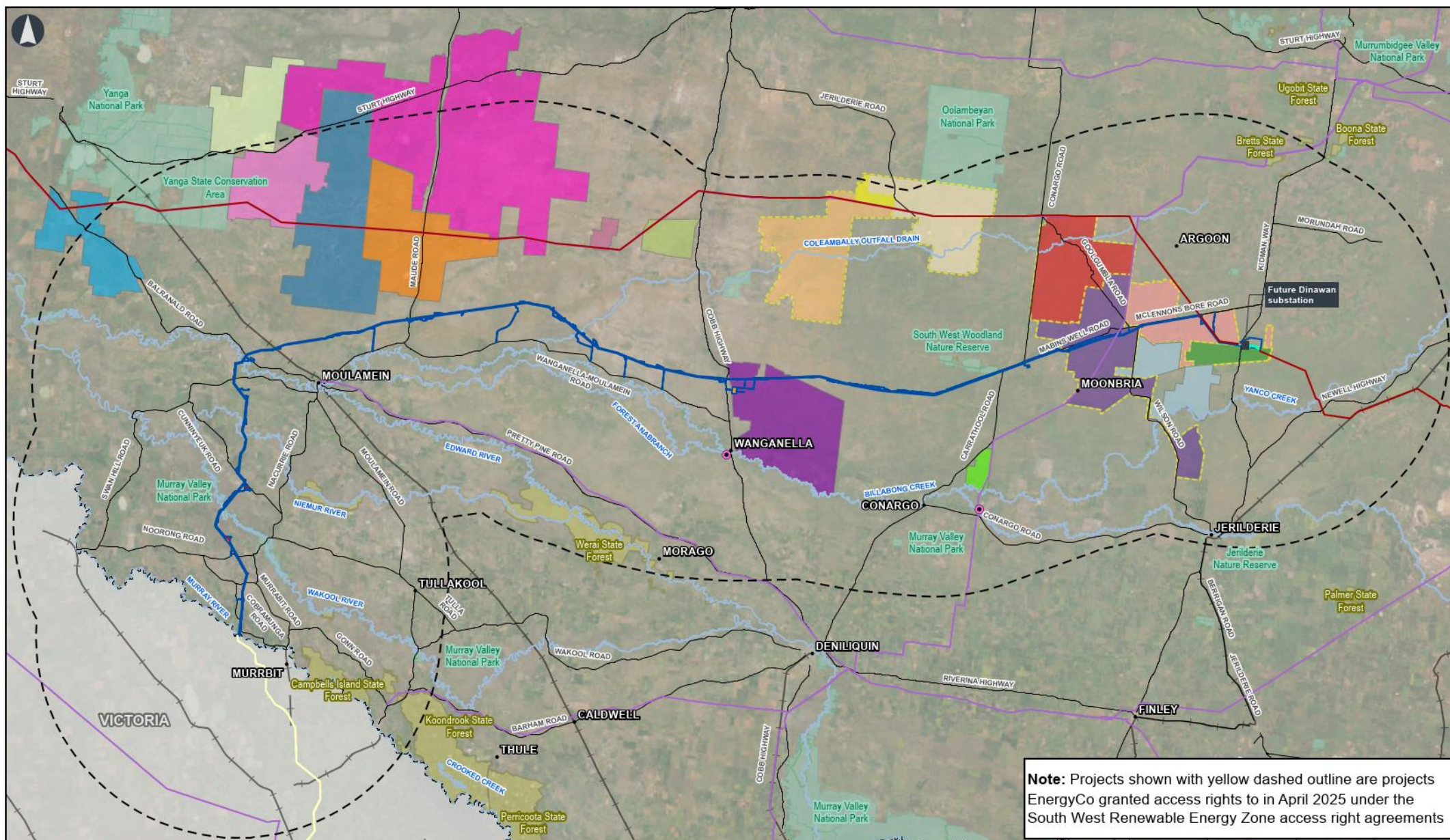
South West Renewable Energy Zone access right agreements

In April 2025, EnergyCo granted access rights to six wind, solar and large-scale battery projects with a combined generation capacity of 3.56 gigawatts¹. These projects consisted of the following:

- Yanco Delta Wind Farm (project 24)
- Dinawan Energy Hub – consisting of the Dinawan Solar Farm and Dinawan Wind Farm (projects 18 and 19 respectively)
- Pottinger Energy Park – consisting of the Pottinger Solar Farm and Pottinger Wind Farm (projects 11 and 12 respectively)
- Bullawah Wind Farm (project 14).

The combined generation capacity of these proposed or approved projects represents the initial allocation of access rights under the South West Renewable Energy Zone access scheme. In making this decision, the maximum capacity for access rights assigned to each proposed renewable energy project is lower than what has been identified in planning assessment documentation for those projects, and it would alter the likelihood of some of the remaining projects in the South West Renewable Energy Zone proceeding in the short-term. However, for the purposes of this cumulative assessment it is assumed that all identified projects would proceed as described in the relevant planning assessment documentation available at the time of the assessment (in line with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (NSW DPIE, 2022)).

¹ [Media Release – South West Renewable Energy Zone powers up](#)



wsp

VNI West – EIS

Figure 4.1a
Cumulative impact projects

Legend

- Rail line
- Main road
- Named waterway
- EnergyConnect (NSW - Eastern section) project (under construction)

- Existing transmission line
- Dinawan substation works - proposed 500 kV
- Dinawan substation works - existing 330 kV
- National park
- State forest

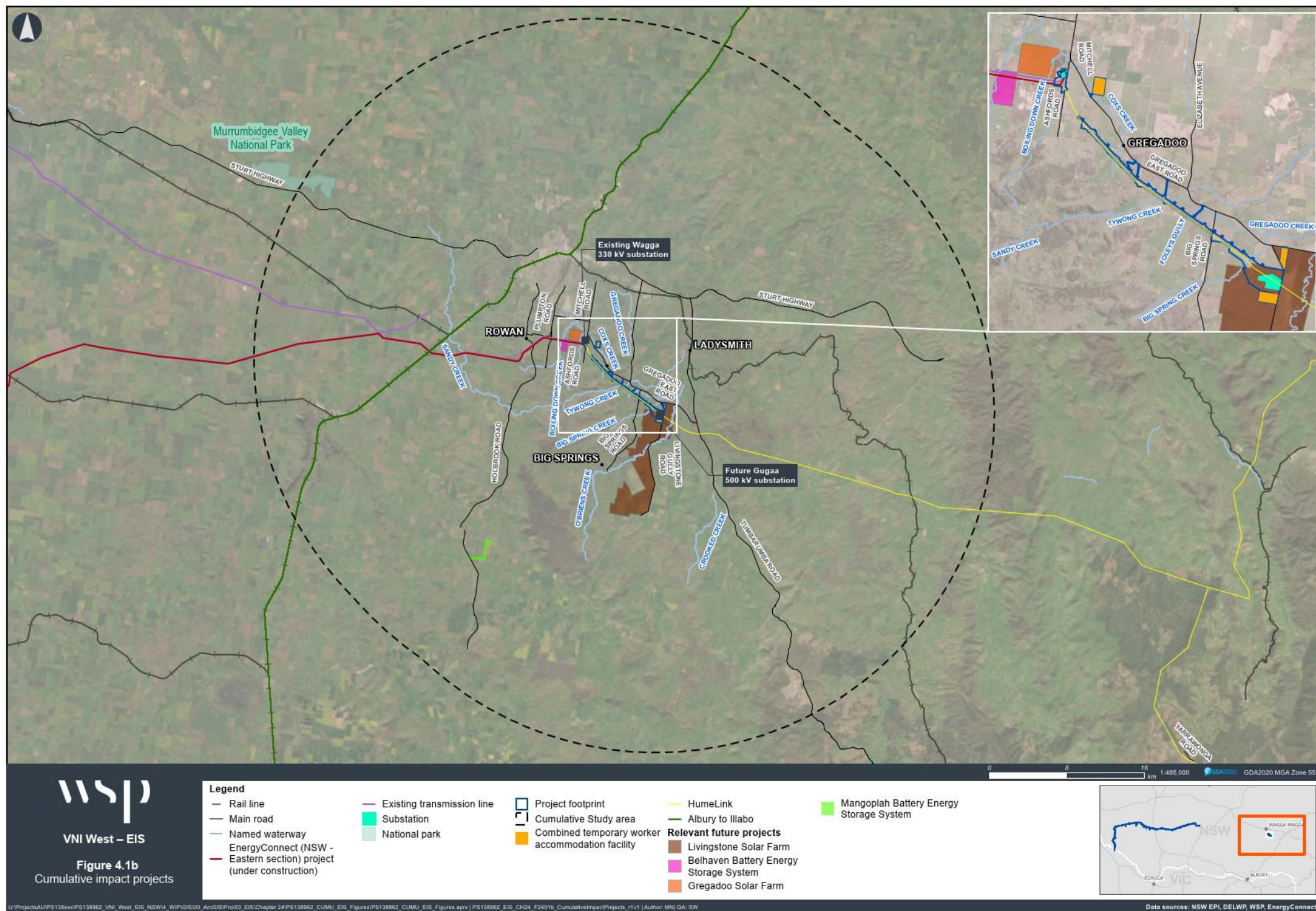
- Project footprint
- NSW/Victorian border
- Cumulative Study area
- Combined temporary worker accommodation facility
- Construction compound

- Billabong Creek Environmental Water Regulators
- Relevant future projects**
- Abercrombie Wind Farm
- Argoon Wind Farm
- Baldon Wind Farm
- Dinawan Solar Farm

- Dinawan Wind Farm (East)
- Dinawan Wind Farm (West)
- Pottinger Wind Farm
- Tchelery Wind Farm
- Yanco Delta Wind Farm
- Wilan Wind Farm
- Bullawah Wind Farm

- Junction Rivers Wind Farm
- Keri Keri Wind Farm
- Pottinger Solar Farm
- Romani Solar Farm
- West Nyangay Solar Farm
- Conargo Wind Farm
- Wanganella Wind Farm





4.1.4 Accessibility

This section provides an overview of accessibility to services, housing and tenure, transport and travel networks and telecommunications in the local and regional social localities.

4.1.4.1 Social infrastructure

Social infrastructure encompasses the facilities, services, and networks that support community well-being and quality of life. This includes educational institutions, healthcare facilities, community services, and recreational facilities.

Communities in the social locality (direct, local and regional) rely on social infrastructure distributed across a network of townships and rural areas. Townships and urban centres that host social infrastructure servicing the social locality (direct, local and regional) includes Swan Hill, and Balranald, Berrigan, Hay, and Deniliquin.

Within the local social locality, Moulamein and Jerilderie host services that serves dispersed rural dwellings. Residents in the local social locality heavily rely on these communities for employment, services, and social connections. They also frequently commute between towns and urban centres. An overview of retail, education, and health infrastructure is provided below.

Retail

While services are accessible in all LGAs, residents in the local social locality frequently travel to the regional social locality to access goods and services.

Swan Hill (Swan Hill LGA, Victoria) serves as the central urban hub for the entire regional social locality. It is identified by the community as the ‘retail hub’, especially for residents of Deniliquin (Edward River LGA, NSW), Moulamein (Murray River LGA, NSW) and Hay (Hay LGA, NSW). Swan Hill has petrol stations, banking services, supermarkets, a library, and an aerodrome.

Hay and Deniliquin are considered as ‘regional hubs’ for basic services and everyday activities. Hay has grocery stores, automotive supplies and home appliances. It also has cafes and restaurants, a pharmacy, a newsagency, post office, and a veterinary clinic. Deniliquin has essential services and retail options, including the Deniliquin Service Centre (Service NSW), local shops, cafes, restaurants, bottle shops, and specialty stores.

Deniliquin has popular natural spaces near the Edward River. Like locals, visitors can enjoy water sports like waterskiing, wakeboarding, and fishing, as well as bushwalking, cycling, and golf. It is also popular for the Deni Ute Muster, a utility vehicles parade (Visit NSW, n.d.).

Berrigan (Berrigan LGA, NSW) has two restaurants, a pharmacy, grocery shops, and bottle shops.

Balranald (Balranald LGA NSW) is the LGA’s main township and serves as an essential service hub for the regional and local social localities. It has grocery shops, bottle shops, petrol stations, pharmacies, cafes, bars, and restaurants. Balranald is also renowned as a tourist destination and provides a base for exploring Yanga National Park and the World Heritage-listed Mungo National Park.

Education

In the regional social locality, there are primary schools and high schools in the townships of Balranald, Hay, and Deniliquin. Swan Hill, being the only urban centre near the project, has a greater number of primary schools and high schools. Additionally, Swan Hill and Deniliquin offer more pre-school and kindergarten services than the other townships in the regional social locality (refer to Table 4.12). Tertiary education campuses in the regional social locality include the Swan Hill, Hay, Finlay, Echuca and Deniliquin TAFEs. Some educational institutions deliver small courses in townships, for example Leeton college in Jerilderie and other courses in Moulamein.

In the local social locality, Moulamein, Conargo (Edward River LGA, NSW), and Jerilderie each have one primary public school that covers kindergarten through year six. Jerilderie also has one private primary school. Moulamein has a preschool, while Jerilderie offers an Early Learning Centre. During the SIA engagement, community members highlighted the shortfall of these services within the local area, constraining the capacity of women to participate in the workforce. Waiting lists for childcare in Wanganella and Deniliquin were also reported.

One of the key challenges related to education access reported during the SIA engagement, is the absence of high schools in the local social locality. Students often need to travel long distances — for example, to Swan Hill (around 140 to 510 km round trip), Hay (around 230 to 355 km round trip) or Deniliquin (around 75 to 220 km round trip). Community members from Jerilderie also mentioned the need to travel to Finlay (35 kilometres away) or to boarding schools in Albury, Ballarat, Geelong, Leeton and Melbourne.

Table 4.12 Education services in the regional social locality – urban centre and townships

Urban centre/ township	Pre-school/kindergarten	Primary school (kindergarten until year 6)	High school
Balranald	1	2	1
Berrigan	0	2	0
Hay	1	1	1
Deniliquin	3	3	1
Swan Hill	6	6	4
Total	11	14	7

Health, medical and emergency services

Access to healthcare services, including primary care, specialist services, and allied health services, are limited within the social locality. Rural residents face challenges accessing healthcare due to long travel distances, a shortage of healthcare professionals, and limited availability of healthcare facilities. Table 4.13 details the main hospitals, general practices, and emergency services within the regional and local social locality.

In the regional social locality, four hospitals and several medical centres serve the main urban centre and townships. However, within the local social locality, health services are limited, with only Moulamein and Jerilderie having health centres. During the SIA engagement, residents expressed the need to travel to the main urban centre or townships for specialist services, relying on public transport or volunteers that drive them to main urban centres. Community members also reported that the regional health system is highly stressed and under-resourced. There are no available bookings, long waiting lists of two to three weeks for medical services, and no capacity for additional patients.

In the local social locality, Moulamein health services are well perceived by the community. They have a “bush nurse” at the Community Health Centre and an aged care service in town. However, the aged care centre struggles to find a full-time nurse. There are no mental health services in town.

The infrastructure of the emergency services in the regional social locality area comprises a network of agencies and facilities dedicated to ensuring public safety and rapid response to emergencies. The NSW Rural Fire Service (NSW RFS) plays a critical role in bushfire management and emergency response across the region. Additionally, the State Emergency Service (SES) provides vital support during floods, storms, and other natural disasters. The region also benefits from the presence of local fire brigades, ambulance services, and police stations, which work collaboratively to safeguard the community in times of crisis.

During the SIA engagement, differences between local communities regarding emergency services were noted. In Wanganella, there is a perception of difficulties in contacting emergency services (ambulance and police). On the contrary, Moulamein has a well-established Rural Fire Service (RFS) team with 20 members, active for approximately 50 years.

The RFS in Moulamein is described by community members as one of the best-trained in the region. They hold monthly meetings, have new equipment, and a large shed in town. The RFS responds to fire alarms, accidents, missing persons, and floods.

Table 4.13 Health services and infrastructure in regional and social locality

	Regional social locality					Local social locality	
	Urban centre	Townships				Servicing communities	
	Swan Hill	Berrigan	Balranald	Hay	Deniliquin	Moulamein	Jerilderie
Hospital	Swan Hill District Health	Balranald District Hospital		Hay District Hospital	Deniliquin Hospital	–	–
Doctors	Swan Hill Primary Health Medical Centre Swan Hill Medical group Central Victorian Cardiology – Swan Hill Mallee District Aboriginal Services The Baudinet Centre	Berrigan Multi Purpose Service	Balranald Medical Centre Balranald Multi-Purpose Service Country Hearing Care	Hay Medical Centre	Deniliquin Medical Centre Deniliquin Community Health Centre Deniliquin Specialist Community Mental Health, Drug and Alcohol Service Deniliquin Clinic Shiloh Medical Practice Ochre Medical Centre	Moulamein Community Health Centre	Jerilderie Multi-Purpose Service Jerilderie Medical Centre
Ambulance Services	Swan Hill Ambulance Station	Berrigan Ambulance Station	Balranald Ambulance Station	Hay Ambulance Station	Deniliquin Ambulance Station	–	Jerilderie Ambulance Station
Police Services	Swan Hill Police Station	Berrigan Police Station	Balranald Police Station	Hay Police Station	Deniliquin Police Station	Moulamein Police Station	Jerilderie Police Station
Fire Services	Country Fire Authority – District 18 Headquarters	Berrigan Fire Station	Balranald Fire Station	Hay Fire Station	Deniliquin Fire Station Rural Fire Service	Rural Fire Service	Jerilderie Fire Station Rural Fire Service

Community services

In the regional social locality, community services and recreational facilities are well-covered in the urban centre and major townships. Meanwhile, in the local social locality, Moulamein and Jerilderie have most of the community services and infrastructure. These communities have a tightly knit social fabric, where residents actively engage in shared activities such as local festivals, sports events, or community gatherings.

During the SIA engagement, community members from Moulamein identified the need for public indoor recreational spaces in the community. It was described that the local bowling club is used as a community hub and accommodation provider, however, noting that alcohol consumption and pokies machines available in the venue might restrict community participation.

Table 4.14 shows the detail of the community services in the urban centre and townships of the regional social locality and in the most populated localities of the local social locality.

Table 4.14 Presence of community facilities in the regional and local social locality

	Community services	Cemetery	Parks and playgrounds	Skate Park	Swimming pool	Sport and recreation	Library	Museum	Art gallery
Regional social locality									
Swan Hill	✓	✓	✓	✓	✓	✓	✓	✓	✓
Berrigan	✓	✓	✓	✓	✓	✓	✓	✓	-
Balranald	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hay	✓	✓	✓	✓	✓	✓	✓	✓	✓
Deniliquin	✓	✓	✓	✓	✓	✓	✓	✓	✓
Local social locality									
Moulamein	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jerilderie	✓	✓	✓	✓	✓	✓	✓	-	-
Conargo	-	-	✓	-	-	✓	-	-	-

4.1.4.2 Housing and tenure

In the regional social locality, the number of private dwellings unoccupied are higher than the state averages (refer to Table 4.15). Specifically:

- in NSW, LGAs report 15.68 per cent unoccupied private dwellings, surpasses the 9.36 per cent statewide average
- in Victoria, the LGA percentages are more closely aligned to the overall state figure of 11.09 per cent.

Table 4.15 Unoccupied dwellings in the regional social locality (ABS 2021)

	Unoccupied dwellings	Percentage
NSW	299,524	9.36%
Murray River	929	16.01%
Edward River	523	13.56%
Murrumbidgee	191	12.83%
Hay	239	17.42%
Berrigan	524	13.46%
Balranald	192	20.82%
Victoria	298,029	11.09%
Swan Hill	1,006	11.54%
Gannawarra Shire Council	613	12.32%

In the local social locality, Jerilderie and Moulamein have the highest numbers of unoccupied dwellings. Jerilderie (Murrumbidgee LGA) has 65 unoccupied dwellings (15.3 per cent), while Moulamein (Murray River LGA) has 54 unoccupied dwellings (22.2 per cent).

Regarding the housing prices in the local social locality, limited information was found online. However, it was possible to identify some data for Jerilderie. The median house price in Jerilderie stands at \$293,500, reflecting a 24.9 per cent increase over the past 12 months. Currently, there are only nine houses available for purchase. Additionally, the median rental price in Jerilderie is \$335 per week, showing a 31.4 per cent increase (RealEstate.com 2024).

Short-term accommodation

The regional social locality has limited short-term accommodation options, which are mainly hotels, motels, motor inns, and cabins. Specifically, Swan Hill offers around 13 options, Deniliquin has approximately 10 options, and Hay provides about nine options (Booking, 2024). Overall, there are approximately 32 short-term accommodation options in the regional social locality. Additionally, an AirBnB search revealed 28 available houses in Swan Hill, nine in Deniliquin, five in Berrigan, and only one in Jerilderie (AirBnB, 2024).

According to the ABS data on tourism accommodation from 2015 to 2016, the urban centre with the highest short-term accommodation availability is Swan Hill, followed by Hay and Deniliquin (refer to details in Table 4.16). Unfortunately, no specific data was available in this data for other urban centres within the regional social locality.

Table 4.16 Short-term accommodation in urban centres (ABS, 2016)

Urban centre	Establishments	Rooms	Number of beds
Swan Hill	13	348	981
Hay	7	176	478
Deniliquin	7	148	426

During the SIA engagement, there was reported a perception of a limited availability of housing and short-term accommodation in the local social locality. Additionally, specific information about some localities was collected regarding housing availability:

- Jerilderie: There is a lack of housing for health staff, making it difficult to attract professionals to the area.
- Deniliquin: There is a housing shortage affecting all types of accommodation, particularly rental properties.
- Moulamein: there is accommodation shortage of all types (homes, vacant blocks, rentals, short-term accommodation). Also, the town faces challenges in building new houses due to floodplain risks identified in the *Moulamein Flood Study* prepared by the NSW State Emergency Services (2019). This report established that houses cannot be built above flood level in certain parts of the township.

4.1.4.3 Transport and travel networks

The regional social locality is serviced by two regional airports, including Wagga Wagga Airport in Wagga Wagga LGA and Griffith Airport in Griffith (within Murrumbidgee LGA). These airports provide domestic flights connecting the region to major cities such as Sydney and Melbourne.

In the regional social locality, Balranald and Swan Hill each have an aerodrome for small planes and there is an airstrip at Moulamein that serves as an emergency evacuation site/helicopter pad.

Additionally, *Technical paper 14 – Aviation impact assessment* further identified four certified aerodromes within 30 nautical miles (55.56 kilometres). The closest to the project are the Kerang Aerodrome (29.6 kilometres) and the Swan Hill Aerodrome (27.8 kilometres). It also identified seven published uncertified aerodromes within 10 kilometres of the project, the majority of which are within three nautical miles of the project footprint (5.56 kilometres), and many do not have a defined runway. However, uncertified aerodromes identified through consultation include up to 39 airstrips.

In the regional social locality, the Hume Highway and Sturt Highway provide major road links to connect the urban centre, townships and servicing communities within the region and to other parts of Australia.

The main highways and roads within the local social locality are outlined in Table 4.17.

Table 4.17 Main highways and roads within the local social locality

Main highways and roads		
Balranald Road	Gregadoo East Road	Nacurrie Road
Balpool Road	Gregadoo-Ladysmith Road	Noorong Road
Big Springs Road	Kidman Way	Swan Hill Road
Boiling Down Road	Mabins Well Road	Pretty Pine Road
Carrathool Road	Maude Road	Wanganella Moulamein Road
Cobb Highway	Mitchell Road	
Cunninyeuk Road	Moulamein Road	

Public transport options within the regional social locality vary depending on the LGA:

- Balranald LGA counts with limited public transport services, including a fortnightly community bus to Swan Hill and Mildura for appointments and social activities. LiveBetter Community Transport also provides non-urgent door-to-door transport for eligible residents.
- Berrigan LGA offers coach services with stops in the town, and bus routes that connect nearby areas such as Finley, Tocumwal, and Barooga. The Moovit app can help navigate these services, providing real-time schedules and route information.

- Edward River LGA has very limited public transport options. Most residents rely primarily on private vehicles for their daily commuting needs.
- Hay LGA is one of the most well-connected LGAs in the regional social locality. It has bus services that connect to nearby towns such as Deniliquin, Griffith, and Narrandera. Additionally, Countrylink offers a train service from Sydney to Cootamundra, with a connecting bus to Hay. This combination of bus and train services ensures that residents and visitors have reliable transportation options for both local and long-distance travel.
- Murray River LGA also counts with limited public transport, however the council has established community transport options for eligible clients. These include regular trips for shopping, medical appointments, and social activities.
- Murrumbidgee LGA offers various public transport options, including bus and coach services that connect to nearby towns and cities such as Coleambally, Darlington Point, and Jerilderie. Additionally, air services are available to and from Griffith, providing essential connectivity for residents and visitors.
- Swan Hill LGA offers a variety of public transport options to ensure connectivity for residents and visitors, being another well connected LGA. Bus services operated by BusBiz connect Swan Hill to nearby areas such as Tooleybuc (NSW), Sea Lake, Wycheproof, and Bendigo. Taxis are also available for local transport needs.
- Gannawarra LGA provides public transport options that include bus services connecting to nearby towns such as Kerang, Cohuna, and Koondrook. These services are essential for daily commuting and accessing regional hubs. Community transport services are also available for eligible residents, offering door-to-door transport for medical appointments, shopping, and social activities.

The local social locality has limited public transport options. The most populated townships do have some public transport services:

- Moulamein has bus services available, connecting the town to nearby areas such as Swan Hill and Bendigo. These services often require transfers and operate on specific schedules.
- Conargo has limited public transport options, with bus services connecting to larger towns and cities. Residents often rely on private transport for daily commuting.
- Jerilderie offers bus services that connect to major transit hubs such as Narrandera and Gundagai. Routes like 733 and 734 pass through the town, providing essential connectivity for residents.

The rail infrastructure in the regional social locality varies significantly. Balranald, Berrigan, Murray River, Murrumbidgee and Edward River LGAs lack direct rail services, relying on nearby towns for connectivity such as Narrandera and Griffith. Hay LGA is well-connected by CountryLink services. Swan Hill and Gannawarra LGAs are served by V/Line trains, connecting to Melbourne and supporting both passenger and freight transport. Additionally, NSW TrainLink operates road coach services with stations in Balranald, Hay, Deniliquin, and Jerilderie.

4.1.4.4 Telecommunications

The regional social locality has 4G mobile network coverage. Like most regional and rural areas in Australia, the coverage can be limited between population clusters. For example, Edward River Council's report in 2021, identifies the unreliable connectivity outside Deniliquin as a significant issue for its LGA.

In the local social locality, the limited coverage between population centres is more evident with fragmented mobile reception, connectivity and gaps primarily to the north and south of the project's transmission line corridor in the Hay area. As a result, between main localities and townships there can be difficulties in maintaining communications.

Telstra's 4G network coverage within the local social locality is robust in densely populated urban areas, though certain gaps can be seen along certain roads connecting townships, especially the northern routes leading to Hay (refer to Figure C.3 in Appendix C). The comparable data for Optus' network coverage shows strong 4G coverage in outdoor urban areas. However, there is notably weaker 4G coverage outdoors with antenna, particularly near Moulamein, Wanganella, Steam Plains, Argoon and Gala Vale SALs (refer to Figure C.4 in Appendix C).

Feedback from stakeholders during the SIA engagement revealed that mobile coverage in the region falls short of what is indicated by coverage maps. Stakeholders identified significant connectivity challenges, particularly during periods of heightened population influx, such as community celebrations or holidays. Impacts to the network coverage have been experienced near the EnergyConnect (NSW – Eastern section) temporary worker accommodation camp at the future Dinawan substation. Telstra have committed to working with Transgrid, EnergyCo and other relevant stakeholders to identify solutions for this issue.

4.1.5 Health and wellbeing

4.1.5.1 Pre-existing health conditions

The key health issues in the regional social locality include chronic diseases, such as arthritis (11.91 per cent), asthma (10.25 per cent), and mental health conditions (8.33 per cent). Notably, the prevalence of arthritis and asthma in the regional social locality exceeds that of NSW (8.42 per cent, 7.75 per cent, respectively) and Victoria (7.97 per cent, 8.35 per cent, respectively). These higher percentages may indicate that residents in the regional social locality are more exposed to risk factors such as smoking, poor diet, physical inactivity, and limited access to healthcare services and preventive health programs.

The local social locality exhibits similar percentages to those observed in the regional social locality, suggesting a consistent trend in long-term health conditions (refer to Table 4.18).

Table 4.18 Long-term health conditions in the regional and local social locality, ABS 2021

Long-term health condition	NSW	Victoria	Regional social locality	Local social locality
Arthritis	8.42%	7.97%	11.91%	10.63%
Asthma	7.75%	8.35%	10.25%	10.4%
Mental health condition (including depression or anxiety)	8.01%	8.78%	8.33%	3.34%

4.1.5.2 Need of assistance, disability, and carers

The regional social locality exhibits slightly higher percentages of people needing assistance for core activities (6.36 per cent) compared to NSW and Victoria (5.76 per cent and 5.87 per cent, respectively). This might suggest a greater demand for support services related to daily living tasks in the regional area. People caring for those with a disability, health condition or old age (12.79 per cent) is similar to NSW and Victoria (11.5 per cent and 12.92 per cent, respectively). Additionally, the percentages for carers and persons aged zero to 17, who require assistance (3.07 per cent) are similar to NSW and Victoria (3.19 per cent and 3.4 per cent, respectively). These similarities show the regional social locality shares common patterns with the broader state context in terms of caregiving demands and support requirements.

Compared to the regional social locality, NSW, and Victoria, the local social locality exhibits lower percentages across all categories regarding the need of assistance, disability and carers (refer to details in Appendix C, Table C.5). There remains a significant proportion (8.9 per cent) of individuals engaged in caregiving activities, which are traditionally undertaken by women. It is crucial then to recognise that women in the local social locality may be a vulnerable group, as the caregiving activities might not receive the same recognition or value as remunerated employment.

4.1.6 Culture

4.1.6.1 Aboriginal culture

At the 2021 Census, the regional social locality was home to 3,069 Aboriginal and Torres Strait Islander people, who represent 5.2 per cent of the population, a higher percentage than NSW and Victoria (3.4 per cent and one per cent, respectively).

The map of Aboriginal nations and languages of Australia (refer to Figure 4.2) indicates the general location of larger Aboriginal groups in Australia. It is important to note that the map may include smaller groups such as clans, dialects or individual languages in a group, and that boundaries are not intended to be exact.

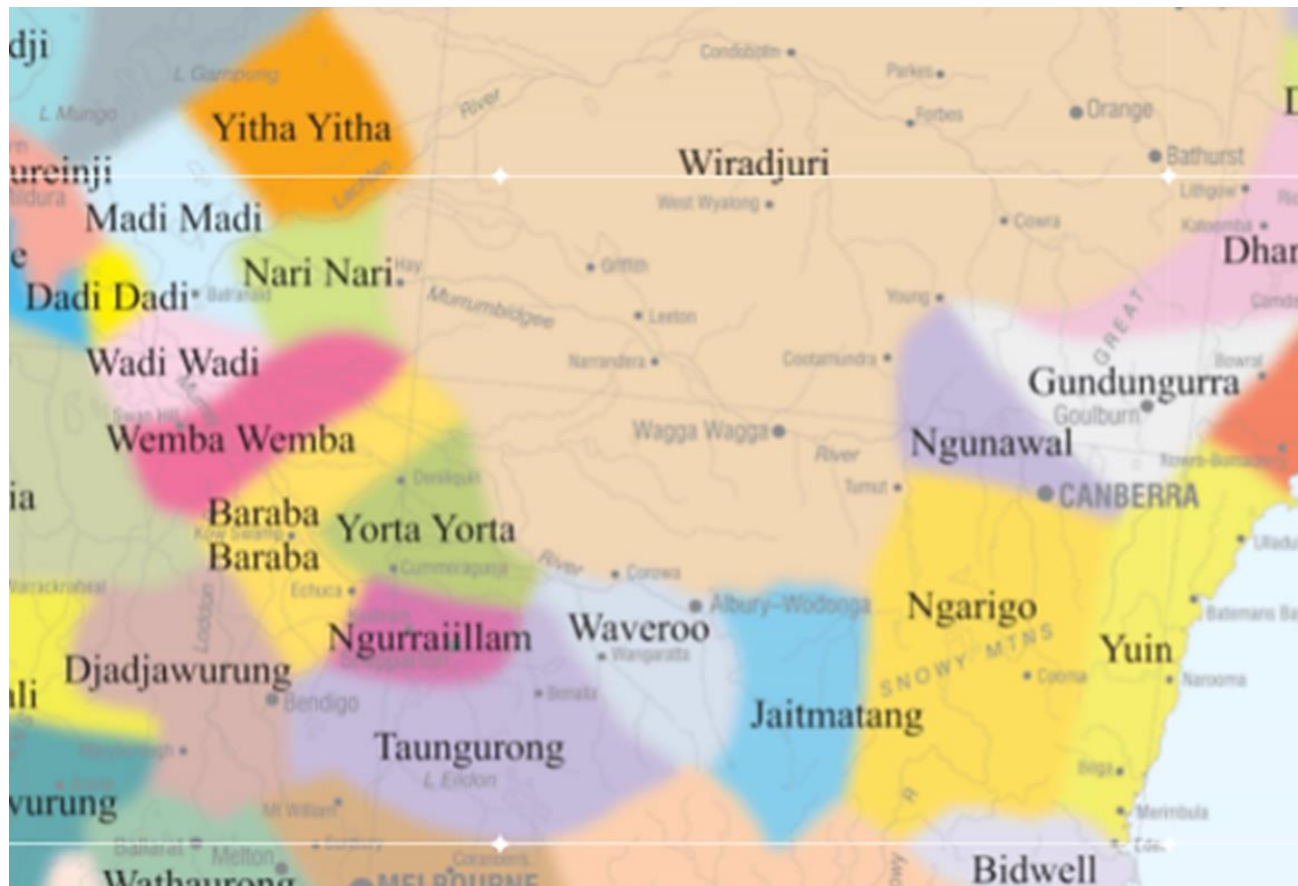


Figure 4.2 Map of Indigenous Australia covering southeast NSW

Source: Australian Institute of Aboriginal and Torres Strait Islander Studies, 1996

The Aboriginal groups identified within the local social locality include:

- Wiradjuri people: On the Lachlan River and south from Condobolin to Booligal; at Carrathool, Wagga-Wagga, Cootamundra, Cowra, Parkes, Trundle; east to Gundagai, Boorowa, and Rylstone; at Wellington, Mudgee, Bathurst, and Carcoar; west along Billabong Creek to beyond Mossiel; southwest to near Hay and Narrandera; south to Howlong on upper Murray; at Albury and east to about Tumbarumba. They visited Yass for ceremonies with the Ngunawal tribe. The northwestern boundary was incorrectly drawn on the 1940 map. Brough Smyth shows that members of the tribe were on the Murray River at Albury (Tindale 1974).
- Yorta Yorta people: from the junction of the Murray and the Goulburn Rivers, on either side of the Murray River from west of Echuca to east of Cobram/Tocumwal and south-east along the Goulburn River to the Mooropna-Shepparton area (Bowe and Morey 1999:1).

- Wamba Wamba or Wemba Wemba people: people of this tribe concentrated on Moonacullah Mission, some 40 km downstream from Deniliquin on the Edwards River (Hercus 1986:3). On Loddon River from Kerang, Victoria, north to Swan Hill; on Avoca River south to near Quambatook; north eastward to Booroorban and Moulamein, NSW; near Barham; at Lake Boga and Boort, Victoria. (Tindale 1974).
- Perrepa Perrepa or Barapa Barapa people: recognised by the Australian Government as the traditional owners of the Edward/Kolety-Wakool River system. However, they also speak the same language as the Wamba Wamba people.

Within the regional social locality, and in close proximity to the project there are six Local Aboriginal Land Councils (LALC):

- Balranald LALC
- Cummeragunja LALC
- Deniliquin LALC
- Griffith LALC
- Hay LALC
- Wamba Wamba LALC.

While no Native Title has been determined in the local social locality, a Native Title application was presented by the Wamba Wamba people in December 2021 but not accepted for registration. According to the *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a), there are 10 Aboriginal cultural sites listed in the Aboriginal Heritage Information Management System (AHIMS) within or near the Aboriginal cultural heritage study area for the NSW/Victorian border to the future Dinawan substation component. The most common site types within the Aboriginal heritage study area are artefacts, burials, hearths and modified trees.

4.1.6.2 Non-Aboriginal culture and heritage

According to the *Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b), no World heritage, National heritage or Commonwealth heritage items are recorded within the project footprint.

More broadly, across the regional and local social localities, the non-Aboriginal cultural heritage is deeply intertwined with the legacy of colonisation and European settlement. The region has been significantly influenced by the arrival of settlers, pastoralists, agricultural pioneers and the reshaping of the landscape for farming. The wool industry played a pivotal role in shaping the economy, social fabric, and the region's overall identity.

This cultural heritage is evident in the presence of historic homesteads, shearing sheds, and agricultural practices that remain integral to the area's identity. The *Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b) also states that the community identifies with several homesteads as part of its heritage, even though these infrastructures are not classified in any local or state heritage listing.

Furthermore, the *Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b) identified one listed local heritage item in the non-Aboriginal heritage study area for this component. The item is Black Swamp listed under Conargo LEP 2013 I9, located along the Cobb Highway and is a part of the Long Paddock Route. This place is important as it used to be a source of water during the settlement and Spring Plains homestead is also located within the boundaries of the site.

Additionally, field survey identified six currently unlisted sites of local significance. These are:

- the archaeological remains of a homestead or pastoral outstation (possibly associated with the F.S. Falkiner pastoral family) (Historic Site 3)
- decommissioned Wetuppa Railway Station and Siding on the Kerang to Stony Crossing Railway (Historic Site 5)
- nearby Larry's Creek wooden railway bridge (Historic Site 7)
- a survey reference 'blaze' tree, (Historic Site 9)
- Merran Creek Railway Bridge (Historic Site 15)
- Cunninyeuk Soldier Settlement Memorial (Historic Site 17).

Presently, efforts to preserve and interpret this non-Aboriginal cultural heritage are being led by community members. For example, in Moulamein, the Moulamein Community Development Group has been operating for four years with 10 members. Their main objective is heritage preservation including as one of their main projects the Moulamein Heritage Village. This village received grants to support tourism in the town and will offer visitors a glimpse into the region's rich pastoral past through its collection of restored buildings and artefacts dating back to the 19th and early 20th centuries.

Additionally, communities of the regional social locality participate in diverse cultural events throughout the year. A list of the main events is provided in Appendix C5.

4.1.7 Surroundings

This section provides an overview of the landscape, natural environment and climate in the local and regional social localities, including information about flooding and bushfire prone areas.

4.1.7.1 Landscape and natural environment

The regional social locality is in the Riverina Murray region, characterised by its diverse and picturesque landscape, that includes fertile plains, meandering rivers, and rolling hills. In southern NSW, this region is renowned for its natural beauty and agricultural productivity.

This landscape also is home to State Forests, plains, and wetlands that are havens for various ecological communities. Among these are Niemur, Wera, Campbells Island, and Morago State Forests, as well as the Murray Valley National Park south of Deniliquin, the Yanga National Park north of Balranald, and the Kalyarr and Oolambeyan National Park near Hay. These diverse habitats support a wide range of flora and fauna, contributing to the region's ecological richness and biodiversity.

Another significant area in the regional social locality is the Toogimbie Indigenous Protected Area (IPA), on the southern side of the Murrumbidgee River between Hay and Maude. This 4,600-hectare IPA includes former pasture lands eucalypt-lined creeks watercourses and a floodplain. Dedicated to the Nari Nari people in 2004, it is managed by the Nari Nari Tribal Council with a focus on the restoration and protection of country and culture.

The region's dominant flora species include the iconic River Red Gum, Black Box, and Coolibah trees that thrive along watercourses and floodplains, while riverine vegetation such as reeds and rushes contribute to the riparian ecosystems. Among the native fauna are Eastern Grey Kangaroos, Emus and Superb Parrots as well as aquatic species like the Murray Cod and Eastern Long-necked Turtle.

The Riverina Murray region is renowned for its extensive network of watercourses, which play a vital role in shaping the landscape and supporting both natural ecosystems and human activities. Some of the key watercourses are:

- **Murrumbidgee River:** It is the region's major river, flowing through the heart of the Riverina Murray from its headwaters in the Snowy Mountains to its confluence with the Murray River near Boundary Bend. The Murrumbidgee River is a lifeline for agricultural irrigation, providing water for crops, pastures, and livestock. It also serves as a popular recreational destination for activities such as fishing, boating, and camping.
- **Murray River:** The Murray River forms the southern boundary of the Riverina Murray region, separating NSW from Victoria. As Australia's longest river, the Murray River plays a crucial role in sustaining the region's ecosystems and supporting a diverse range of flora and fauna. It also provides important water resources for agriculture, industry, and urban communities throughout the region.
- **Edward-Wakool River Catchment:** A vital component of the River Murray system in southern NSW. More than 1,000 km² between the Murray and Edward Rivers, this intricate network includes rivers, creeks, flood runners and wetlands. It is home to significant ecological diversity and supports 20 noteworthy flora and fauna species. The land usage is mainly agriculture (grazing, cropping, irrigated pastures) and National Park designation (Green, 2001) (NSW Office of Water, 2011).
- **Billabongs and Wetlands:** In addition to the major rivers, the Riverina Murray region is home to numerous billabongs, wetlands, and ephemeral water bodies that provide important habitat for wildlife and contribute to the region's biodiversity. These water bodies are often seasonal, filling up during periods of heavy rainfall and providing crucial refuges for waterbirds, frogs, and other aquatic species. During the SIA engagement, Billabong Creek and Edward River were mentioned as key watercourses for the community.

Agriculture is the lifeblood of the Riverina Murray, with the region producing a wide range of crops, including grains, fruits, vegetables, and wine grapes. The fertile soils and temperate climate make it ideal for farming, supporting a thriving agricultural industry that drives the region's economy.

4.1.7.2 Community exposure to natural disasters

The Riverina Murray region experiences a semi-arid climate characterised by hot summers and cool winters. Like many regions globally, the Riverina Murray is experiencing the effects of climate change reflected on increased flood exposure.

During the 2022 and 2023 flooding events, the region faced significant challenges, with damaged infrastructure (roads, bridges, and utilities) and loss of crops, livestock and fertile soil.

Deniliquin, Hay, and Balranald, situated within the floodplains of the Murray, Murrumbidgee, and Darling rivers, are inherently vulnerable to inundation (NSW Government, 2019). As detailed in the *VNI West Preferred Route Report* (Transgrid, 2024c), the Regional Reference Group (RRG) and the Community Consultation Group (CCG) have identified that the western and central portions of the project's corridor study area (generally north of the Murray River and along Pretty Pine Road and north of Conargo) have been subject to several historical flooding events.

In November 2022, the town of Moulamein experienced severe flooding because of heavy rainfall and rising river levels. During the SIA engagement in Moulamein, participants discussed the emotional toll, evacuations, property loss, and the impact of uncertainty on their mental health.

The NSW Government is actively facilitating climate change adaptation in the Murray Murrumbidgee region through the Enabling Regional Adaptation initiative, which seeks to identify and manage critical aspects of the region that are susceptible to climate impacts.

The Riverina Murray region, including areas around Moulamein, has experienced bushfires, during the hotter and drier months of the year. Berrigan, Edward River, Federation, Murray River, and southern parts of Murrumbidgee LGAs are subject to Total Fire Bans during high-risk periods. Bushfire-prone areas are primarily concentrated in national parks, state forests, and vegetation along major watercourses. Some community members raised concerns and queries regarding the connection between bushfires and electrical transmission infrastructure.

4.1.8 Decision-making systems

Transgrid commenced project engagement in mid-2023 with local councils, government agencies, energy consumer representative groups to inform the preferred corridor for the project. Since June 2023, targeted stakeholder workshops, community information sessions and stakeholder briefings to engagements with directly affected landholders, including face-to-face meetings, phone calls and written correspondence have taken place to inform the project.

During corridor selection, 70 written responses were received and 16 community events attended by more than 270 local landholders and community members were held. For the development of the preferred route, Transgrid received 48 written submissions from landholders, the local community and industry. Additionally, 13 community information and town hall sessions were held, attended by approximately 190 local landholders and community members.

The following refinements have been made to the project to respond to stakeholder and community feedback, as outlined in the *Preferred Route Report* (Transgrid, 2024c):

- Route adjustment: The final preferred route has been adjusted to the west and north of Moulamein township, increasing the minimum distance to approximately six kilometres to the north. This change keeps the transmission line farther away from residential areas. Additionally, it creates a greater separation between the proposed transmission line and Moulamein-Wanganella Road at its western end, avoiding multiple crossings of Billabong Creek.
- Reduction of community impacts:
 - reducing direct visual and amenity impacts for Moulamein residents from the transmission line
 - mitigating potential impacts on irrigated agricultural land
 - minimising the impact of the proposed transmission line on watercourses, including Billabong Creek.
- Modification to the west of Cobb Highway: A section to the west of Cobb Highway, north of Wanganella-Moulamein Road, has been modified. The line has been shortened and moved further away from several residential properties south of this roadway.

4.2 Network augmentation works social locality

This section provides an overview of the local (Gregadoo SAL) and regional (Wagga Wagga LGA) communities that would be affected by the network augmentation between the existing Wagga 330 kV substation and future Gugaa 500 kV substation, Livingstone Gully Road works. This component of the project refers to the replacement of around nine kilometres of an existing 330 kV single circuit transmission line (Line 51) generally between Ivydale Road (south of the existing Wagga 330 kV substation) and the future Gugaa 500 kV substation, Livingstone Gully Road at Gregadoo with a new double circuit 330 kV transmission line. It also includes connection and line diversion work at the existing Wagga 330 kV substation and the future Gugaa 500 kV substation, Livingstone Gully Road to allow for the connection to the newly replaced Line 51.

Gregadoo, the local social locality of the network augmentation works component, is situated approximately six kilometres southeast of Lake Albert within the Wagga Wagga LGA.

This social locality section provides an analysis of demographic characteristics, economic characteristics and social values.

4.2.1 *Community*

Wagga Wagga LGA is situated in the Riverina Murray region (which was already described in section 4.1.7). The city centre of Wagga Wagga is about 9.5 kilometres from the existing Wagga 330 kV substation.

4.2.1.1 Population, age and Aboriginal and Torres Strait Islander population

Wagga Wagga LGA's population is 67,609 people, 17,273 families and 24,776 occupied private dwellings. Its population reflects that the City of Wagga Wagga is a major regional hub in the region. During the past few decades, the LGA has experienced steady population growth, increasing in a 9.9 per cent between 2011 and 2021. This might be driven by factors such as education, employment opportunities, and lifestyle appeal.

Gregadoo has a much smaller population with 274 people, 81 families and 76 occupied private dwellings.

Only 3.6 per cent of the population identifies as Aboriginal and Torres Strait Islander (10 individuals), compared to 6.6 per cent per cent in Wagga LGA.

The median age in Gregadoo is 41 years, which is comparatively higher than the median age in the Wagga Wagga LGA (35 years), indicating an overall older population. With the highest age groups being between 15–19 years (11.4 per cent) and 50–54 years (11 per cent), suggesting a locality with higher presence of young individuals and middle-aged people. In Wagga Wagga LGA, the highest age groups are 20–24 years (7.6 per cent) and 25–29 years (7.4 per cent) indicating a concentration of young adults.

4.2.2 *Way of life*

The Wagga Wagga LGA includes a mix of residential, commercial, industrial, non-urban/rural, special use, environmental, and recreational zones (Local Environmental Plan, 2010). Wagga Wagga has also a long history of intensive agricultural and pastoral use. The Gregadoo SAL's in particular, the main land use is agriculture, such as cropping and grazing activities.

Wagga Wagga's community vision, as outlined in the Community Strategic Plan 2040, envisions a thriving, innovative, connected, and inclusive community along the Murrumbidgee River. Wagga Wagga aims to be rich in opportunity, choice, learning, and environmental stewardship, where paths intersect, and people come together. This also covers the Gregadoo SAL as it is part of the Wagga Wagga LGA.

Wagga Wagga City Council (2017) identifies the following indicators of the community's identity and values:

- connection to place
- family friendly
- city of good sports
- multicultural community
- arts and cultural centre
- a city with a country lifestyle
- defence presence
- opportunities to connect.

4.2.3 Livelihoods

The labour force participation rate among residents in the Wagga Wagga LGA aged 15 and above stands at 64.4 per cent. This figure significantly surpasses the corresponding rate of 58.7 per cent observed in NSW. Population not in the workforce in the Wagga Wagga LGA equates to 29.7 per cent, this is about 15,989 people.

The unemployment rate in Wagga Wagga LGA mirrors the broader NSW population, both around 4 per cent and 4.9 per cent, respectively. Among employed residents in Wagga Wagga LGA, key sectors include health care and social assistance (17.9 per cent), education and training (10.61 per cent), and public administration and safety (9.85 per cent). These sectors underscore the city's emphasis on healthcare services and education.

In contrast, Gregadoo SAL presents a robust labour force participation rate of 72.6 per cent, significantly higher than that of Wagga Wagga LGA (64.4 per cent). The unemployment rate in Gregadoo is very low at 2.5 per cent, reflecting a thriving local economy. The main industries of employment are secondary education (6.9 per cent), beef cattle farming (5.7 per cent) and primary education (five per cent). The median weekly household income in Gregadoo is substantially higher at \$2,305, than Wagga Wagga LGA's \$1,638. This disparity likely reflects Gregadoo's economic profile as a suburban area with strong ties to farming and rural life. Additionally, the education sector plays a significant role in Gregadoo's employment, possibly due to its proximity to the educational institutions in the city of Wagga Wagga.

Additionally, when examining the IRSAD quintiles at the local social locality level, the alignment between Gregadoo SAL falling within the fifth quintile (indicating a low level of disadvantage) and Wagga Wagga LGA being positioned in the fourth quintile (suggesting a moderate level of socio-economic advantage) might indicate the relative socio-economic well-being of these areas. In this case, the proximity of Gregadoo and Wagga Wagga's quintiles suggests a similarity in their socio-economic profiles, despite slight differences in advantage or disadvantage.

4.2.3.1 Local business, industry and economy

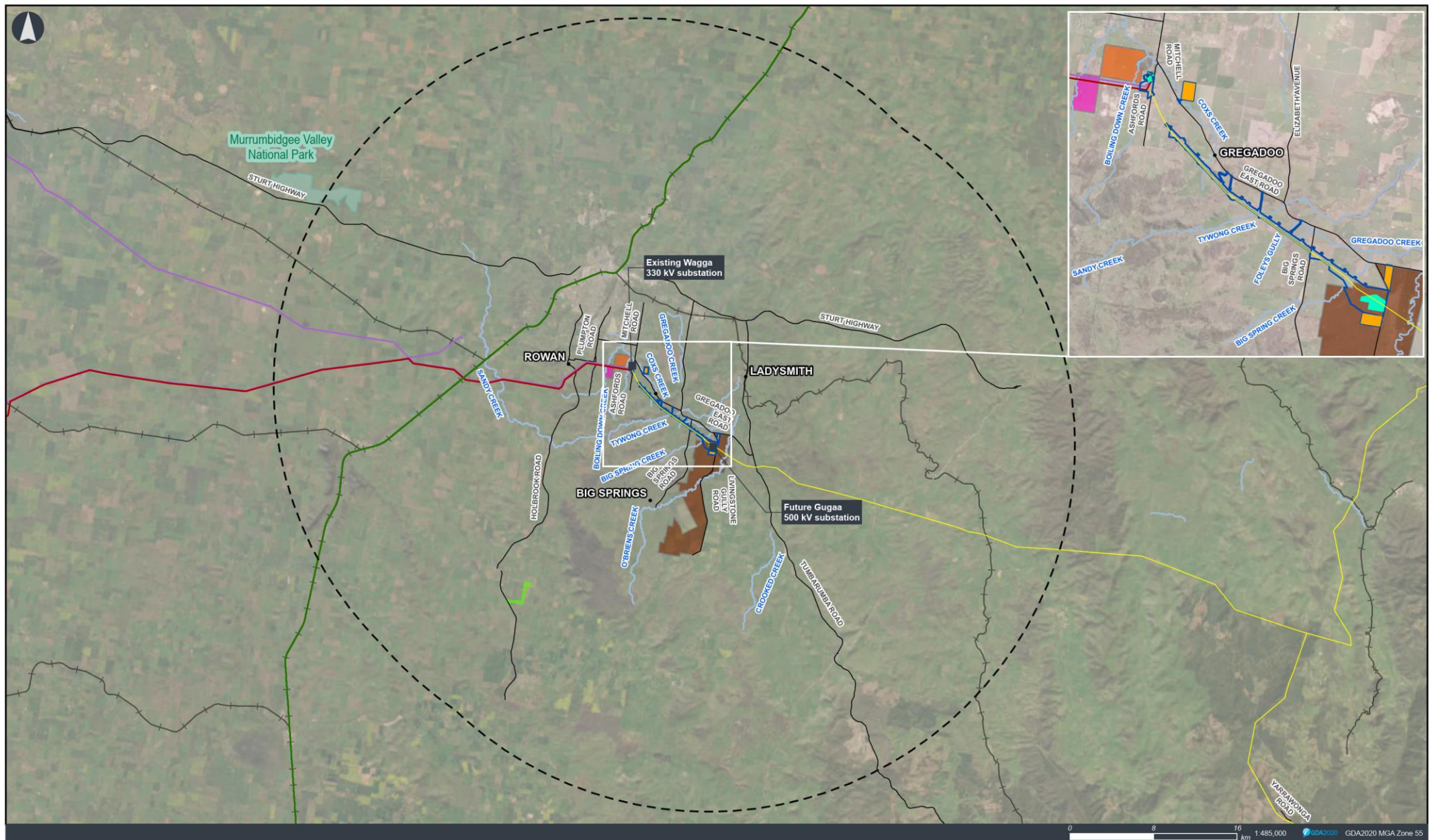
Wagga Wagga is a hub for industry, healthcare, education and recreation, with more than \$54 million in major capital works projects underway or commencing since the 2020/21 financial year.

An analysis of the jobs held by the resident population in the City of Wagga Wagga in 2021 shows the three most popular industry sectors were:

- health care and social assistance (5,957 people or 17.9 per cent)
- education and training (3,532 people or 10.6 per cent)
- public administration and safety (3,280 people or 9.9 per cent).

These three industries employed 12,769 people in total or 38.4 per cent of the total employed resident population.

Appendix F identifies seven relevant future projects relevant for the network augmentation works component of the project. These relevant future projects may result on over 1,800 employment opportunities during construction. Based on the available schedules, HumeLink, EnergyConnect (NSW – Eastern section), Belhaven Battery Energy Storage System and Mangoplah Battery Energy Storage System projects may overlap during their construction phases (refer to Figure 4.3).



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VNI West – EIS

Figure 4.3
Cumulative impact projects

Legend

— Rail line
— Main road
— Named waterway
— EnergyConnect (NSW - Eastern section) project (under construction)

— Existing transmission line
— Substation
— National park

— Project footprint
— Cumulative Study area
— Combined temporary worker accommodation facility

— HumeLink
— Albury to Illabo
Relevant future projects
— Livingstone Solar Farm
— Belhaven Battery Energy Storage System
— Gregadoo Solar Farm

— Mangoplah Battery Energy Storage System



4.2.4 *Accessibility*

This section provides an overview of housing and tenure, transport and travel networks and telecommunications in the Wagga Wagga LGA. There was no specific data available for Gregadoo SAL related to housing; however, transport and telecommunication data have been included.

In Wagga Wagga LGA, the occupied housing is 92.5 per cent (24,776 dwellings), which is slightly higher than NSW with a 90.6 per cent. Moreover, unoccupied dwellings in Wagga Wagga LGA are 7.5 per cent (2,005 dwellings) which is lower than NSW with a 9.4 per cent (299,524 dwellings).

According to the ABS data on tourism accommodation from 2015 to 2016, the Wagga Wagga LGA has 30 establishments for short-term accommodation, which includes 1,012 rooms and 2,950 beds.

The city provides a comprehensive range of commercial facilities and medical services, including the Wagga Wagga Base Hospital with a 24-hour emergency department. The Wagga Wagga Base Hospital includes 60 clinic rooms and treatment spaces for allied health, outpatient, and community health services.

The city also has several public and private educational facilities ranging from early learning to primary and secondary education as well as Charles Sturt University Wagga Wagga campus and Riverina Institute of TAFE NSW.

Wagga Wagga also boasts numerous cafes, restaurants, pubs, vineyards, more than 30 hotel/motel operators, and five caravan parks.

The City of Wagga Wagga also provides multiple parks and recreational spaces that contribute significantly to the city's liveability, fostering community engagement, physical well-being, and cultural enrichment. These amenities cater to both residents and visitors, enhancing the city's quality of life and contributing to its vibrant community fabric. They include Wagga Wagga Botanic Gardens with its 22 hectares of curated landscapes and a small zoo, Apex Park that is strategically positioned near the city centre, and Wollundry Lagoon considered a birdwatcher's attraction, hosting native and migratory species in their natural habitat. The city presents a cultural scene with the Wagga Wagga Civic Theatre and Wagga Art Gallery – National Art Glass Gallery.

The Wagga Wagga airport offers daily direct flights to Sydney and Melbourne. Major highways and roads in the Wagga Wagga LGA include the Sturt Highway, Olympic Highway, Koorringal Road and Copland Street. The Gregadoo SAL are served by the same highways, and the main roads are Gregadoo East Road, Elizabeth Avenue and Big Springs Road.

The Wagga Wagga LGA has 5G and 4G Telstra network coverage. Gregadoo only has 4G Telstra coverage. The comparable data for Optus' network coverage shows strong 5G coverage in Wagga Wagga LGA; however, there is only 4G coverage outdoors when using antenna within Gregadoo SAL.

4.2.5 *Health and wellbeing*

In Wagga Wagga LGA, 20.6 per cent of the population has at least one long-term health condition (ABS, 2021). The most prevalent conditions are asthma, affecting 11.1 per cent, and mental health conditions, affecting 10.3 per cent of the population. In contrast, the community of Gregadoo SAL faces different health challenges. Approximately 3 per cent of the residents (56 individuals) have a long-term health condition. Among these, asthma affects 9.12 per cent, while arthritis impacts 6.2 per cent of the population (ABS, 2021).

In the Wagga Wagga LGA, 12.38 per cent of people are involved in caring activities, and 5.91 per cent need assistance for core activities. This suggests a greater demand for support services related to daily living tasks in the regional area. In the Gregadoo SAL, 13.24 per cent of people are engaged in carer activities, and 2.5 per cent need assistance, which could indicate certain level of vulnerability. However, due to the higher income and proximity to the City of Wagga Wagga, this community likely has good access to social services and a relatively good quality of life.

4.2.6 Culture

4.2.6.1 Aboriginal culture

The Wagga Wagga LGA is located on traditional Wiradjuri Country, the largest Aboriginal Nation in NSW. There are 4,471 Aboriginal and Torres Strait Islanders who reside in the LGA, which represents 6.6 per cent of the population (ABS, 2021). Gregadoo SAL presents just 10 people who identified as an Aboriginal and Torres Strait Islander person, which represents 3.6 per cent of the population (ABS, 2021).

The name Wagga Wagga is derived from the Wiradjuri language. With “Waga” signifying a place to dance or celebration and the repetition of the word emphasises its importance and suggests a vibrant hub of festivities and cultural expression (City of Wagga Wagga, 2021). Known as “the people of the three rivers”, the Wiradjuri Nation has a connection to the Lachlan, Murrumbidgee, and Macquarie rivers, which traditionally provided sustenance for their communities.

The Wagga Wagga LGA still remains home for many Wiradjuri people and also welcomes many Aboriginal people from various Nations. Wagga Wagga City Council believes this reflects the city’s rich cultural diversity and ongoing commitment to reconciliation (City of Wagga Wagga, 2021). The Wagga Wagga Local Aboriginal Land Council is within the social locality. The objectives of the LALC are cultural preservation and healing, community engagement and support, collaboration with multiple stakeholders of the region, advocacy, and land management.

There are seven significant Aboriginal sites registered in Wagga Wagga LGA: Wollundry Lagoon, Tony Ireland Park, Wiradjuri/Wiradyuri Reserve (Wiradyuri is the preferred spelling of commonly used Wiradjuri across the southern part of the Nation), Gobba Beach, Bomen Lagoon, Bomen Axe Quarry and Flowerdale Lagoon.

The Wiradjuri people actively engage with the Wagga Wagga City Council in the development and implementation of their Reconciliation Action Plans. These collaborative efforts reflect a commitment to cultural well-being, health, and community reconciliation. For example, the Wiradjuri people have played a pivotal role in establishing the Riverina Medical and Dental Aboriginal Corporation (RIVMED).

According to the *Technical Paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a), there are four Aboriginal cultural sites listed on AHIMS within or near the Aboriginal heritage study area for the network augmentation component. There is a dominance of scarred trees in the area, especially where there are remnant stands of native trees. Scarred trees provide a tangible link to the past and provide evidence of Aboriginal subsistence activities through the deliberate removal of bark or wood (NGH environmental, 2018).

4.2.6.2 Non-Aboriginal culture

European settlers arrived in the mid-19th century, establishing pastoral properties and significantly contributing to the growth of Wagga Wagga. The Best Family Cemetery holds a pivotal place in the European settlement narrative of Wagga Wagga. It stands as one of the few remaining remnants of the original European family that settled in the area. In 1832, George Best squatted at Flowerdale, which today is called Horseshoe Lagoon.

Technical paper 11 – Non-Aboriginal heritage impact assessment (Navin Officer, 2025b) identified three listed local heritage items in the non-Aboriginal heritage study area. The items are:

- Ivydale listed under Wagga Wagga City LEP 2010
- Ivydale Woolshed, Gregadoo listed under Wagga Wagga City LEP 2010
- Stone Ruin listed under Wagga Wagga City LEP 2010.

Additionally, communities of the Wagga Wagga LGA participate in diverse cultural events throughout the year, such as FRESH in June-July and the Fusion Botanical Festival in October. A list of the main events is provided in Appendix C5.

4.2.7 Surroundings

The Wagga Wagga LGA is part of the Riverina Murray region and is described in section 4.1.7.1. Within the Wagga Wagga LGA, there are several nature reserves such as Pomingalarna Reserve, Marrambidya Wetland and the Willans Hill Reserve. The LGA also host National Parks such as the Murrumbidgee Valley National Park is approximately 22 kilometres west of City of Wagga Wagga and the Livingstone National Park about fourteen kilometres south of the network augmentation works component.

As discussed in section 4.1.7.2, the Riverina Murray is experiencing the effects of climate change which might produce flooding and bushfire events. Wagga Wagga has areas susceptible to overland flow flooding, which occurs due to intense rainfall events. The Wagga Wagga Major Overland Flow Floodplain Risk Management Study and Plan outlines the flood risks and management strategies for the area.

Technical paper 9 – Hydrology, flooding and water quality impact assessment (WSP, 2025e) found that flooding in the Gregadoo SAL is mainly due to local rainfall in the Coxs Creek and O'Briens Creek catchments, with most flows staying in the main watercourses. The HumeLink Hydrology and Flooding Impact Assessment Report (Aurecon, 2023) also noted riverine flooding in Big Spring Creek, O'Brien's Creek, and Gregadoo Creek. In relation to bushfire prone land, Wagga Wagga LGA has bushfire prone land mainly in category 2, which means these areas are at a moderate risk of bushfires. Gregadoo SAL includes some areas in category 1, which indicates a higher risk of bushfires (Wagga Wagga City Council, 2022).

4.2.8 Decision-making systems

A Wagga Wagga community consultative group (CCG) has been established by Transgrid for the HumeLink project since 2021.

Additionally, Transgrid counts with the Transgrid Discovery Hub in Wagga Wagga City. The hub offers a consistent and accessible point of contact with the Wagga Wagga community, landholders, and businesses in the surrounding areas. Information about Transgrid major projects, operations and community-based activities is displayed at the hub.

Two community information sessions were held at the Transgrid Discovery Hub. The first session, organised in November 2024, had no attendees. Due to the low participation, Transgrid held a second session in February 2025, with six participants. The community's key areas of interest included the project's interaction with other projects like HumeLink and EnergyConnect (NSW – Eastern section), heritage and landholder management, general community perception of the project, and the benefits to the local community.

5 Engagement findings

This section provides a summary of the findings from the SIA engagement activities (55 total participants) to date. It includes a summary of the data collected during two fieldwork campaigns in August and November 2024, phone interviews and an online survey with 23 responses as described in section 3.3.3. The SIA engagement activities were developed prior to publishing of the final construction corridor, therefore some views (particularly related to concerns about construction impacts) may shift as more information is provided by Transgrid during the construction phase.

These findings include engagement feedback from stakeholders in the NSW/Victorian border to the future Dinawan substation component (refer to Table 5.1) and for the network augmentation between the existing Wagga 330 kV substation and future Gugaa 500 kV substation, Livingstone Gully Road component of the project (refer to Table 5.2). Engagement findings have been divided into different tables for more clarity. Feedback from interviews and the online and paper-based survey consistently identified the same issues, which indicates engagement had reached a point of saturation. In qualitative studies, this is the point where no new issues are being identified by the impacted groups.

It is important to note that while findings were classified under one social impact category, they may also be relevant to other categories or multiple categories in the impact assessment sections.

The key findings from these engagement activities are:

- concerns about environmental impacts on flora and fauna, particularly from clearing activities and noise (Wanganella, Conargo, Moulamein, Gregadoo)
- concerns about changes to landscape due to the project and other energy projects locally, as well as combined impacts of multiple renewable energy projects on agricultural operations, safety, and bushfire risks
- concerns about land use changes and impacts on agricultural practices, and land price decreases and reduced farming land (Jerilderie, Moulamein, Gregadoo)
- concerns around constraints to local services including health services which are already under-resourced; telecommunications and internet; and potential overload of hospitality services
- concerns about mental health issues due to project impacts or concerns about health issues associated with transmission lines (Jerilderie, Moulamein, Mallan, Wanganella)
- concerns about loss of cultural and historical heritage, as well as impacts on Aboriginal sense of belonging and non-tangible heritage
- expectations of employment opportunities and benefits for local businesses
- dissatisfaction with engagement activities and lack of information, noting this sentiment has improved from the first engagement campaign as being commonly raised by participants to not being raised as often during the second field campaign.
- positive feedback about Transgrid engagement related to land access (Gregadoo).

Additionally, survey data has been summarised in Table 5.3.

5.1 Interviews summary findings

Table 5.1 SIA community and stakeholder engagement summary for the NSW/Victorian border to the future Dinawan substation component

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
Community	Community member	Two community members from Moulamein identified an increased conflict in communities arising from differing perspectives (both positive and negative) about the project, its impacts, and the potential benefits to landholders and the community.	Section 6.1.1
		Two community members from Moulamein expressed that the permanent staff from the project could contribute to the community by integrating into the local area and participating in local sports clubs.	Section 7.1.1
	Murray River Council	Representative from Council identified division in communities due to the project.	Section 6.1.1
	Neighbouring landholder	A neighbouring landholder from Moulamein expressed concern about landholders directly affected by the project footprint and sections of the family wishing to leave the property and not to raise the family in coexistence with the project.	Section 6.1.1
	Murrumbidgee Council	Council representative perceives some division and tension in the community. Farmers who have agreed to the multiple renewable energy developments in the local area are being reimbursed, causing tension with those who haven't. Additionally, those who initially declined to host some of these renewable energy developments are now realising they missed an opportunity and are looking to the Council for benefits.	Section 6.1.1
Way of life	Community member	Eight community members across different communities expressed that they would prefer not to have the project developed in their region (Conargo, Jerilderie, Moulamein, Wanganella).	Section 6.1.1 and 6.7.1
		Nine community members identified that the project would have major impacts in their countryside lifestyle, enjoyment of natural spaces and surroundings. They are particularly worried about visual changes to the landscape (Jerilderie, Conargo, Moulamein, Mallan and Wanganella).	Section 6.2.1
		Five community members, and one landholder, expressed concerns about potential landscape alterations due to multiple energy-related projects in the area (transmission lines, wind farms and solar farms), fearing visual disruptions (Jerilderie, Conargo, Moulamein and Wanganella).	Section 7.4.1

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
		One community member expressed concerns about the impacts of temporary worker accommodation facilities. They expressed that currently there is a limited population in the area and the project would introduce a large number of workers residing in the area (Jerilderie).	Section 6.2.1
	Landholders possibly directly affected by the project footprint	Two landholders expressed concerns about the impacts of temporary worker accommodation facilities, with concerns about their integration with the community and fairness to local businesses (Gala Vale and Wanganella).	Sections 6.2.2 and 6.3.2
		Two landholders identified that the project would have major impacts in their countryside lifestyle, enjoyment of natural spaces and surroundings. They are particularly worried about visual changes to the landscape (Jerilderie, Conargo, Moulamein, Mallan and Wanganella).	Section 6.2.1
Livelihoods	Community member	Four community member expressed expectations that the project would create employment opportunities and benefit local businesses (Jerilderie and Moulamein). A local business provider in Moulamein expressed local accommodation providers are already benefiting from the project.	Sections 6.3.1 and 6.3.2
		Four landholders and community members raised concerns about decrease in price of their land and property due to the project (Moulamein and Wanganella).	Section 7.3.2
		Four community members are concerned that the project may reduce the amount of available land for farming, disrupt irrigation areas and the access to properties. This leads to fears that farming may no longer be a major economic activity in the area (Moulamein, Mallan and Wanganella).	Sections 6.3.4 and 7.2.2
		One community member expressed concern that the project could affect farm biosecurity, with trucks potentially bringing weeds to the farms (Wanganella).	Section 6.3.4
		Two community members expressed particular attention to the housing problem in the region and its relationship with the lack of health and education professionals in the area. They are interested on getting housing built in the local social locality as part of the benefit-sharing scheme (Deniliquin, Jerilderie and Wanganella).	Section 6.1.2

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
	Landholders possibly directly affected by the project footprint	Landholders expressed concerns about the possible tax implications of the compensation payments. If the payments are both upfront and annual, they are fully taxed by the Australian Taxation Office. These payments are considered current income and not an offset (Jerilderie). Also, one landholder identified a possible increase in the cost of insurance for their land if they are close to transmission or renewable energy projects (Gala Vale).	Sections 7.2.1 and 7.3.2
	Neighbouring landholder	During the focus group, landholders that develop farming activities are worried that the project could impact their productive farming capacity by affecting machinery movement, aerial sown rice operations, and overhead sprinklers, which require a 4 km clear span (Mallan). Two neighbouring landholders expressed concerns about constraints to conduct aerial activities. Landholders expressed that the location of the project will interfere with landing at their property airstrips (Gala Vale and Mallan).	Section 7.2.2
	Murray River Council	A representative from the Council stated that they are concerned about the potential impact on landholders. The representative explained that landholders are worried about the effects of the project on their agricultural land and feeling uncertainty regarding changes to insurance in their farming practices.	Section 7.3.2
		A Council representative expects that the project will bring increased employment to the local area, particularly in operational jobs. They mentioned the Council's Economic, Tourism, and Employment strategy, which aims to support employment and economic growth in the LGA.	Section 6.3.1
		A Council representative expects an increased in business opportunities. They identified an opportunity to benefit the community with workers spending in local businesses and shops.	Section 6.3.2
		A Council representative stated that a beneficial initiative could involve preparing local businesses for procurement opportunities through training, qualifications, and quality assurance.	Section 6.3.2

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
Accessibility	Service provider	One service provider and three community members think that health services in their community are stressed and under-resourced. A possible influx of workers is likely to exacerbate pressure on the system (Deniliquin, Moulamein, Jerilderie and Wanganella).	Section 6.4.1
		One service provider and three community members are concerned about the poor connectivity for calls and internet in the area, fearing that these telecommunications issues would worsen during construction due to the increased population from the workers associated with the project (Deniliquin, Jerilderie and Conargo).	Section 6.4.3
		One service provider identified a potential overload of hospitality services, such as venues, food, and entertainment, due to the increase in workers in the area (Deniliquin).	Section 6.4.1 and 6.4.2
	Murray River Council	A Council representative acknowledged that while some small businesses could benefit from servicing the project's workers, the town is not well-equipped, and these businesses may struggle to meet the demand.	Section 6.3.2 and 6.3.3
	Community member	One community member showed concern about effects of transmission lines on airplanes used for firefighting (Jerilderie).	Section 6.4.1
		Three community members are concerned about an increase in traffic accidents and reduced road safety due to higher traffic levels in local areas during construction. They describe the current traffic levels on roads as low (Jerilderie, Moulamein and Wanganella).	Section 6.2.2
		Five community members and three landholders are concerned that the already damaged roads may deteriorate further due to the heavy trucks used during the construction phase of the project and due to cumulative impact from other developments (Jerilderie, Conargo, Moulamein and Wanganella).	Section 6.2.2
	Murray River Council	Council indicates that there may be pressure on health and other services. There are no opportunities for health services development due to the small population. Suggest looking at the larger centres for health services for workers.	Section 6.4.1
	Edward River Council	A Council representative indicated potential impacts of the project on road use, particularly during harvest time.	Section 6.2.2
		Council representative indicates that some communities are in very remote areas and may have communication issues. This is also related to access to roads.	Section 6.4.3

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
	Murrumbidgee Council	A Council representative identified that the temporary workers, particularly those working on the Dinawan substation, could have a significant impact on health services.	Section 6.4.1
		A Council representative stated that housing has been occupied by construction workers, leaving other professionals, such as teachers, without housing. They also observed an increase in rent prices. It also creates problems for the tourism area as there is no accommodation available.	Section 6.4.2
		A Council representative made an observation about telecommunications. One of the temporary worker accommodation facilities at the future Dinawan substation is located under a telecommunication tower, a joint venture between the Council and Telstra. Before the temporary worker accommodation facility was established, the Council representative said reception was adequate. Now, within two to three kilometres of the temporary worker accommodation facility, the Council representative noted there is no reception, and coverage drops. The temporary worker accommodation facility houses 300-400 people, and this concentration of people in one area could be saturating the telecommunications network.	Section 6.4.3
Health and wellbeing	Community member	During the first field campaign, five community members expressed feelings of anxiety, stress, and uncertainty about their future. They attributed these concerns to the project, available information, and its potential impacts on their lifestyle, landscape, and agricultural livelihoods (Jerilderie, Moulamein, Mallan and Wanganella).	Section 6.5.1
		Three community members expressed concerns about health issues associated to transmission lines. One person made a reference to the electric and magnetic fields (EMF) and possible negative effects to people and stock (Moulamein and Wanganella).	Section 7.3.1
		Five community members feel overwhelmed and stress due to the multiple energy related projects and projects in the area and its cumulative impacts (Jerilderie and Moulamein). A Moulamein community member expressed that cumulative impacts are their biggest concern.	Section 6.5.1
		Two community members have identified potential overuse of firefighting services due to possible emergency events associated with new energy projects in the area and are concerned about the lack of fire plans in the project (Jerilderie and Conargo).	Section 6.4.1

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
	Neighbouring landholder	A landholder in Deniliquin expressed his biggest concern are the combined impact of the project with the EnergyConnect (NSW – Eastern section) project in terms of visual, grazing, safety, moderate risk of bushfire and roads, and feels that there is little that can be done to manage those impacts.	Sections 6.2.1 and 7.4.1
	Service provider	One service provider identified fear of potential air pollution due to the increased number of cars and trucks on the roads associated to the project (Deniliquin).	Section 6.2.1
		One service provider expressed feelings of stress from uncertainty and not clear information about transmission line corridor (Deniliquin).	Section 6.5.1 and 6.7.1
Culture	Aboriginal and Torres Strait Islander community member	An Aboriginal and Torres Strait Islander community member expressed concerns about the potential loss of both Aboriginal and non-Aboriginal cultural and historical heritage due to the proposed works (Mallan).	Section 6.6.1
		An Aboriginal and Torres Strait Islander community member suggested that if Aboriginal cultural heritage material is found during construction, it should be relocated to a place within Country, rather than to a shed or museum (Mallan).	Section 6.6.1
	Murray River Council	A Council representative is worried about project impacts in the sense of belonging and non-tangible heritage in Aboriginal people.	Section 6.6.1
	Murrumbidgee Council	A Council representative identified a division between Aboriginal groups. It is perceived that the Wiradjuri group (Wagga Wagga, Hay, Narrandera, and Griffith) is being heard more than smaller tribes such as Yorta Yorta, Nari Nari, Perreppa Perreppa (Barapa Barapa), Wamba Wamba (Wemba Wemba), and Waddi Waddi, who are likely more impacted by the project (located in Jerilderie, Deniliquin, and Coleambally). There are traditional groups outside the LALCs that need to be heard.	Section 6.7.1
Surroundings	Community member	Six community members are highly concern about the potential environmental impacts in flora and fauna, particularly from clearing activities and noise during construction phase. The Plains Wanderer was mentioned as one of the species that would not survive within 200 metres of the power lines (Wanganella, Conargo and Moulamein).	Section 7.4.1
		One community member is concerned about the impact of the project on flood-prone areas and the potential consequences for their safety during flooding events (Wanganella).	Section 7.4.1

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
	Murrumbidgee Council	Council identified effects to visual amenities and landscape vistas as impacts related to the project.	Section 7.4.1
Decision-making	Community member	During the first field campaign, three community members expressed dissatisfaction with Transgrid's engagement activities. They feel there is a lack of information about the project's impacts and that they are not included in the decision-making process for the transmission line. Additionally, there is a strong need for better coordination and wider dissemination of information through community hubs such as council offices, art galleries, supermarkets, and local papers (Moulamein and Mallan).	Section 6.7.1
		A community member expressed that the community is seeking to establish a community foundation to manage the benefit sharing funding from renewable projects, and eventually this project. Community member expressed they want to have control of fundings and to generate long-term sustainability (Moulamein).	Section 6.1.2
		Four community members voiced a sense of limited agency in the development of this project. They expressed frustration over the lack of engagement and feel powerless, perceiving that decisions have been made without considering their input (Jerilderie, Mallan and Moulamein).	Section 6.7.1
		A community member expressed concern over capacity to analyse information and to provide feedback during the planning and approvals of the project. Suggested communities should be provided with consultants that review information for the community and give them advisory (Moulamein).	Section 6.7.1
	Landholders possibly directly affected by the project footprint	During the second field campaign, a landholder expressed that engagement with Transgrid has been positive.	Section 6.7.1
	Edward River Council	A Council representative stated that some communities have not felt heard in relation to the project.	Section 6.7.1
	Murrumbidgee Council	A Council representative criticised the social investment opportunities discussion process with Transgrid. The council representative stated that Transgrid informed them that there would be a social investment fund, but it would be contestable. As a result, the Council representatives feel frustrated with this process, feeling bribed and bought off.	Section 6.1.2
		Council representative expressed that after the experience with the solar farms, the community no longer participates in information sessions because the trust is lost.	Section 6.7.1

Table 5.2 SIA community and stakeholder engagement summary for the network augmentation works component

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
Way of life	Landholders possibly directly affected by the project footprint	Three landholders expressed their connection to the Gregadoo area and the cattle farming lifestyle, as their families have lived there or in the surrounding areas.	Section 6.2.1
		One landholder had to adjust their farm planning, including fencing activities in paddocks, due to the upcoming construction activities related to the project. He identified the need for clear Property Management Plans to avoid impacts in cattle.	Section 6.3.4
		One landholder is worried about soil erosion due to construction activities, which could lead to flooding. He mentioned that some trees might need to be removed, potentially affecting the creek's embankment and increasing flood risks.	Section 6.2.1
Livelihoods	Landholders possibly directly affected by the project footprint	Three landholders interviewed stated that their main residential property is in Wagga Wagga city. They primarily use their properties in Gregadoo as hobby farms and for grazing. One of these landholders also uses the property for sheep (around 240) and cattle (around 23) farming, although it serves as a complementary income for him.	Section 6.1.1
		One landholder noted that Transgrid's measures to prevent weed cross-contamination from other properties have been effective so far. However, she would like these measures to continue during construction, as the number of machinery and workers is expected to increase.	Section 6.3.4
		Two landholders believe that the primary benefits of the project would be providing energy for the future and potentially creating job opportunities for local residents.	Section 7.1.2
Accessibility	Landholders possibly directly affected by the project footprint	One landholder emphasised the need for a clear Property Management Plan to avoid issues with access points on their property.	Section 6.3.4
		Two landholders positively evaluated Transgrid's efforts, noting that they were consulted about access locations to their property. They expressed feeling heard and gave a positive evaluation of their relationship with the Transgrid engagement team.	Section 6.3.4

Social impact category	Stakeholder type	Engagement feedback	Where addressed in this report
Culture	Landholders possibly directly affected by the project footprint	One landholder expressed concerns about the potential impacts on heritage and cultural values due to the construction activities.	Section 6.6.1
Surroundings	Landholders possibly directly affected by the project footprint	One landholder highlighted the importance of the landscape and natural environment, identifying flora and fauna as key elements of their surroundings.	Section 7.4.1
		Three landholders noted that the project might affect their landscape views. They acknowledged that, although there are existing towers in the area, the new project infrastructure would be taller, impacting their enjoyment of the landscape.	Section 7.4.1
		One landholder is worried about the potential impact on animal habitats due to tree removal. The landholder recommended providing replacement trees as a mitigation measure.	Section 7.4.1
Decision-making systems	Landholders possibly directly affected by the project footprint	One landholder felt that they did not have enough information about energy-related developments in the area. The landholder mentioned that had this been known, then they wouldn't have invested in building a house on the land. The landholder also expressed that the Wagga Wagga City Council does not have a concrete development plan for the local area.	Section 6.7.1

5.2 Survey summary findings

Survey responses correspond to 23 individuals living around the NSW/Victorian border to the future Dinawan substation component of the project (NSW and Victoria). These included community members (12), business owners (four), landholders potentially directly affected by the project footprint (two), and neighbouring landholders (five).

The summary of findings per stakeholder group is provided in Table 5.3. The detailed findings of survey are provided in Appendix D.

Table 5.3 Survey summary findings

Stakeholder	Location	What do you value most about your property and lifestyle?	Top concerns	Comments on areas of key concerns	Top investment and benefit themes
Community members	Moulamein, Wakool, Swan Hill, Argoon, Jerilderie	— natural beauty of the landscape — sense of community — quiet rural retreat with lovely natural views, access to recreation and fishing, agricultural ties	— change in land use — impact on property values — increase in bushfire risk	— need for clear communication about expected impacts and plans to mitigate them — concerns about cumulative impacts of multiple infrastructure projects — desire for community benefits and compensation for disruptions	— health and wellbeing — environment — services, facilities and local infrastructure
Business owners	Barham, Jerilderie	— business activities and operations (e.g. tourism) — visual amenity and local views — cultural heritage	— impact on business activities and operations — change in land use — impact on property values	— survey respondents identified need for more transparency and communication — interest in strategic investment in economic projects to create sustainable jobs — concerns about the impact on local roads and infrastructure	— environment — telecommunications and connectivity — emergency response

Stakeholder	Location	What do you value most about your property and lifestyle?	Top concerns	Comments on areas of key concerns	Top investment and benefit themes
Landholders potentially directly affected by the project footprint	Charlton (VIC) and Cobramunga	— sense of community, satisfaction of hard work — ability to grow own food — mindfulness, appreciation for seasons, caring for animals and land	— change in land use — change in visual amenity — impact on property value	— need for greater transparency and the importance of community consultation — alternatives to the project were suggested (e.g. upgrading existing infrastructure or nuclear energy) — additionally, landholders expressed concerns about the potential cost overruns	— health and wellbeing — emergency response — education
Neighbouring landholders	Wanganella, Mallan, Mabins Well, Marnoo East (VIC)	— landscape – the flat open plains, uninterrupted horizon — intergenerational ties, community connection — privacy	— change visual amenity (i.e., views and vistas in your local area) — change in land use — impact on property values	— objections to the project and/or renewable energy projects, or that these projects should be concentrated in areas where the demand is — interest in fire risk management	— environment — health and wellbeing — services, facilities and local infrastructure

6 Impact assessment – Construction

This chapter presents an assessment of the potential impacts, including cumulative impacts, that are expected to occur during construction. The impact rating assigned within this section does not consider mitigation as per the methodology described in Chapter 3.

Management measures are proposed to mitigate the impacts identified in this section (refer to section 8.1). A ‘residual impact rating’ has been applied to identify the significance of the social impact after the proposed mitigation measure has been implemented (refer to section 8.2).

6.1 Community

6.1.1 *Changes to community cohesion*

Changes to community cohesion may arise among landholders directly affected by the project footprint, adjacent landholders, and the broader community due to differing opinions about the project. The differing opinions relate to the distribution of impacts and benefits during construction, and the influx of non-residential workers. Changes to community cohesion could also arise if some community members within the direct and local social locality decide to relocate due to the project. The likelihood of changes to community cohesion has been determined considering engagement feedback.

6.1.1.1 NSW/Victorian border to the future Dinawan substation

During SIA engagement, for the NSW/Victorian border to the future Dinawan substation component, representatives from Murray River Council and Murrumbidgee Council identified division in communities due to the project and tension among farmers regarding development agreements with other energy related projects and potential missed opportunities. This is consistent with feedback from community members of Moulamein, Conargo, Jerilderie and Wanganella who identified conflicting views arising in communities about the project, its impacts, and the potential benefits to landholders and the community, with some expressing that they would prefer not to have the project developed in the region (refer to section 5.1).

Moreover, during engagement at Moulamein, two community members raised concerns about a landholder directly affected by the project footprint, where some family members would decide to relocate elsewhere to avoid living next to the project. This concern speaks directly to how changes to community cohesion are currently experienced by community members.

For the magnitude of this impact, the following has been considered:

- High levels of socio-economic disadvantage at Moulamein (489 inhabitants), Conargo (117 inhabitants) and Wanganella (61 inhabitants) (refer to section 4.1.3.3) and greater socio-economic advantage at Jerilderie (922 inhabitants).
- These are close-knit communities that rely on each other and highly value this aspect of their community. Changes to community cohesion would be a noticeable deterioration for the community and may impact on overall resilience of more vulnerable community members.
- Level of concern about the issue across the direct social locality was moderate, with neighbours continuing to have relationships with each other and being able to talk to each other about the project.
- Transgrid has developed a Community Investment and Benefits Plan in consultation with local communities (refer to section 6.1.2) and conducted extensive engagement throughout corridor selection to minimise project impacts and to inform the EIS and management measures (refer to section 4.1.8).

For the direct social locality, which includes landholders directly affected by the project footprint and neighbouring infrastructure, Mallan, Moulamein, Conargo and Jerilderie, it is likely that changes to community cohesion would occur. The magnitude of this change would be minor, resulting in a Medium unmitigated impact.

For the local social locality, it is possible that the impact would occur, resulting in a Medium unmitigated impact (refer to Table 6.1). Negligible impacts are anticipated for the regional social locality, as impacts to community cohesion are felt with those living closer to one another.

SIA survey participants raised concerns about the cumulative impacts of multiple infrastructure projects. As outlined in section 4.1.3.4, there is a total of sixteen projects that could contribute to a cumulative impact during construction based on time and spatial overlaps with the project, with nine of these sixteen having a SIA available.

The available SIAs for the sixteen relevant future projects have identified medium to high impacts to community cohesion due to the influx of non-residential workers and for conflicting views about renewable energy projects (including their validity, and perceived unequal sharing of impacts and benefits). Potentially more than 5,000 workers will be required for the construction of the sixteen projects, of these a large proportion will be non-residential workers, and fourteen projects would accommodate their workers at temporary worker accommodation facilities. This would result in a High unmitigated cumulative impact for the direct and local social locality (refer to Table 6.2).

6.1.1.2 Network augmentation works

For the network augmentation works component of the project, it is anticipated that Wagga Wagga LGA may be better equipped to absorb changes to community cohesion due to greater socio-economic advantage and being a larger regional centre. SIA engagement with three landholders directly affected by the project footprint revealed that while they don't have their primary residence in Gregadoo they still have some farming activities at their properties and value the farm related lifestyle. The change would likely be experienced for only a short time, resulting in a Medium unmitigated impact (refer to Table 6.1).

Cumulatively, HumeLink, EnergyConnect (NSW – Eastern section) project, Gregadoo Solar Farm, Belhaven Battery Energy Storage System (BESS), Inland Rail (Albury to Illabo) and Mangoplah Battery Energy Storage System (BESS) would contribute to the influx of workers, with some of them being accommodated in Wagga Wagga. HumeLink and EnergyConnect (NSW – Eastern section) project stakeholders expressed mixed views about the positive and negative impacts of these projects and identified medium impacts to community cohesion. Consequently, a Medium unmitigated cumulative impact is determined for the local social locality (refer to Table 6.2).

Table 6.1 Impact assessment: Changes to community cohesion

Project component	Social impact	Changes to community cohesion		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Likely	Minor	Medium
	Local social locality	Possible	Minor	Medium
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct and local social locality	Possible	Minor	Medium
	Regional social locality	Possible	Minimal	Low

Table 6.2 Cumulative impact assessment: Changes to community cohesion

Project component	Social impact	Changes to community cohesion		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct and local social locality	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct and local social locality	Possible	Moderate	Medium
	Regional social locality	Possible	Minor	Low

6.1.2 Enhanced community wellbeing as a result of benefit sharing programs

The Transgrid Community Investment and Benefits Plan and the construction contractor's outcomes plans (Workforce and workforce development plan, Local industry participation plan and Aboriginal and Torres Strait Islander peoples' participation plan) outlines various ways in which the project would deliver community investment and benefits to the social locality during construction and operation phases of the project. Appendix C section C4, provides an overview of some of the Transgrid Corporate Sponsorships Programs that will be carried through for the project, these largely focus on education and upskilling programs.

In addition, Transgrid is currently delivering the Community Partnerships Program, which offers grants of up to \$5,000 for not-for-profit organisations that are local to their planning, operations, and major project areas (Transgrid, 2024b). The following projects have been awarded funds within the social locality for both components of the project:

- Deniliquin Local Aboriginal Land Council – supporting Aboriginal and Torres Strait Islander youth participation in the Mighty Murray Marathon annual kayaking event
- Hay Aboriginal Medical Service – information sessions about health, mental health and safety in the community
- Moulamein Art Gallery – 'recycle and repurpose' furniture restoration training for community members
- Moulamein Community Gym and Moulamein Bowling Club
- Wanganella District Social Club – Wanganella Quickfill Standpipe Hardstand Upgrade to eliminate hazards
- Many Mobs Indigenous Corporation in Jerilderie – funding for local facilitator
- South Wagga Public School P&C Association – yarning circle and cultural garden
- Funds for equipment for Riverina Environmental Education Centre and Boys to the Bush Ltd in Wagga Wagga.

6.1.2.1 NSW/Victorian border to the future Dinawan substation

A Moulamein community member expressed that the community is seeking to establish a community foundation to manage the benefit sharing funding from renewable projects, and eventually this project. Another community member expressed they want to have control of funding and to generate long-term sustainability (Moulamein).

The direct and local social locality for NSW/Victorian border to the future Dinawan substation component is likely to experience benefits due to the multiple initiatives and funds delivered by Transgrid through its Community Partnerships Program and benefit sharing initiatives. However, these are expected to have a minor magnitude in the local and regional social locality due to their targeted extent, resulting in a Medium positive impact (refer to Table 6.3).

Regarding cumulative impacts, seventeen out of the nineteen relevant future projects correspond to renewable energy and two to transmission. All of these projects have committed to the delivery of benefit sharing programs during construction and in some cases during operations. Therefore, it is likely that the local and regional social locality would see an enhancement in community wellbeing, resulting in a High positive cumulative impact (refer to Table 6.4).

6.1.2.2 Network augmentation works

For the network augmentation works, the social locality (direct, local and regional) would also benefit from the project's Community Partnerships Program and Transgrid Community Investment and Benefits Plan resulting in a Medium positive impact, considering the proportion of beneficiaries in relation to the total population (refer to Table 6.3). Five of the seven relevant future projects have also committed to the delivery of benefit sharing programs, resulting in a High positive cumulative impact (refer to Table 6.4).

Table 6.3 Impact assessment: Enhanced community wellbeing as a result of benefit sharing programs

Project component	Social impact	Enhanced community wellbeing		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Social locality (direct, local, regional)	Likely	Minor	Medium (positive)
Network augmentation works	Social locality (direct, local, regional)	Likely	Minor	Medium (positive)

Table 6.4 Cumulative impact assessment: Enhanced community wellbeing as a result of benefit sharing programs

Project component	Social impact	Enhanced community wellbeing		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Social locality (direct, local, regional)	Likely	Moderate	High (positive)
Network augmentation works	Social locality (direct, local, regional)	Likely	Moderate	High (positive)

6.2 Way of life

6.2.1 *Reduced sense of place due to construction-related amenity impacts*

Change of sense of place can occur when people experience alterations to aspects of amenity such as noise, vibration, air quality and visual aesthetics in their local environment (Gieryn, 2000). Landholders directly affected by the project footprint and neighbouring properties would almost certainly experience changes to their amenity during construction. Construction activities that would bring changes to amenity include earth works, land clearing, the erection of transmission line structures, stringing activities, and construction road traffic.

The magnitude of this impact is determined by the duration of exposure to these changes. In this case, the construction would last approximately two years starting in late 2026. Construction work would be transient for the transmission line works, moving along the alignment, meaning that amenity impacts are not expected to occur simultaneously across the social locality. However, works or activities at substations, construction compounds or temporary worker accommodation facilities would not be transient, meaning amenity impacts at those locations would have a more prolonged duration.

6.2.1.1 NSW/Victorian border to the future Dinawan substation

Other factors informing the magnitude of this impact are understanding the outcomes of the EIS technical papers, the individual's ability to adapt, and the level of concern about this impact. During SIA engagement, nine community members and two landholders in the direct social locality expressed concerns about changes to their lifestyle, enjoyment of natural spaces and visual changes to the landscape.

Community members from the direct social locality (Wanganella, Conargo and Moulamein) expressed high levels of concerns related to potential environmental impacts to flora and fauna, particularly related to clearing activities during the construction phase of the project. Survey findings also raised changes to visual amenity as one of the main concerns for nine people (two community members, three business owners and four landholders).

For the NSW/Victorian border to the future Dinawan substation component, the project would have the following amenity impacts during construction:

- Construction noise (*Technical paper 7 – Noise and vibration impact assessment* (WSP, 2025c)): The construction of the transmission line works may result in minor noise impacts to five properties during standard working hours and up to fourteen properties outside of working hours. Road traffic noise is expected to increase by up to 4 dBA along construction routes. However, no nearby homes or sensitive locations are expected to be affected beyond acceptable noise limits.
- Air quality (dust) impacts (*Technical paper 15 – Air quality impact assessment* (WSP, 2025g)): The construction of the project is not expected to generate dust impacts that would impact on human health. For unsealed construction roads, there is a higher potential for dust generation that may impact nearby sensitive receivers due to the road surface, particularly under certain conditions (dry surface road and/or high winds). However, the impacts to the sensitive receivers would be intermittent, of short duration and would likely only impact a small number of receivers at any given time.
- Impacts to landscape character and visual impacts (*Technical paper 3 – Landscape character and visual impact assessment* (Iris, 2025)): The construction of the project would have a temporary moderate landscape character impact on the Murray River rural valley landscape character zone due to the increased sensitivity of the Murray River and low impact to landscape character during the day on the remaining character zones. Lighting at the construction compounds and/or temporary worker accommodation facilities would have a moderate landscape character impact given the low district brightness of the area. Temporary visual impacts in views to the Fisher Lane, Wetuppa compound from three private dwellings and from Fisher Lane, which provides access to these dwellings, were identified. In addition, there would be temporary visual impacts in views from Cunninyeuk Road, Balranald Road, Cobb Highway, Mabins Well Road and Kidman Way where there would be views of compounds or combined compounds and temporary worker accommodation facilities during the day and at night.

Consequently, for the NSW/Victorian border to the future Dinawan substation, a Medium unmitigated impact to the sense of place is anticipated in the direct social locality. This is largely due to anticipated changes to the landscape, noise, vibration, and air quality, especially for those neighbouring construction compounds and temporary worker accommodation facilities. Strong community concerns relating to losing connection to the peaceful lifestyle afforded by the existing level of amenity was raised during SIA consultation. Those areas located further away from construction would experience lower levels of impact. Therefore, for the local social locality, a Low unmitigated impact is anticipated, and negligible impact to sense of place at the regional social locality level due to their distance to project (refer to Table 6.5).

Cumulative impacts related to amenity are limited to those landholders directly affected by the project footprint and in proximity to multiple projects. These landholders in the direct social locality would likely experience changes to their surroundings for about three years and have expressed concerns about the cumulative impacts of the multiple projects (refer to section 5.1).

Potential noise cumulative impacts are anticipated at locations where construction activities from this project coincide with those of other relevant future projects, including VNI West (Victoria), EnergyConnect (NSW – Eastern section), Dinawan Solar Farm and Wind Farm, and Yanco Delta Wind Farm. Under a worst-case scenario, cumulative noise levels may increase by up to 3 dB above the highest predicted level from any single project during construction (refer to EIS Chapter 24 – Cumulative impacts).

Cumulative landscape and visual amenity impacts from the introduction of large-scale infrastructure and renewable energy projects is expected to significantly alter the existing rural character of the region. Relevant future projects contributing to this transformation include EnergyConnect (NSW – Eastern section), Baldon Wind Farm, Tchelery Wind Farm, Dinawan Wind Farm, Yanco Delta Wind Farm, and Argoon Wind Farm (refer to EIS Chapter 24 – Cumulative impacts).

As a result, landholders directly affected by the project footprint and in proximity to VNI West, Baldon Wind Farm, Tchelery Wind Farm, EnergyConnect (NSW – Eastern section) project, Conargo Wind Farm, Dinawan Wind Farm, Dinawan Solar Farm, Argoon Wind Farm, Wanganella Wind Farm and Yanco Delta Wind Farm, would experience a High unmitigated cumulative impact (refer to Table 6.6). It is acknowledged that landholders directly affected by wind farms and solar farms have entered voluntary agreements with developers, which will mitigate disruptions to sense of place.

6.2.1.2 Network augmentation works

For the network augmentation works component:

- *Technical paper 7 – Noise and vibration impact assessment* (WSP, 2025c) determined that the transmission line construction may result in noise impacts to 21 properties during standard working hours and 36 properties outside of working hours in Gregadoo. Additionally, the construction work at the Gugga 500 kV substation may affect two properties during standard working hours.
- Air quality impacts: Construction of the transmission line component would have a low risk of dust impacting human health (without mitigation) based on the magnitude of emissions, the limited number of sensitive receivers and distance from the project footprint (*Technical paper 15 – Air quality impact assessment* (WSP, 2025g)).
- Landscape character impacts are expected to be very low to low within the three landscape character zones during the day. At night, lighting at the construction compounds and/or temporary worker accommodation facilities would have a temporary low and moderate landscape character impact given the low district brightness of the area. Moderate-low and low visual impact from public roads was determined by *Technical paper 3– Landscape character and visual impact assessment* (Iris, 2025) due to the minor scale of the change proposed.
- During SIA engagement, one landholder directly affected by the project footprint in the direct social locality (Gregadoo) identified potential soil erosion in its property due to construction activities, which may increase flooding risks.

Given that the direct social locality (Gregadoo community) is a small farming community, changes to amenity and surroundings would be experienced more acutely, resulting in a Medium unmitigated impact to the sense of place. For the local social locality (Wagga Wagga), a Low unmitigated impact is anticipated given that this is a larger urban centre where the community can adapt more easily to change and minimal amenity impacts. No impacts are anticipated for the regional area, given that the populations residing across the broader LGA will not be subject to changes to their amenity (refer to Table 6.5).

Cumulative amenity impacts for the network augmentation works are limited to those landholders directly affected by the project footprint and in proximity to relevant future projects under construction concurrently, which in this case are the HumeLink, Gregadoo Solar Farm, Mangoplah BESS and Belhaven BESS projects. Potential impacts may arise from Livingstone Solar Farm due to closeness to project, however no timeframe has been made public yet for construction.

Cumulative noise and vibration impacts are anticipated at sensitive receptors where construction activities from this project coincide with those of other relevant future projects, including HumeLink, Mangoplah BESS, Belhaven BESS projects, Livingstone Solar Farm, Gregadoo Solar Farm (refer to EIS Chapter 24 – Cumulative impacts).

In terms of landscape and visual impacts, the cumulative contribution is expected to be minimal. The viewshed is already influenced by existing transmission infrastructure and renewable energy developments, including EnergyConnect (NSW – Eastern section), HumeLink, Gregadoo Solar Farm, and Belhaven BESS (refer to EIS Chapter 24 – Cumulative impacts).

Therefore, landholders directly affected by the project footprint and the four relevant future projects under construction concurrently in the direct and local social locality, may experience prolonged changes in their amenity. This could result in a High unmitigated cumulative impact for those landholders directly affected by the project footprint (refer to Table 6.6).

Table 6.5 Assessment of the impact: Reduced sense of place due to construction-related amenity impacts

Project component	Social impact	Reduced sense of place due to construction-related amenity impacts		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Almost certain	Minimal	Medium
	Local social locality	Possible	Minimal	Low
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct social locality	Likely	Minor	Medium
	Local social locality	Unlikely	Minor	Low
	Regional social locality	Negligible impacts anticipated.		

Table 6.6 Cumulative impact assessment: Reduced sense of place due to construction-related amenity impacts

Project component	Social impact	Reduced sense of place due to construction-related amenity impacts		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected and neighbouring multiple projects in direct and local social locality	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Landholders directly affected and neighbouring multiple projects in direct and local social locality	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		

6.2.2 Changes to sense of safety and the way people move and work

Construction activities and increased workers in the local and regional areas would likely change people's sense of safety and the way they work and move (walk, drive, etc.) around the community.

The magnitude of this impact is determined by considering the potential duration and intensity of the change, who is expected to be affected, the sensitivity of those groups, and their level of concern.

6.2.2.1 NSW/Victorian border to the future Dinawan substation

For the NSW/Victorian border to Dinawan substation, the following is considered:

- The direct and local social locality is a rural area with the main industry being agriculture, with high levels of car dependency amongst residents. Local residents are dependent on road and traffic conditions to access services such as health, education, community events and for conducting agricultural activities, such as stock crossing and harvesting.
- During SIA engagement activities, community members and landholders in the direct social locality expressed concerns that additional heavy vehicle movements associated with the project and renewable energy projects could further deteriorate already damaged roads. Concern was also expressed that this would reduce their sense of safety due to an increase in both vehicle movements and people in an area that is usually very quiet (Jerilderie, Conargo, Moulamein and Wanganella).
- Property access for landholders (including for emergency vehicle access and egress) would be maintained throughout construction, with short-term restrictions to be agreed with landholders for specific construction activities.
- Over-sized and over-mass (OSOM) vehicles would be required to deliver proposed Dinawan substation components to the proposed Dinawan substation expansion site. All preliminary routes proposed to the Dinawan substation site are gazetted as approved OSOM routes.
- *Technical paper 8 – Traffic and transport impact assessment* (WSP, 2025d) assessed the traffic increase associated with the construction activities and the impact to road network efficiency as low. As such, it was not anticipated that construction traffic would result in increased vehicle overtaking, sudden speed reductions, or lane changing and hence would unlikely increase the potential for crashes.

For the NSW/Victorian border to the future Dinawan substation component, it is likely there would be changes to the sense of safety and the way people move and work in the direct social locality, especially during harvest time and community events. While only minor traffic-related impacts are anticipated, a High unmitigated impact is anticipated for the sense of safety and the way people move and work in the direct social locality (refer to Table 6.7). This rating considers the socio-economic disadvantage within the local social locality, and the high value placed by the community and landholders in the direct social locality due to their reliance on roads to access employment and services. For the local social locality, this impact is expected to be a Medium unmitigated impact. Negligible impacts are anticipated for the regional social locality given that traffic movements will largely occur within the local social locality.

Cumulatively, the direct and local social locality are expected to experience an increase in traffic volumes, including the movement of over-size over-mass (OSOM) vehicles. Of the sixteen relevant future projects assessed, nine have identified high or medium impacts on the community's sense of safety due to increased traffic activity.

Where construction routes for this project overlap with other relevant future projects, the volume of construction-related traffic on the road network is expected to increase. Relevant future projects identified as having potential cumulative traffic impacts with this project include: Junction Rivers Wind Farm, Keri Keri Wind Farm, Baldon Wind Farm, Pottinger Wind Farm, Billabong Creek Environmental Water Regulators, Bullawah Wind Farm, Dinawan Solar Farm, Dinawan Wind Farm, Argoon Wind Farm, and Yanco Delta Wind Farm (refer to EIS Chapter 24 – Cumulative impacts).

Despite the anticipated increase in traffic, the existing road network is considered to have sufficient residual capacity to accommodate the additional load. Key roads expected to be used during construction include the Sturt Highway, Balranald-Moulamein Road, Swan Hill Road, Cobb Highway, Conargo Road, Kidman Way, Jerilderie Road, Newell Highway, and Mitchell Road. As such, cumulative traffic impacts are expected to be manageable within the current infrastructure and the implementation of related mitigation measures (refer to EIS Chapter 24 – Cumulative impacts).

Therefore, despite cumulative traffic impacts are expected to be low, it is likely that sense of safety in the direct social locality may be affected. It is anticipated that between the third quarter of 2026 and the first quarter of 2029 cumulative impact to sense of safety would be High given that through that period, seven relevant future projects would potentially be built concurrently with the project (refer to Table 6.8).

6.2.2.2 Network augmentation works

The community members within the local social locality are experiencing changes to traffic because of EnergyConnect (NSW – Eastern section) project; it is possible these have become acquainted and slightly adjusted to the traffic change. The direct locality of Gregadoo is predominantly a farming community with a high reliance on personal vehicles for transport and work activities. It is possible the Gregadoo community would experience moderate changes to their sense of safety and the way they move and work, resulting in a Medium unmitigated impact (refer to Table 6.7). Negligible impacts are anticipated in the regional social locality given that project traffic movements will be mostly contained within the direct and local social localities.

Cumulatively, Belhaven BESS, HumeLink and Mangoplah BESS would contribute additional traffic to the area. The HumeLink SIA determined a medium unmitigated impact on sense of safety; however, it is considered that the use of construction routes might not always overlap in time within the direct social locality. The Gregadoo Solar Farm is considered to have negligible cumulative traffic impacts with the project as it is expected to be completed before VNI West commences pre-construction (refer to EIS Chapter 24 – Cumulative impacts).

Considering the socio-economic characteristics of the communities in the direct and local social localities and that the change would occur over a period of about three years, a High cumulative impact is anticipated for the direct and local social locality.

Negligible impacts to sense of safety are anticipated for both components of the project in the regional social locality.

Table 6.7 Assessment of the impact: Changes to sense of safety and the way people move and work

Project component	Social impact	Changes to sense of safety and the way people move and work		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Likely	Moderate	High
	Local social locality	Possible	Moderate	Medium
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct social locality	Possible	Moderate	Medium
	Local social locality	Possible	Minor	Medium
	Regional social locality	Negligible impacts anticipated.		

Table 6.8 Cumulative impact assessment: Changes to sense of safety and the way people move and work

Project component	Social impact	Changes to sense of safety and the way people move and work		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct and local social locality	Likely	Major	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct and local social locality	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		

6.3 Livelihoods

6.3.1 Enhanced livelihoods due to increased local employment opportunities

The project construction and associated employment opportunities may improve economic conditions of community members and local businesses. Construction of the project is expected to require around 1,500 construction workers. Around 400 of these workers would be employed for substation works. Around five per cent are expected to be local workers from the region, as per *Technical paper 6 – Economic impact assessment* (Gillespie, 2025).

Transgrid is committed to improving employment opportunities, retention and professional development of Aboriginal and Torres Strait Islander peoples (Transgrid, 2023). It implements employment readiness programs and pathways for Aboriginal and Torres Strait Islander youth through internships, apprenticeships and scholarships. These programs apply to the project.

The likelihood and magnitude of this impact are determined by considering the characteristics of the local workers described in section 4.1.3.1 and 4.2.3.

6.3.1.1 NSW/Victorian border to the future Dinawan substation

For the NSW/Victorian border to the future Dinawan substation component, there are approximately 1,000 people in search for jobs in the regional social locality. However, at the local social locality there are low unemployment rates, with Moulamein at 2.1 per cent and Jerilderie at 3.6 per cent, with high percentages of people not in the labour force (32.6 per cent and 35.7 per cent respectively). This means that a proportion of the unemployed may remain employed long-term, reducing their likelihood to be employed by the project.

However, at Jerilderie and Moulamein about 11 per cent of employment is in the public administration and safety industry and 11.8 per cent in retail trade, which provides transferrable skills to procurement and administration positions within the project construction.

In the local social locality, SIA engagement revealed high expectations from community members and councils about local employment opportunities. Murray River Council and community members at Jerilderie and Moulamein particularly raised local employment expectations. Given the comparatively small proportion of unemployment within the local social locality, it is possible that a limited number of residents would benefit from new employment opportunities, resulting in a Low positive impact. It is likely that employment positions would be mostly sourced from the regional social locality, resulting in a Medium positive impact (refer to Table 6.9).

Cumulatively, there may be more than 5,000 jobs available between available between the third quarter 2026 and first quarter 2029, including the project workers. While most developers of the relevant future projects have identified that it would prioritise local employment, only four projects commit to local employment targets in their SIAs (refer to Appendix F1). Targets stated in the SIAs range between 20 and 40 per cent of regionally sourced workers. Consequently, a High positive cumulative impact on the local and regional social localities considering there is about 1,000 people in search of jobs in the regional social locality (refer to Table 6.10).

6.3.1.2 Network augmentation works

For the network augmentation works component, the Wagga Wagga LGA has an unemployment rate of four per cent (1,397 people); employment is primarily in health care and education. Population not in the workforce equates to 29.7 per cent, this is 15,989 people. Gregadoo is a small farming community with a low unemployment rate (2.5 per cent), where education and cattle farming are the main employment industries (refer to section 4.2.3). Therefore, a Low positive impact on the local and regional social locality is anticipated as the major employment industries are in different sectors (refer to Table 6.9).

Cumulatively, three of the seven relevant future projects would overlap during construction, providing potentially up to 1,000 jobs across the Wagga Wagga LGA. Given that out of the 1,397 unemployed population in the Wagga Wagga LGA only a proportion would have relevant skills, a Medium positive impact on the local and regional social locality. For the direct social locality (Gregadoo), negligible cumulative positive impact is anticipated given the low unemployment rate and socio-economic advantage of the community.

Table 6.9 Assessment of the impact: Enhanced livelihoods due to increased local employment opportunities

Project component	Social impact	Enhanced livelihoods due to increased local employment opportunities		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local social locality	Possible	Minimal	Low (positive)
	Regional social locality	Possible	Minor	Medium (positive)
Network augmentation works	Direct social locality	Negligible impacts anticipated.		
	Local social locality	Unlikely	Minimal	Low (positive)
	Regional social locality	Possible	Minimal	Low (positive)

Table 6.10 Cumulative impact assessment: Enhanced livelihoods due to increased local employment opportunities

Project component	Social impact	Enhanced livelihoods due to increased local employment opportunities		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Likely	Moderate	High (positive)
Network augmentation works	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Likely	Minor	Medium (positive)

6.3.2 *Local business opportunities and economic stimulus due to project procurement opportunities and increased demand for goods and services*

The construction of the project would result in economic opportunities and growth for local businesses involved in supply chain and service activities related to the project and the temporary worker accommodation facilities. The likelihood of this impact is determined by understanding the business profiles of the social locality and types of procurement opportunities available. Procurement opportunities may include other construction opportunities (direct and indirect), such as earth movement, transport, security, health and safety, and other services for temporary worker accommodation facilities.

Construction-related businesses are clustered in Wagga Wagga, Hay, Balranald, and Swan Hill, these include:

- Heavy and civil engineering construction: Includes businesses involved in engineering construction and project management services activities such as constructing electricity transmission lines or structures.
- Construction services: Includes businesses involved in earthmoving work, levelling construction sites, excavation, trench digging, concreting services, electrical services, and hire of earthmoving plant with operators.
- Non-residential building construction: Includes businesses engaged in constructing non-residential buildings and temporary worker accommodation facilities.

6.3.2.1 NSW/Victorian border to the future Dinawan substation

Community members identified that local accommodation providers are benefiting from the project by hosting project personnel and consultants. However, the Murray River Council expressed the need to assist local businesses to benefit from the procurement opportunities that the project can provide.

Local business would also benefit from direct purchases from the residential and non-residential workers and increased household income. *Technical paper 6 – Economic impact assessment* (Gillespie, 2025) estimates that the construction of the project in the NSW/Victorian border to the future Dinawan substation component is expected to impact the regional economy for up to two years with \$339 million in annual direct and indirect output and \$56 million in annual direct and indirect household income. Therefore, it is anticipated that businesses within the regional social locality would experience a Medium positive impact, while businesses in the local social locality would experience a Low positive impact, given the low number of businesses in engineering or construction-related businesses. Businesses in the direct social locality are expected to experience negligible impacts (refer to Table 6.11).

Cumulative benefits are also anticipated from the delivery of multiple concurrent and/or consecutive relevant future projects across the social locality. These projects are expected to uplift in direct economic activity, with flow-on benefits to local businesses that can supply goods and services to the construction and operational phases.

The construction of this project, alongside relevant future projects, is projected to create strong demand for suitably qualified construction workers in regional areas. This demand is likely to stimulate employment and economic activity in key sectors such as heavy and civil engineering construction, construction services and non-residential building construction (refer to EIS Chapter 24 – Cumulative impacts).

However, it is noted that among the nineteen relevant future projects, only the Dinawan Solar Farm established a local procurement target of 30 per cent (refer to Appendix F). This highlights a potential gap in ensuring that regional communities fully capture the economic benefits of these proposed projects. Overall, the cumulative impact in the local and regional social locality would be likely and moderate, resulting in a High cumulative benefit (refer to Table 6.12).

6.3.2.2 Network augmentation works

For the network augmentation works, the average annual construction impacts on the regional economy for two years are estimated at \$12 million in annual direct and indirect output and \$3 million in annual direct and indirect household income (*Technical paper 6 – Economic impact assessment* (Gillespie, 2025)). Consequently, some local businesses within the regional social locality would experience economic stimulus, resulting in a Medium positive impact.

At the direct and local social locality (Gregadoo), it is unlikely that local business would benefit given the characteristics of local business, in terms of type of services and capacity to source the project.

Cumulative benefits are anticipated for the regional social locality in particular for the construction sector and accommodation and hospitality industries as mentioned before, with Belhaven BESS and Mangoplah BESS construction workers accommodated in local rental, resulting in a High positive impact.

Table 6.11 Assessment of the impact: Local business opportunities and economic stimulus

Project component	Social impact	Local business opportunities and economic stimulus		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Businesses within direct social locality	Negligible impacts anticipated.		
	Businesses within local social locality	Possible	Minimal	Low (positive)
	Businesses within regional social locality	Possible	Moderate	Medium (positive)
Network augmentation works	Direct and local social locality	Negligible impacts anticipated.		
	Businesses within regional social locality	Possible	Moderate	Medium (positive)

Table 6.12 Cumulative impact assessment: Local business opportunities and economic stimulus

Project component	Social impact	Local business opportunities and economic stimulus		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Businesses within local and regional social locality	Likely	Moderate	High (positive)
Network augmentation works	Direct and local social locality	Negligible impacts anticipated.		
	Businesses within regional social locality	Likely	Moderate	High (positive)

6.3.3 Labour shortages due to increased demand for local workers

While a large infrastructure project can increase worker demand, the supply of skilled workers may not meet this demand. This can lead to competition and can reduce the availability of workers for local businesses in construction and administrative services. Competitive salaries and packages offered by the project may further challenge local employers who face increased labour costs to compete.

6.3.3.1 NSW/Victorian border to the future Dinawan substation

As discussed in section 6.3.1, it is expected that about five per cent of the project workers would be sourced locally. Considering that unemployment rates in both components of the project are low, it is likely that employment opportunities would be leveraged by those already active and engaged in work locally, resulting in a Medium unmitigated impact on local businesses in the local and regional social locality (refer to Table 6.13).

Cumulatively, for the NSW/Victorian border to the future Dinawan substation component, there may be more than 5,000 jobs available between the third quarter 2026 and the first quarter 2029. With most relevant future projects prioritising local workers, six of them have anticipated direct medium impacts on labour shortages. This temporary surge in demand for construction workers may lead to increased wages in the construction sector (and other sectors) and attraction of workers from other relevant sectors of the economy over the short term, that could result in temporary labour shortages and associated shortages of goods and services and rising inflation (refer to Chapter 24 – Cumulative impacts).

The concurrent construction of sixteen projects and this project, would result in a High cumulative impact on local businesses in the local and regional social localities (refer to Table 6.14).

6.3.3.2 Network augmentation works

The network augmentation works component would employ around 200 workers. With a broader pool of people in the active workforce, it is possible that local business may experience minimal labour shortages, resulting in a Low unmitigated impact on the local and regional social locality (refer to Table 6.13).

Cumulatively, three of the seven relevant future projects will overlap during construction, providing about 1,000 jobs across the Wagga Wagga LGA, resulting in a Medium unmitigated impact on the regional social locality.

Table 6.13 Assessment of the impact: Labour shortages due to increase demand in local workers

Project component	Social impact	Labour shortages due to increase demand in local workers		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Local businesses within direct social locality	Negligible impacts anticipated.		
	Local businesses within local and regional social locality	Possible	Minor	Medium
Network augmentation works	Local businesses within direct social locality	Negligible impacts anticipated.		
	Local businesses within local and regional social locality	Possible	Minimal	Low

Table 6.14 Cumulative impact assessment: Labour shortages due to increased demand for local workers

Project component	Social impact	Labour shortages due to increase demand in local workers		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Local businesses within direct social locality	Negligible impacts anticipated.		
	Local businesses within local and regional social locality	Likely	Moderate	High
Network augmentation works	Local businesses within direct social locality	Negligible impacts anticipated.		
	Local businesses within local and regional social locality	Likely	Minor	Medium

6.3.4 Disruptions to agricultural activities and property management restrictions

The construction of the project may disrupt agricultural activities and increase biosecurity risks, which in turn could result on economic impacts to landholders. The land required during construction of the transmission lines would restrict agricultural uses but would not completely exclude all activities (e.g. grazing). For the construction compounds, temporary worker accommodation facilities and the Dinawan substation expansion, agricultural activities are likely to be excluded during construction.

The magnitude of this impact is determined by considering the potential duration and the intensity of the change, as well as who is expected to be affected, the sensitivity of those groups and their level of concerns.

6.3.4.1 NSW/Victorian border to the future Dinawan substation

The following is considered for NSW/Victorian border to the future Dinawan substation:

- Landholders in the direct social locality who participated in the SIA engagement and online survey expressed concerns regarding the project negatively impacting their agricultural activities and income during construction. Concerns during construction included reduced farming land, changes or restrictions to access and disrupted agricultural practices (including irrigation and aerial operations). These concerns were particularly raised in Moulamein, Gala Vale, Mallan, and Wanganella.
- The majority of landholders who would be directly affected by the project footprint own livestock.
- The project would temporarily reduce the area available for grazing and cropping, affecting 2,271 hectares. Of this, this, 79 per cent is grazing of native pasture, and between three to seven per cent represent grazing modified pastures, cropping, grazing irrigated modified pastures and irrigated cropping. This represents about 0.09 per cent of the total agricultural land across the Murray River, Edward River and Murrumbidgee LGAs.
- The estimated financial impact on gross agricultural production due to direct impacts on agricultural land during construction is approximately \$1,354 million, of which about \$1,029 million in the NSW/Victorian border to the future Dinawan substation component and \$324,720 in the network augmentation works component (*Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)). This represents 0.05 per cent of the total gross annual agricultural production. However, this assessment conservatively assumed no agricultural land use would occur during construction.

- Moderate to high localise impacts on aerial agriculture and the use of drones may arise during the construction of transmission line structures. Approximately 4.4 per cent of the transmission line would have a high impact on aerial agricultural activities, while 23 per cent is anticipated to have a moderate impact (refer to *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)).

For NSW/Victorian border to the future Dinawan substation component, the magnitude of the impact is considered moderate since grazing activity can be maintained during construction for most of the project footprint, yet aerial agricultural activities may become less efficient, and farming or property infrastructure might need to be relocated or adjusted, resulting in a Medium unmitigated impact for landholders directly affected by the transmission line corridor. A High unmitigated impact is anticipated for landholders directly affected by the construction compounds and temporary worker accommodation facilities required for the project. Noting that landholders directly affected by the project footprint (including the transmission line corridor, construction compounds and temporary worker accommodation facilities) would receive compensation.

Landholders neighbouring project infrastructure would be less likely to experience impacts on their agricultural activities, and any such impact would depend on the proximity to the project footprint or construction routes. For example, construction traffic may disrupt stock crossings if common roads are used, construction activity may cause biosecurity risk for some neighbouring landholders during construction (if not properly managed) and aerial operations may be disrupted. As such, interruptions in their agricultural activities are possible but with a minor magnitude, resulting in a Low unmitigated impact. No impacts are anticipated for the local and regional social localities given that disruption will be constrained to the project footprint (for all ratings refer to Table 6.15).

Cumulatively, all the relevant future projects would have a minor impact on regional agricultural production, generally allowing agricultural activities to continue across most of the respective project sites. Most of the future wind and solar farms are located on areas of low productivity and mainly used for grazing. However, agricultural operations may also be temporarily impacted where project footprints directly overlap due to increased construction traffic, vegetation removal, the generation of noise, vibration and dust, changes to farm infrastructure and increased biosecurity risks (such as with Dinawan Wind Farm (East)) (refer to Chapter 24 – Cumulative impacts).

Therefore, cumulative impacts are only anticipated for those landholders directly affected by the footprint of multiple relevant future projects within their properties, or where relevant future projects are adjacent to the project, contributing to disruptions to farming operations due to traffic and aerial constraints. An example of this is landholders in proximity and/or directly affected by the EnergyConnect (NSW – Eastern section) project footprint and in proximity to Dinawan substation, resulting in a High unmitigated cumulative impact (refer to Table 6.16). It is acknowledged that landholders directly affected by wind farms and solar farms footprints have entered voluntary agreements with developers, which will mitigate disruptions to agricultural activity.

6.3.4.2 Network augmentation works

As the network augmentation works includes the replacement of an existing transmission line, it is likely that the farming operations are already established elsewhere on the properties. However, during SIA consultation, one landholder directly affected by the project footprint in the direct social locality mentioned having to adjust their farm planning (including fencing for cattle paddocks) due to the project. Therefore, some farming operations may experience disruption by the project construction. These disruptions are expected to be minimal and managed with adequate Property Management Plans and appropriate engagement, resulting in a Low unmitigated impact for landholders directly affected by the project footprint or landholders adjacent to the project (refer to Table 6.15).

Cumulative impacts are possible, with three of the seven projects being constructed concurrently. The HumeLink project is expected to moderately cumulatively impact local agricultural production during construction activities. In contrast, the Belhaven Battery Energy Storage System project is anticipated to have negligible cumulative impacts. Additionally, the agricultural land used by these projects is expected to be small in relation with each total project area (refer to *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)). This would result in a Low cumulative impact on the direct, local, and regional social locality.

Table 6.15 Assessment of the impact: Disruptions to agricultural activities and property management restrictions

Project component	Social impact	Disruptions to agricultural activities and property management restrictions		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected by the project footprint (transmission lines) in direct social locality	Almost certain	Minor	Medium
	Landholders directly affected by project compounds and temporary worker accommodation facilities in direct social locality	Almost certain	Moderate	High
	Landholders neighbouring project infrastructure in direct social locality	Possible	Minimal	Low
	Local and regional social locality	Negligible impacts anticipated.		
Network augmentation works	Landholders directly affected by the project footprint and neighbouring project infrastructure in direct social locality	Possible	Minimal	Low
	Local and regional social locality	Negligible impacts anticipated.		

Table 6.16 Cumulative impact assessment: Disruptions to agricultural activities and property management restrictions

Project component	Social impact	Disruptions to agricultural activities and property management restrictions		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected by the project footprint and or neighbouring multiple projects in direct and local social locality	Almost certain	Moderate	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Landholders directly affected by the project footprint and or neighbouring multiple projects in direct and local social locality	Possible	Minimal	Low
	Regional social locality	Negligible impacts anticipated.		

6.4 Accessibility

6.4.1 Overburdening of health, emergency and hospitality services

The project would generate a temporary increase in the number of people into the social locality. This may lead to increased use of health, emergency and hospitality services, overburdening local and regional services and impacting local residents.

The project would require up to five combined temporary worker accommodation facilities and construction compounds, with seven option sites having been identified as potential facilities:

- NSW/Victorian border to the future Dinawan substation: Balranald Road in Moulamein, Cobb Highway in Wanganella (north), Cobb Highway in Wanganella (south), Dinawan substation in Coleambally.
- Network augmentation works: Gregadoo Road (Wagga Wagga option 2), Gregadoo Road, Wagga B (Wagga option 3) and Livingstone Gully Road (Wagga Wagga option 4).

These facilities would include food and catering services, first aid, fitness and recreational facilities (such as indoor and outdoor recreational spaces, gymnasium areas) and telecommunication services for personal use, which may decrease the likelihood of overburdening hospitality services in local and regional social localities.

Certain construction activities can pose a bushfire risk, noting that management controls can reduce this risk. Further, the risk of bushfire in the region can also pose a risk construction personnel, particularly those residing at temporary worker accommodation facilities or working within construction compounds. The provision of asset protection zones at these sites would reduce this risk (*Technical paper 12 – Bushfire impact assessment* (Australian Bushfire Protection Planners, 2025)). However, any bushfire incidents may increase the demand for emergency services, particularly the RFS. RFS in the area are based in Moulamein and Jerilderie (direct social locality).

The magnitude of the impact is determined by understanding the baseline capacity of services, community sensitivity, duration, and level of concern.

6.4.1.1 NSW/Victorian border to the future Dinawan substation

For the NSW/Victorian border to the future Dinawan substation component, the following is considered:

- At the regional social locality, there are four hospitals and several medical centres serving main urban centres. During SIA engagement, four community members reported that the regional health system is highly stressed and under-resourced, resulting in limited available appointments, long waiting lists of two to three weeks for medical services, and no capacity for additional patients (refer to section 4.1.4.1). Moulamein and Jerilderie are the only two localities in the local social locality with health centres. The capacity of medical centres is dependent on many different factors such as availability of qualified staff and size of facilities.
- Community members from Moulamein, Jerilderie, and Wanganella, along with representatives from Murray River and Murrumbidgee councils, are worried that the project workers might lead to more demand on local health services.
- A service provider mentioned that hospitality services in Deniliquin, such as venues, food, and entertainment, may not be able to meet demand due to the influx of temporary workers. Additionally, Murray River Council noted that while the small businesses could benefit from the project, they are not well equipped and may struggle to meet an increased demand.
- The Riverina Murray region is experiencing climate change effects, including rising temperatures, altered rainfall patterns. Total Fire Bans occur during high-risk periods (refer to section 4.1.7.2).
- During SIA engagement activities, communities positively evaluated RFS in Moulamein as a reliable, well-trained and active organisation (refer to section 4.1.4.1). The regional social locality has multiple emergency services and facilities dedicated to ensuring public safety and rapid response to emergencies (refer to section 4.1.4.1). However, at Jerilderie and Conargo, two community members expressed concern over the potential increased demand for firefighting services due to possible emergency events associated with new energy projects in the area.

For the NSW/Victorian border to the future Dinawan substation component, it is possible that some workers would access to local services on limited occasions, such as emergency services and closer to the end of their shift for hospitality services. It is also anticipated that a limited number of workers decide to relocate with their families to the local social locality during construction. This may have moderate negative effects on access to these services for residents in the direct (Moulamein and Jerilderie) and local social locality, resulting in a Medium unmitigated impact.

For the regional social locality, it is unlikely that the limited access by the workers would have significant effects on health, emergency and hospitality services, resulting in a Low unmitigated impact (refer to Table 6.17). This is because across the wider region, there are other options for health, emergency and hospitality services.

Cumulatively, six of the sixteen relevant future projects that overlap during construction identified very high, high and medium impacts on health and local services. Fourteen projects have included their own temporary worker accommodation facilities, with only Yanco Delta Wind Farm (300 workers at peak) and the Billabong Creek project (26 workers) in the Murrumbidgee LGA proposing to use existing and/or future in town temporary worker accommodation facilities. Murrumbidgee LGA and Edward River LGA will host three additional relevant future projects with workers in temporary worker accommodation facilities. Five relevant future projects will take place in the Murray River LGA and another seven in Edward River and Hay LGAs.

The overlap of construction activities across this project and other relevant future projects located on bushfire-prone land may lead to an increased risk of bushfire ignition (refer to Chapter 24 – Cumulative impacts). This elevated risk could place additional pressure on Rural Fire Services and potentially overburden emergency response resources in the regional area, particularly during peak construction periods.

Consequently, it is anticipated that, especially during the overlap of the project with Yanco Delta Wind Farm (third quarter of 2025 to the second quarter of 2028), the cumulative impact on health and hospitality services would be High (refer to Table 6.18).

6.4.1.2 Network augmentation works

For the network augmentation works component, the recently expanded Wagga Wagga Base Hospital would be able to meet the medical needs of the local population. However, the local community is already facing constraints in accessing medical services (Transgrid, 2023). Therefore, it is possible that the direct and local social locality would experience minimal overburdening of services due to an increase in workers, resulting in a Medium unmitigated impact (refer to Table 6.17).

Cumulatively, Belhaven BESS (100 workers), Mangoplah BESS (60 workers), EnergyConnect (NSW – Eastern section) and HumeLink overlap with the project during construction and would accommodate some workers in Wagga Wagga. HumeLink has determined the project could have a High unmitigated impact on health and hospitality services. Consequently, a High cumulative impact is anticipated for the social locality.

Table 6.17 Assessment of the impact: Overburdening of health, emergency and hospitality services

Project component	Social impact	Overburdening of health, emergency and hospitality services		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to Dinawan substation	Direct and local social localities	Possible	Moderate	Medium
	Regional social locality	Unlikely	Minimal	Low
Network augmentation works	Direct, local and regional social localities	Possible	Minimal	Low

Table 6.18 Cumulative impact assessment: Overburdening of health and hospitality services

Project component	Social impact	Overburdening of health, emergency and hospitality services		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Likely	Moderate	High
Network augmentation works	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Likely	Moderate	High

6.4.2 *Impacts to short-term accommodation and rental market*

As outlined in section 6.4.1, the project would accommodate most of the project workers in five temporary worker accommodation facilities with approximately 1,960 total beds. These facilities would include food and catering, fitness and recreational facilities (such as indoor and outdoor recreational spaces, gymnasium areas) and telecommunication services for personal use.

During the construction of the temporary worker accommodation facilities, it is anticipated that up to 30–40 people would be accommodated locally. Pre-construction work would commence in late 2026 and is expected to take around six months (24 weeks). Once the temporary worker accommodation facilities are operational, it is possible that some staff may choose to use local accommodation for short-term visits such as hotels and motels (if available) during the peak construction period and most likely to be accommodated at Wagga Wagga, Deniliquin and Balranald.

The magnitude of the impact is determined by understanding the baseline capacity of services, community sensitivity, duration, and level of concern.

6.4.2.1 NSW/Victorian border to the future Dinawan substation

For the NSW/Victorian border to the future Dinawan substation component, the following is considered:

- There is a limited supply of short-term accommodation and housing across the regional social locality. The urban centre with the highest short-term accommodation availability is Swan Hill (total 981 rooms), followed by Hay (478) and Deniliquin (426). In addition, there are approximately 28 Airbnb houses available in Swan Hill, nine in Deniliquin, five in Berrigan, and only one in Jerilderie.
- The limited availability of housing and rental properties has constrained the capacity to attract health and education professionals to the area.
- Moulamein faces challenges in building new houses due to floodplain risks. According to SIA interviews, funding for building additional short-term accommodation at the bowling club has been approved.
- The busiest times of the year for tourism across the local social locality includes the Easter long weekend, Anzac Day, local festivals and sporting events in spring/summer such as Confest, races, fishing. Shearing also attracts workers to the local social locality, which also places demand on short-term accommodation.
- A Murrumbidgee Council representative stated that housing has been occupied by construction workers, leaving other professionals, such as teachers, without housing, increasing in rent prices and creating problems for tourism as there is no accommodation available.

The use of short-term accommodation by 30–40 project workers for a period of up to six months while the temporary worker accommodation facilities are under construction, and the potential additional limited use by project workers at other times during construction, would possibly result in negative effects on access to these services for visitors to the direct (Moulamein and Jerilderie) and local social locality. It is anticipated that some workers may decide to relocate with their families to the local social locality, potentially using local rental properties.

The use of short-term accommodation and private rental by the project, would result in a Medium unmitigated impact for the local social locality and Low for the regional social locality (refer to Table 6.19).

Cumulatively, fourteen of the nineteen relevant future projects would have their own temporary worker accommodation facilities, which will ease pressure on local short-term accommodation during construction. However, short-term accommodation will still be required during the construction of these facilities. Combined with the overlapping construction periods of the Yanco Delta Wind Farm (300 employees) and the Billabong Creek project (26 employees), it is almost certain that the short-term accommodation market would be constrained. As previously outlined, the Murrumbidgee LGA and Edward River LGA will host three relevant future projects with temporary worker accommodation facilities, as well as the Murray River LGA, Edward River and Hay LGAs.

Consequently, during the construction period of the project temporary worker accommodation facilities (third quarter of 2026 to the second quarter of 2027), cumulative impacts on short-term accommodation are expected to be Very High across the local and regional social locality. These impacts are projected to reduce to High following the pre-construction period and the use of temporary worker accommodation facilities by the project employees (refer to Table 6.20).

6.4.2.2 Network augmentation works

Wagga Wagga has 30 establishments for short-term accommodation, which equates to 1,012 rooms and 2,950 beds. The use of short-term accommodation by the project workers is unlikely to result in negative effects on access to short-term accommodation given the project would likely use an existing worker accommodation facility and the local accommodation services are available.

Regarding cumulative impacts, the presence of workers from Belhaven BESS, Mangoplah BESS, EnergyConnect (NSW – Eastern section) and HumeLink are likely to have a minor impact on short-term accommodation availability. Belhaven BESS and Mangoplah BESS would accommodate their workers in local temporary accommodation, while HumeLink would construct a temporary worker accommodation facility and compound in Tarcutta, approximately 40 kilometres east of Gregadoo. This would result in a Medium unmitigated impact on accommodation services, as the relevant future projects would still add additional workers to the local and regional social locality (refer to Table 6.20).

Table 6.19 Assessment of the impact: Impacts to short-term accommodation

Project component	Social impact	Impacts to short-term accommodation		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local social locality	Possible	Moderate	Medium
	Regional social locality	Possible	Minimal	Low
Network augmentation works	Direct, local and regional social locality	Negligible impacts anticipated.		

Table 6.20 Cumulative impact assessment: Impacts to short-term accommodation

Project component	Social impact	Impacts to short-term accommodation		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Almost certain	Major	Very High
Network augmentation works	Direct social locality	Negligible impacts anticipated.		
	Local and regional social locality	Likely	Minor	Medium

6.4.3 *Disruption to telecommunications, especially phone and internet, due to the increased population from the project's temporary workers*

The construction workers may result in additional demand for telecommunications services, affecting services for residents living near the project footprint in the direct and local social locality. The temporary worker accommodation facilities would have telecommunication services for personal use, which may alleviate some pressure on local telecommunications.

The magnitude of the impact is determined by understanding baseline conditions, community sensitivity and level of concerns.

6.4.3.1 NSW/Victorian border to the future Dinawan substation

For NSW/Victorian border to the future Dinawan substation component:

- There is limited coverage between population centres. This is evident by intermittent mobile reception, meaning there are connectivity and coverage gaps primarily to the north and south of the project's footprint in the Hay area.
- Local communities rely on telecommunications to access essential services, work and stay connected with family and friends. During SIA engagement, community members and service providers stated their concerns about the current poor connectivity for calls and internet in the area, fearing that these telecommunications issues would worsen during construction due to the increased population from the workers associated with the project (Jerilderie, Conargo and Deniliquin).
- As identified in section 4.1.4.4, network coverage issues have arisen in the vicinity of the future Dinawan substation site since the establishment of the temporary worker accommodation facility for the EnergyConnect (NSW – Eastern section) project. Telstra is consulting with Transgrid concerning the expected workforce numbers and likely locations for temporary worker accommodation facilities and construction compounds for the project. This will assist Telstra in identifying any capacity issues and to seek funding for any required upgrades that are deemed necessary.
- A Murrumbidgee Council representative shared his experience with the temporary worker accommodation facility at the Dinawan substation (developed for EnergyConnect (NSW – Eastern section) project), noting that since the worker accommodation facility was established, there has been no phone reception and internet coverage has significantly deteriorated.

Disruptions to telecommunications are anticipated, as workers may use mobile phones and internet services during working hours, placing additional demand on local communication networks. While temporary worker accommodation facilities will be equipped with telecommunications for personal use, this may not fully offset the increased usage during the day. Similar issues have already been observed near the future Dinawan substation, suggesting that the local network may not have sufficient capacity to absorb the added demand. As a result, telecommunications services in the direct and local social locality are likely to experience significant strain, leading to a High unmitigated impact (refer to Table 6.21).

Telstra have committed to working with Transgrid, EnergyCo and other relevant stakeholders to identify solutions for this issue. Transgrid is consulting with Telstra concerning the expected workforce numbers and likely locations for temporary worker accommodation facilities and construction compounds for the project. This would assist Telstra in identifying any capacity issues and to seek funding for any required upgrades that are deemed necessary.

Cumulatively, there would be peak of about 5,000 workers distributed across the six LGAs between 2025 and 2030 adding pressure to the broader telecommunication network, resulting in a High cumulative impact for residents in the direct and local social localities (refer to Table 6.22).

6.4.3.2 Network augmentation works

For the network augmentation works component, the Wagga Wagga LGA has robust internet coverage (5G and 4G Telstra coverage). However, Gregadoo (direct social locality) only has 4G coverage outdoors when using antenna (refer to section 4.2.4). Given temporary workforce accommodation facilities will provide telecommunication services, it is unlikely that the direct and local social locality would face disruption of telecommunication services due to the project workers, resulting in a Low unmitigated impact (refer to Table 6.21).

Cumulatively, Belhaven BESS, Mangoplah BESS, EnergyConnect (NSW – Eastern section) and HumeLink workers along with the project would cumulatively increase demand on the network, with the latter determining a Medium unmitigated impact on telecommunications on its SIA, resulting in a Medium cumulative impact (refer to Table 6.22).

No impacts are anticipated for the broader regional social locality as connectivity issues are mostly found in the areas between population centres instead of larger residential centres (refer to Figure C.3 and Figure C.4).

Table 6.21 Assessment of the impact: Disruption to telecommunications

Project component	Social Impact	Disruption to telecommunications, especially phone and internet		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct and local social localities	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct and local social localities	Unlikely	Minor	Low
	Regional social locality	Negligible impacts anticipated.		

Table 6.22 Cumulative impact assessment: Potential disruption to telecommunications

Project component	Social impact	Potential disruption to telecommunications		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct and local social localities	Likely	Moderate	High
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct and local social localities	Possible	Moderate	Medium
	Regional social locality	Negligible impacts anticipated.		

6.5 Health and wellbeing

6.5.1 *Diminished mental health among landholders and community members*

Easements for right of access to construction, maintain and operate the project would be required for directly affected by the project footprint landholdings. The process will be conducted in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* and the *Property Acquisition Standards* (Department of Finance, Services and Innovation, 2019). For the network augmentation works, no additional easements would be created. Further, no freehold acquisition is expected.

Land that is only required temporarily for construction and beyond any new or existing easement, such as construction compounds and/or temporary worker accommodation facilities, would be leased and returned to the landholder at the completion of construction.

Transgrid has a number of corporate policies and programs in place in recognition of the stress and anxiety experienced by landholders directly impacted by transmission projects. These apply to the project and include:

- Short-term support and counselling services for landholders provided by an external party (Assure Programs). The service is confidential and anonymous.
- The *Landholder easement and compensation guide* to provide private landholders with information on the process Transgrid follows when acquiring easement rights. This process starts with a meeting or reasonable attempts to meet, followed by a letter of intention or offer. This offer initiates a formal six-month negotiation period as required by the *Just Terms Act*. This period allows for negotiation, understanding the process, obtaining advice, and addressing concerns.
- Appointment of Place Managers and Land Access Officers to inform project design prior to and during the preparation of the EIS.

Transgrid is also a signatory to the *Landowner & Community Better Practice Engagement Guide* (The Energy Charter undated).

6.5.1.1 NSW/Victorian border to the future Dinawan substation

For NSW/Victorian border to the future Dinawan substation component, it is also understood that:

- At the time of writing this technical paper, the majority of landholders directly affected by the project footprint have provided consent for studies to be conducted at their properties and commenced lease easement negotiations.
- During SIA engagement, community members and landholders expressed having or knowing someone having mental health issues, including feelings of anxiety, stress, and uncertainty about their future. They attributed these concerns to the project and its potential impacts on their lifestyle, landscape, and agricultural livelihoods, affecting landholders directly affected by the project footprint and neighbouring infrastructure (Jerilderie, Moulamein, Mallan and Wanganella).
- Mental health in the regional social locality is one of the highest chronic diseases (8.33 per cent), exceeding NSW percentages (eight per cent) and Victoria (8.78 per cent).

Given concerns raised about mental health and existing baseline conditions, it can be argued that it is possible that some landholders directly affected by the project footprint would experience mental health issues related to the project requirements. As mentioned in section 6.1.1, there are greater levels of socio-economic disadvantage in the local social locality and duration of the impact could extend throughout construction, resulting in a Medium unmitigated impact. Where compulsory acquisition process is triggered, landholders may develop higher levels of stress and anxiety, leading to a High unmitigated impact (refer to Table 6.23). Similarly, landholders neighbouring the project might experience higher levels of stress given that they would have less opportunities to provide input to the project, when compared to

landholders directly affected by the project footprint, resulting in a High unmitigated impact. No impacts are expected in the local and regional social locality.

Cumulative impacts to landholders are only anticipated for those directly affected by the project footprint and/or neighbouring multiple projects, such as EnergyConnect (NSW – Eastern section), Dinawan Wind Farm, Dinawan Solar Farm, Wanganella Wind Farm and Yanco Delta Wind Farm (refer to Table 6.24). At Moulamein and Jerilderie, five community members in the local social locality expressed feeling overwhelmed and stressed due to the multiple energy related projects in the area and their cumulative impacts. Consequently, landholders directly affected by multiple projects footprint are likely to experience diminished mental health, resulting in a High unmitigated cumulative impact for this particular group of people.

6.5.1.2 Network augmentation works

For the network augmentation works, the project would largely take place within an already existing easement. New easement acquisition will be limited to some works to support removal of existing infrastructure. Therefore, it is anticipated that impacts to landholder mental health would be Low due to the smaller extent of the project footprint (refer to Table 6.23). Cumulatively, landholders directly affected by the project footprint would in many cases also be directly affected by the HumeLink project footprint, resulting in a High unmitigated cumulative impact for this group.

Table 6.23 Assessment of the impact: Diminished mental health amongst landholders

Project component	Social impact	Diminished mental health amongst landholders		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected by the project footprint in the direct social locality	Possible	Moderate	Medium
	Landholders who might be subject to compulsory acquisition in the direct social locality	Likely	Moderate	High
	Landholders neighbouring infrastructure in the direct social locality	Likely	Major	High
	Local and regional social locality	Negligible impacts anticipated.		
Network augmentation works	Landholders directly affected by the project footprint and neighbouring infrastructure in the direct social locality	Unlikely	Minor	Low
	Local and regional social locality	Negligible impacts anticipated.		

Table 6.24 Cumulative impact assessment: Diminished mental health among landholders

Project component	Social impact	Diminished mental health among landholders		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected and neighbouring infrastructure from multiple projects in direct social locality	Likely	Moderate	High
	Local and regional social locality	Negligible impacts anticipated.		
Network augmentation works	Landholders directly affected and neighbouring infrastructure from multiple projects in direct social locality	Likely	Moderate	High
	Local and regional social locality	Negligible impacts anticipated.		

6.6 Culture

6.6.1 Loss of cultural values due to changes to tangible and intangible heritage

Impacts on Aboriginal cultural values and wellbeing may arise due to changes to the landscape and access to sites of cultural heritage significance, leading to an altered sense of place and cultural connection to Country.

6.6.1.1 NSW/Victorian border to the future Dinawan substation

Technical paper 2 – Aboriginal Cultural Heritage Assessment Report (Navin Officer, 2025a) was informed by engagement with approximately 50 Registered Aboriginal Parties (RAPs). The RAPs that participated in the field during survey activities were representatives from the Cummeragunja LALC, Deniliquin LALC, Griffith LALC, Wamba Wamba LALC and Wagga Wagga LALC.

Technical paper 2 – Aboriginal Cultural Heritage Assessment Report (Navin Officer, 2025a) identified that 194 previously recorded and newly recorded Aboriginal sites and potential archaeological deposits (PADs) within (or adjacent to) the project footprint that may be directly or indirectly impacted by the project. The majority of the sites are stone artefact occurrences, including artefact scatters, isolated finds, or hearths and heat retainers. The Aboriginal sites and PADs that could be directly or indirectly impacted by the project have a scientific significance ranging from low to high. During SIA engagement, one Aboriginal community member from Mallan expressed concerns about the potential loss of both Aboriginal and non-Aboriginal cultural and historical heritage due to the proposed works, suggesting if Aboriginal cultural heritage material is found, it should be relocated within Country and not at an off-site facility.

Representatives from the Murray River Council and Edward River Council are concerned about the potential impacts of the project on the sense of belonging, natural surroundings, and intangible heritage of Aboriginal people. The Murrumbidgee Council also identified that there are potentially differing views among Aboriginal groups concerning the level of representation in the engagement completed for the project. It was suggested to engage with traditional groups, not just LALCs, to obtain a more representative voice from Traditional Owners (refer to engagement findings in section 5.1).

Additional engagement has been conducted for the *Technical paper 2a – Cultural Values Assessment* (EMM, 2025), involving eight representatives from broader Aboriginal organisations within the regional social locality. The assessment identified potential impacts on the aesthetic values of the Edward, Murray rivers and in the Delta, Yanco, Coxs and Boiling Down creeks, which are culturally significant watercourses. Consequently, it is possible that Aboriginal people within the local social locality would experience diminished cultural values, resulting in a Medium unmitigated impact.

Technical paper 11 – Non-Aboriginal heritage impact assessment (Navin Officer, 2025b) has assessed the impacts to non-Aboriginal cultural heritage. The technical paper stated that two unlisted heritage items of local significance are likely to be directly impacted by the project. Historic Site 9 is a *Eucalyptus largiflorens* (black box) tree with a surveyor's reference 'blaze'. Additionally, Historic Site 15, the Merran Creek Railway Bridge, is at the edge of the transmission line corridor and may be subject to direct impact from construction activities.

Impacts to non-Aboriginal heritage, are possible and minor resulting in a Medium unmitigated impact (refer to Table 6.25).

Cumulative loss of cultural values is also anticipated due to the construction activities of the 19 relevant future projects. As an example, Baldon Wind Farm and Keri Keri Wind Farm identified potential harm to Aboriginal cultural values and heritage as a high unmitigated impact during construction. These could result in High cumulative impact.

For non-Aboriginal heritage, it is unlikely that the construction activities of the 19 relevant future projects would directly affect heritage sites (*Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b)). This may result in a Low cumulative impact (refer to Table 6.26).

6.6.1.2 Network augmentation works

Technical paper 2 – Aboriginal Cultural Heritage Assessment Report (Navin Officer, 2025a) identified a total of eleven previously recorded and newly recorded Aboriginal sites and potential archaeological deposits (PADs) within the network augmentation works component. During survey activities, four new Aboriginal sites were found which are artefact scatters. These Aboriginal sites could be directly or indirectly impacted by the project, with significance ranging from low to high.

Additionally, during engagement with an Aboriginal knowledge holder for the *Technical paper 2a – Cultural Values Assessment* (EMM, 2025), it was identified that Coxs Creek and Boiling Down Creek which are located in Gregadoo and in the immediate vicinity of this component are highly significant for Wiradjuri people as intangible sites due to their use as traditional pathways.

Technical paper 11 – Non-Aboriginal heritage impact assessment (Navin Officer, 2025b) has assessed the impacts to non-Aboriginal cultural heritage finding that of the four existing heritage items of local significance, three (Ivydale, Ivydale Woolshed and the Stone Ruin) will be subject to indirect impacts, including visual intrusions during construction and impact to curtilage.

Consequently, it is possible that Aboriginal people within the social locality would experience diminished cultural values, resulting in a Low unmitigated impact. In the case of non-Aboriginal heritage, a Low unmitigated impact is anticipated (refer to Table 6.25).

Cumulative loss of cultural values is not anticipated for the network augmentation works component. *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a) did not identify any substantial increase on the impacts of Aboriginal sites from the seven relevant future projects in the area of Gregadoo, resulting in a Low cumulative impact. For non-Aboriginal heritage sites, cumulative impacts to Ivydale homestead and woolshed is minor during construction and no long term impacts expected, resulting in a Low cumulative impact (refer to Table 6.26).

Table 6.25 Assessment of the impact: Loss of cultural values

Project component	Social impact	Loss of cultural values		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Aboriginal people within the social locality (direct, local and regional social localities)	Possible	Moderate	Medium
	Non-Aboriginal communities, organisations and individuals within the social locality (direct, local and regional social localities)	Possible	Minor	Medium
Network augmentation works	Aboriginal people within the social locality (direct, local and regional social localities)	Possible	Minor	Low
	Non-Aboriginal communities, organisations and individuals within the social locality (direct, local and regional social localities)	Unlikely	Minor	Low

Table 6.26 Cumulative impact assessment: Loss of cultural values

Project component	Social impact	Loss of cultural values		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to Dinawan substation	Aboriginal people within the social locality (direct, local and regional social localities)	Likely	Moderate	High
	Non-Aboriginal communities, organisations and individuals within the social locality (direct, local and regional social localities)	Unlikely	Minimal	Low
Network augmentation works	Aboriginal people within the social locality (direct, local and regional social localities)	Possible	Minor	Low
	Non-Aboriginal communities, organisations and individuals within the social locality (direct, local and regional social localities)	Unlikely	Minor	Low

6.7 Decision-making systems

6.7.1 *Diminished capacity to influence decisions regarding changes that may affect people's own lives*

Diminished capacity to influence decisions regarding changes that may affect people's own lives often occurs when they are not provided with informed opportunity to influence project design.

Transgrid commenced project engagement in May 2022 with local councils, government agencies, energy consumer representative groups and Aboriginal representatives to inform the preferred corridor for the project. Since May 2022, there has been more than 5,700 engagement activities, ranging from targeted stakeholder workshops, community information sessions and stakeholder briefings to engagements with directly affected landholders, including face-to-face meetings, phone calls and written correspondence.

- During the corridor selection, 70 written responses were received and 16 community events attended by more than 270 local landholders and community members were held. For the development of the preferred route, Transgrid received 48 written submissions from landholders, the local community and industry. Additionally, 13 community information and town hall sessions were held, attended by approximately 190 local landholders and community members.
- As mentioned in section 4.1.8, design adjustments include increasing the minimum distance to around six kilometres north of Moulamein, keeping the transmission line further from homes to minimise visual impacts and mitigating potential impacts on irrigated agricultural land. This also increased the distance between the proposed transmission line and Moulamein-Wanganella Road at its western end, avoiding multiple crossings of Billabong Creek and irrigated agricultural land. These changes aim to address community concerns by reducing direct visual and amenity impacts on Moulamein residents, minimising potential impacts on irrigated agricultural land, and avoiding impacts on watercourses, including Billabong Creek.

The EIS will be placed on public exhibition in 2025. During this time, stakeholders and the community will have the opportunity to review and comment on the EIS via submission to DPHI.

6.7.1.1 NSW/Victorian border to the future Dinawan substation

During the first SIA field campaign, community members expressed frustration over the lack of engagement and felt powerless, perceiving that decisions were made without considering their input (Jerilderie, Mallan, and Moulamein). Additionally, during consultation, community members identified there is a strong need for better coordination and wider dissemination of information through community hubs such as council offices, art galleries, supermarkets, and local papers (Moulamein and Mallan). At this time, eight community members across different communities expressed that they would prefer not to have the project developed in the region (Conargo, Jerilderie, Moulamein, Wanganella).

During the second SIA field campaign, feedback about engagement with Transgrid was more positive. Community members raised concerns about their capacity, in terms of time and knowledge, to be able to read, understand and respond to the EIS, once released. Murray River Council has also raised this concern in two separate occasions (September 2024 and March 2025) outlining the need for more detailed information and clear timelines about this project and other future projects to support community and local business preparedness.

A Moulamein community member suggested that Transgrid could provide communities with independent consultants to support and provide advice to assist in making a submission on the EIS. Transgrid will manage these issues by implementing engagement tools such as a community consultation campaign, generating an EIS summary document, distribution of fact sheets, and hosting an online interactive EIS. Implementation of some of these activities would ensure that the information is accessible without overwhelming the recipients.

A Council representative identified a need for engaging traditional groups outside the LALCs. It is perceived that the Wiradjuri group (Wagga Wagga, Hay, Narrandera, and Griffith) is 'being heard' more (hence having greater potential impact on decision-making) than smaller tribes such as Yorta Yorta, Nari Nari, Perreppa Perreppa (Barapa Barapa), Wamba Wamba (Wemba Wemba), and Waddi Waddi, who are more likely to be impacted by the project (located in Jerilderie, Deniliquin, and Coleambally). While 50 Registered Aboriginal Parties (RAPs) were engaged for the development of *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a), and eight broader Aboriginal organisations were involved in the *Technical paper 2a – Cultural Values Assessment* (EMM, 2025) at the time of writing this report, there has been limited opportunities of engagement for this particular group for the SIA assessment.

Consequently, in the NSW/Victorian border to the future Dinawan substation component, it is possible that some landholders directly affected by the project footprint and those neighbouring project infrastructure, may perceive or experience a diminished capacity to influence or make decisions regarding changes that affect their lives, resulting in a Medium unmitigated impact.

This impact may be experienced differently by the local and regional social locality, as they have been consistently engaged by Transgrid through various methods, resulting in a Low unmitigated for impact for the broader community and a Medium unmitigated impact for Aboriginal people in the local social locality (refer to Table 6.27).

Cumulatively, some landholders and community members might experience different levels of opportunities to influence future projects that would be developed in the social locality, with two relevant future projects identifying medium impacts to decision-making. Community members also expressed concerns about the time and technical knowledge required to be able to provide meaningful feedback to multiple EIS processes. As previously outlined, the Murrumbidgee, Edward River, Murray River and Hay LGAs will see at least five relevant future projects and associated EIS processes. The engagement need of each project might further diminish community capacity and willingness to participate in engagement processes, resulting in a High impact to landholders directly affected by multiple projects footprint and neighbouring multiple projects in the direct social locality, and a Medium impact to community members in the local and regional social locality (refer to Table 6.28).

6.7.1.2 Network augmentation works

For the network augmentation works component, it is unlikely that stakeholders would feel a diminished capacity to make decisions as part of the project, as it largely involves the replacement of existing transmission line infrastructure. The three interviewed landholders positively evaluated Transgrid's engagement for property access during the EIS process, expressing that they felt heard. As such, a Low unmitigated impact for the direct, local and regional social locality is anticipated.

For the Aboriginal people in direct and local social locality this impact is anticipated to be Medium. During the development of the *Technical paper 2a – Cultural Values Assessment* (EMM, 2025), a representative from Bundyi Aboriginal Cultural Knowledge in Wagga Wagga was interviewed. In Gregadoo (direct social locality), ten people identify as Aboriginal and/or Torres Strait Islanders.

Cumulatively, it is possible that the community has already experienced some level of engagement fatigue due to the engagement processes for EnergyConnect (NSW – Eastern section), Gregadoo Solar Farm, Belhaven BESS and Inland Rail (Albury to Illabo). The HumeLink SIA identified very high impacts to community decision-making, which could result in a Medium cumulative impact for this project.

Table 6.27 Assessment of the impact: Diminished capacity to influence decisions regarding changes that may affect people's own lives

Project component	Social impact	Diminished capacity to influence decisions regarding changes that may affect people's own lives		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected by the project footprint and neighbouring project infrastructure in the direct social locality	Possible	Moderate	Medium
	Aboriginal people in direct and local social locality	Possible	Moderate	Medium
	Local and regional social localities	Possible	Minimal	Low
Network augmentation works	Landholders directly affected by the project footprint and neighbouring project infrastructure in the direct social locality	Possible	Minor	Low
	Aboriginal people in direct and local social locality	Possible	Moderate	Medium
	Local and regional social locality	Possible	Minimal	Low

Table 6.28 Cumulative impact assessment: Diminished capacity to influence decisions regarding changes that may affect people's own lives

Project component	Social impact	Diminished capacity to influence decisions regarding changes that may affect people's own lives		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Landholders directly affected by multiple projects footprint and neighbouring multiple project infrastructure in the direct social locality	Likely	Moderate	High
	Aboriginal people in direct and local social locality	Likely	Moderate	High
	Local and regional social locality	Likely	Minor	Medium
Network augmentation works	Direct, local and regional social localities, including Aboriginal people	Likely	Minor	Medium

7 Impact assessment – Operation

This chapter presents an assessment of the potential impacts (including cumulative impacts) that are expected to occur during operation of the project. Management measures are proposed to mitigate the impacts identified in this section (refer to section 8.1), a ‘residual impact rating’ has been applied to identify the significance of the social impact after the proposed mitigation measure has been implemented (refer to section 8.2).

Some management measures implemented during pre-construction and construction may have an operational benefit such as Strategic Benefit Payments Scheme (SBP) and the Community Investment and Benefits Plan (CIBP).

This chapter combines both project components into one discussion for each social impact as most significance ratings are mostly the same. Where these differ, a separate rating has been provided.

7.1 Community

7.1.1 *Changes to community composition due to population growth from the project’s operational workers*

The operational workers associated with the NSW/Victorian border to Dinawan substation component would vary between ten to 25 operational workers, including existing Transgrid employees and around six full time equivalent new workers. *Technical paper 6 – Economic impact assessment* (Gillespie, 2025) anticipates that 60 per cent would reside in the region, and 90 per cent elsewhere in NSW.

Moulamein, Wanganella and Conargo are the closest localities to the project, including telecommunication facilities. Jerilderie is the closest township to the future Dinawan substation. These localities could host permanent workers dedicated to the operation and maintenance of the infrastructure; however, it is likely that most operational workers would reside in Wagga Wagga and Yass Transgrid depots.

During SIA engagement, two community members from Moulamein expressed that permanent staff from the project could contribute to the community by adding participants to local sports clubs and volunteers to RFS and other organisations. For small communities like Moulamein, Wanganella or Conargo, the addition of one or two families could represent a positive change, resulting in a Low positive impact to the direct and local social locality (refer to Table 7.1).

Cumulatively, the nineteen relevant future projects, including this project, would generate about 245 operational jobs. It is anticipated some of these workers would be sourced locally, therefore not included in the population increase, while others who currently live elsewhere would relocate to the region as result of gaining full-time employment on the project. Smaller communities such as those located in the regional social locality can benefit from having more people to contribute to the local economy, by frequently shops, cafes, but also by enrolling in schools and childcare. New residents may also join local clubs and organisations promoting growth and sustainability. This change results in a High cumulative positive impact (refer to Table 7.2). In the case of the network augmentation works, approximately 20 operational jobs would be developed, resulting in a Low cumulative positive impact. There would be no substantive change to number of workers associated with the network augmentations works, given this involves the replacement of existing transmission line infrastructure or augmentation of existing infrastructure at existing or future substations.

Table 7.1 Assessment of the impact: Changes to community composition due to population growth from the project's operational workers

Project component	Social impact	Changes to community composition		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct and local social localities	Possible	Minimal	Low (positive)
	Regional social locality	Negligible impacts anticipated.		
Network augmentation works	Direct, local and regional social localities	Negligible impacts anticipated.		

Table 7.2 Cumulative impact assessment: Changes to community composition due to population growth from the project's operational workers

Project component	Social impact	Changes to community composition		
	Extent	Likelihood	Magnitude	Unmitigated significance
NSW/Victorian border to the future Dinawan substation	Direct social locality	Negligible impacts anticipated.		
	Local and regional social localities	Likely	Moderate	High (positive)
Network augmentation works	Direct, local and regional social localities	Possible	Minimal	Low (positive)

7.1.2 Unequal distribution of impacts and benefits

The unequal distribution of impacts and benefits could lead to further socio-economic disadvantage for those that may experience impacts but do not experience benefits of the project.

Landholders directly affected by the project footprint could experience reduced sense of place, changes to the way they use and manage their properties, and potentially stress associated with living near transmission infrastructure. However, they would also experience the economic benefits through the Strategic Benefits Payments (SBP) Scheme for new major transmission projects in both components of the project, resulting in a negligible impact to unequal distribution of impacts and benefit for this group.

Landholders adjacent to project infrastructure are not eligible for the SBP Scheme, and not as individuals for the Community Investment and Benefits Plan and a Community Partnerships Program. Consequently, neighbouring landholders would experience an unequal distribution of impacts and benefits, resulting in a Medium unmitigated impact for this group due to impacts being experienced to a lower degree than landholders directly affected by the project footprint.

The broader community would mostly experience changes to the landscape and sense of place, and would also benefit from employment, procurement opportunities and benefit sharing programs, therefore negligible impact is predicted for this group. Some Aboriginal and Torres Strait Islander people residing in the local social locality may experience changes to sense of belonging and culture due to the project, others might benefit from employment and procurement opportunities, if targeted strategies to promote their participation are put in place. This results in a Medium unmitigated impact for this group (refer to Table 7.3 for assessment ratings for other groups).

Cumulatively, landholders who neighbour both components of the project and other relevant future projects would almost certainly experience unequal distribution of impacts and benefits, resulting in a High unmitigated impact for this group (refer to Table 7.4).

Table 7.3 Assessment of the impact: Unequal distribution of impacts and benefits

Social impact	Unequal distribution of impacts and benefits		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint in both components (direct social locality)	Negligible impacts anticipated.		
Landholders neighbouring project infrastructure in the direct social locality of both components	Likely	Minor	Medium
Aboriginal and Torres Strait Islander peoples in the local social locality of both components	Possible	Moderate	Medium

Table 7.4 Cumulative impact assessment: Unequal distribution of impacts and benefits

Social impact	Unequal distribution of impacts and benefits		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders neighbouring both project components and other renewable energy projects	Almost certain	Minimal	High
Aboriginal and Torres Strait Islander peoples within the local social locality of both components of the project	Possible	Moderate	Medium

7.2 Livelihoods

7.2.1 *Enhanced landholder livelihoods associated with the Strategic Benefit Payments Scheme*

The project would require the establishment of transmission line easements. An easement is a property right that ensures the protection of the public and Transgrid's transmission line infrastructure, while also providing access for operational activities along the transmission line route. It imposes rights and obligations on both Transgrid and the landholder to restrict activities that could endanger the public or affect the safe operation of the transmission system (Transgrid, n.d.). The easements would also ensure safe electrical clearances during the operation of the transmission lines.

As noted in section 6.5.1, the NSW Government has introduced a SBP Scheme for new major transmission projects. This scheme compensates private landholders hosting new high voltage transmission projects at a fixed rate of \$200,000 per kilometre of transmission, paid annually over 20 years. The payment rate is uniformly calculated across NSW to ensure fair treatment of all landholders. The SBP Scheme acknowledges the vital role these landholders play in supporting the energy infrastructure that powers the State and ensures they directly benefit from this significant economic investment.

During SIA engagement, a landholder raised concern about the tax implications of the SBP and how it could increase the tax bracket for some landholders in the area, suggesting the SBP should not be taxed as it is seen as a compensation. While this is out of Transgrid's control, the issue of tax may affect how the benefit of the SBP is seen (refer to section 7.3.2 for further discussion on tax implications).

Given the low median weekly household incomes in Jerilderie, Moulamein, and Cobramunga, and the significant socio-economic disadvantage in the local area described in sections 4.1.3.2 and 4.1.3.3, the SBP would enhance the financial wellbeing of directly impacted landholders. Similarly, landholders directly affected by the project footprint as part of the network augmentation works would also be included in the SBP Scheme.

Consequently, it is almost certain that landholders directly affected by the project footprint in the NSW/Victorian border to the future Dinawan substation as well as the network augmentation works would improve their social and economic livelihoods associated with the SBP Scheme and other compensation, resulting in a Medium positive impact (refer to Table 7.5). Cumulatively, it is anticipated that a limited number of landholders that host renewable energy projects would also be directly impacted by the project, which would result in additional easement payments for those landholders in the direct social locality (refer to Table 7.6).

Table 7.5 Assessment of the impact: Enhanced landholder livelihoods associated with the SBP Scheme

Social impact	Enhanced landholder livelihoods associated with the SBP Scheme		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint in the direct social locality of the NSW/Victorian border to the future Dinawan substation	Almost certain	Minor	Medium (positive)
Landholders directly affected by the project footprint in the direct social locality of the network augmentation works	Almost certain	Minor	Medium (positive)
Local and regional social localities of both components	Negligible impacts anticipated.		

Table 7.6 Cumulative impact assessment: Enhanced landholder livelihoods associated with the SBP Scheme

Social impact	Enhanced landholder livelihoods associated with the SBP Scheme		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint and other renewable energy projects in the direct social locality of both components	Almost certain	Major	Very High (positive)
Local and regional social localities of both components	Negligible impacts anticipated.		

7.2.2 Landholder activities impacted due to property management restrictions or alterations

The project operational activities would require Transgrid to have access to the transmission line easement. The easement and associated transmission line could restrict or alter how landholders use their property, particularly regarding land use for cropping and grazing activities.

Landholders directly affected by the project footprint and neighbouring landholders are particularly concerned about the reduction of farming land and the potential impacts on agricultural productivity.

As per *Technical Paper 4 – Agricultural impact assessment* (Tremain, 2025), the NSW/Victorian border to the future Dinawan substation component would impact a total of 868 hectares of agricultural land during operation. The loss of agricultural production during operation is estimated at \$222,115 per annum. This is equivalent to approximately 0.02 per cent of the total gross value of agricultural production across the western LGAs of the project. These landholders would, however, be eligible for the SBP Scheme.

Regarding the network augmentation works component, the project would impact thirteen hectares of agricultural land during its operation. This may result in an annual loss of \$8,245 in agricultural production, which is equivalent to just 0.002 percent of the total agricultural production in the Wagga Wagga LGA (refer to *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)).

Landholders directly affected by the project footprint and neighbouring landholders may need to modify their aerial operations near the easement. During SIA engagement activities, neighbouring landholders expressed concerns about farm productivity due to the potential impact of transmission lines on machinery movement, aerial sown rice operations, and overhead sprinklers, which require a four kilometre clear span (Mallan). Additionally, three neighbouring landholders expressed in an online survey that their main concern included the potential impact on agricultural practices, such as the use of drones and aircraft (Wanganella, Mallan, and Mabins Well).

Technical paper 4 – Agricultural impact assessment (Tremain, 2025), identified moderate and localised impacts on aerial agriculture operations due to the presence of transmission lines in agricultural areas. This can lead to parts of paddocks near infrastructure elements being less effectively treated due to increased release heights. Rice crops would be particularly affected, as they are sown by air and cannot receive fertilisers and pesticides from the ground when fields are flooded.

Additionally, *Technical paper 14 – Aviation impact assessment* (Aviation Projects, 2025) identified seven uncertified aerodromes within ten kilometres of the transmission line, of which four are within three nautical miles (5.56 kilometres). Operations at only one uncertified aerodrome, Steam Plains, would be affected by the project. The project may preclude departures and arrivals on the south of the aerodrome. Moreover, *Technical paper 14 – Aviation impact assessment* (Aviation Projects, 2025) found further 40 uncertified aerodromes within ten kilometres of the transmission line, identified through consultation. The project would have a major impact on eight of these aerodromes, while a moderate effect is assessed for a further three aerodromes. This impact may lead to restrictions in aircraft movements, potentially reducing the efficiency and increasing the costs of aerial agriculture activities for both landholders and their neighbours. Public feedback submitted online to Transgrid expressed concerns about airplanes used for aerial agriculture activities, such as pest control spraying and rice cultivation, where airplanes are essential for sowing and spraying.

Consequently, it is likely that landholders directly affected by the project footprint would need to modify their farming activities in accordance with the Transgrid's *Easement guidelines – Living and working with electricity transmission lines* (Transgrid, 2024). These changes would have a minor change in their agricultural production and cattle farming activities, requiring them to adapt their activities to the new infrastructure in place. For example, grazing may continue under and around the transmission line structures. This would result in a Medium unmitigated impact.

For neighbouring landholders in both components of the project, it is possible that for some aerial operations require modification, resulting in a Low unmitigated impact.

Cumulatively, all the relevant future projects would have a minor impact on regional agricultural production, generally allowing agricultural activities to continue across most of the respective project sites. Transmission line structures can cause cumulative impacts on aerial agriculture operations in association with wind turbine generators. Aerial agriculture is understood to occur on some hosting and adjoining landholdings. In these instances, some cumulative impacts from the presence of both wind turbine generators and transmission line structures would be expected due to their proximity. However, these impacts would be minor to negligible for both projects, and therefore cumulative impacts are expected to be minor (refer to Chapter 24 – Cumulative impacts).

Therefore, landholders in proximity to the project, EnergyConnect (NSW – Eastern section), HumeLink and wind farm projects could experience a minor disruption to agricultural activities and biosecurity risks. However, as stated during SIA engagement, they might also experience their aerial operations modified, resulting in a Medium unmitigated impact.

Table 7.7 Assessment of the impact: Landholder activities impacted due to property management restrictions or alterations

Social impact	Landholder activities impacted due to property management restrictions or alterations		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint for both components	Likely	Minor	Medium
Landholders neighbouring infrastructure for both components	Possible	Minimal	Low

Table 7.8 Cumulative impact assessment: Landholder activities impacted due to property management restrictions or alterations

Social impact	Landholder activities impacted due to property management restrictions or alterations		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint and neighbouring project infrastructure and other relevant future projects	Likely	Minor	Medium

7.3 Health and wellbeing

7.3.1 Stress over health and safety risks associated with EMF and bushfire risk

Stress and concerns about possible health and safety risks of EMF related to transmission lines were raised by three community members. Only one of these specifically mentioned EMF and their concern that this has the potential for negative effects on people and livestock in Moulamein and Wanganella.

The World Health Organisation (WHO), the European Commission, and the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) consider EMF from electrical transmission lines do not pose a risk to human health. The WHO concluded, based on a recent in-depth review of the scientific literature, that the evidence does not currently confirm the existence of any health consequences from exposure to low-level EMF. Similarly, SCENIHR found that existing studies do not provide convincing evidence for a causal relationship between magnetic field exposure and self-reported symptoms, nor do they show any effects of Extremely Low Frequency (ELF) fields on reproductive function in humans and is unlikely to be any perceptible effect on mammal livestock species (*Technical paper 13 – Electric and magnetic fields (EMF) study*). However, some gaps in knowledge about biological effects remain and require further research.

The assessment in *Technical paper 13 – Electric and magnetic fields (EMF) study* (Beca, 2025) investigated the predicted EMF levels directly underneath and at the edge of the easements for the new 500 kV transmission line and the double-circuit 330 kV transmission line (Line 51) against the ARPANSA recommended ICNIRP public exposure guidelines. It was determined that a minimum ground clearance for 500 kV transmission line (12.5 metres) and 330 kV transmission line (eight metres) would keep EMFs within the ICNIRP thresholds directly under the line. The assessment also concluded that the maximum levels for EMF at the edge of the easement would be below the ICNIRP thresholds.

Despite the assessment outcomes detailed in *Technical paper 13 – Electric and magnetic fields (EMF) study* (Beca, 2025), concerns may remain regarding perceived health impacts associated with EMF by residents within the direct impact and local social localities. These perceived concerns could lead to stress and anxiety, which could impact mental health. As identified in section 4.1.5.1, mental health issues are among the top health issues in the locality and access to health services may be limited in rural areas (refer to section 4.1.4.1). This may further exacerbate these concerns.

The assessment in *Technical paper 12 – Bushfire impact assessment* (Australian Bushfire Protection Planners, 2025) identified a high to extreme level of bushfire risk within both project components. Specifically, there is a likelihood of a bushfire event impacting transmission lines (defined as around one in every 10 to 100 years). However, it is unlikely that the transmission lines and associated equipment will initiate a bushfire. To address these risks, vegetation within the transmission line easement will be managed according to Transgrid's existing vegetation management standards. Additionally, the route selection, planning, and design of the project have been developed to avoid bushfire risks.

Neighbouring landholders and those affected by compulsory acquisition may experience stress and concern related to perceived health issues associated with EMF and the increased risk of bushfires due to the project presence. Given that landholders subject to compulsory acquisition may have limited agency in the decision-making process about the project and may also face challenges in accessing health and mental health services, the impact would be moderate, resulting in a Medium unmitigated impact (refer to Table 7.9).

In terms of cumulative impact, some sections of the project run parallel to existing and future transmission lines, which can influence EMF levels depending on their configuration. While EMF levels decrease rapidly with distance, modelling of cumulative effects — including near the Yanco Delta 330 kV line and EnergyConnect (NSW – Eastern section) — confirmed that all EMF levels remain within applicable safety limits (refer to Chapter 24 – Cumulative impacts).

Landholders' concern over EMF and potential bushfire risk could increase due to the multiple wind farms and transmission line projects in proximity to the project, resulting in a High cumulative impact for this group (refer to Table 7.10).

For landholders subject to the acquisition of easements through mutual agreement, and residents in the local social locality more broadly, they may experience stress and concerns related to health risks associated with EMF to a lesser degree due to their distance from the project, resulting in a Low unmitigated impact. However, stress and concerns might be exacerbated for those living in proximity to wind farms and new transmissions lines, resulting in a High cumulative impact (refer to Table 7.10).

Negligible impacts are expected for the regional social locality.

Table 7.9 Assessment of the impact: Stress and concerns over health and safety risks associated with EMF and bushfire risk

Social impact	Stress and concerns over health and safety risks associated with EMF		
Extent	Likelihood	Magnitude	Unmitigated significance
Neighbouring landholders and landholders subject to compulsory acquisition in the direct and local social localities	Possible	Minor	Medium
Landholders subject to acquisition of easements through mutual agreement and residents in the direct and local social localities	Possible	Minimal	Low
Regional social locality	Negligible impacts anticipated.		

Table 7.10 Cumulative impact assessment: Stress and concerns over health and safety risks associated with EMF and bushfire risk

Social impact	Stress and concerns over health and safety risks associated with EMF		
Extent	Likelihood	Magnitude	Unmitigated significance
Neighbouring landholders and landholders subject to compulsory acquisition in the direct and local social localities	Likely	Moderate	High
Landholders subject to acquisition of easements through mutual agreement and residents in the direct and local social localities	Likely	Minor	High
Regional social locality	Negligible impacts anticipated.		

7.3.2 *Stress due to perception of possible decline in land prices, increased insurance costs and tax implications for properties near or intersected by the project*

Although the impact of transmission lines on property values has been studied, the findings are still inconclusive. Stigma in the marketplace associated with transmission lines can affect property values (Elliot and Wadley, 2002). However, over time, the proximity to transmission lines may have minimal effect on fluctuations in house prices (Han & Elliott, 2013). It is important to note that no specific research on the impact of transmission lines on property prices to rural versus urban properties has been sited.

During SIA engagement activities, three landholders directly affected by the project footprint expressed concerns about a potential decrease in the price of their land and properties due to the project (Moulamein and Wanganella). This is consistent with the results of the survey, where neighbouring landholders stated that one of their main concerns is the impact on their property value (Wanganella, Mallan and Mabins Well).

As mentioned in section 7.2.1, landholders directly affected by the project footprint would be eligible for the SBP Scheme. However, during SIA engagement activities, landholders expressed concerns about the possible tax implications of the compensation payments (Jerilderie) given the potential for their income tax bracket to increase during the years they receive the SBP payment. Additionally, one landholder identified a possible increase in the cost of insurance for their land if they are close to transmission or renewable energy projects.

There are numerous factors which may cause insurance premiums to increase, the presence of Transgrid assets on a landholder's property is not something that would necessarily increase premiums. Transgrid holds insurance policies with reputable insurers to cover the risks it faces while operating its transmission network. It should be noted that, irrespective of insurance coverage, Transgrid would be legally liable for any loss or damage to third parties for which it is found to be legally responsible (Transgrid, n.d.).

Stress due to the perception of a possible decline in land prices, increased insurance cost and tax implications for landholders neighbouring the infrastructure is likely during the first years of operation, resulting in a possible minor magnitude and a Medium unmitigated impact (refer to Table 7.11). Cumulatively, stress may be exacerbated by the proximity to other renewable energy projects and new transmission infrastructure, resulting in Medium cumulative impacts for those neighbouring multiple projects (refer to Table 7.12).

Mental health issues arising from perceived possible decline in property prices, increased insurance cost and tax implication is anticipated to be of Medium impact. However, it is acknowledged that for some individuals, this might be experienced as a higher impact depending on their situation. With the mitigations proposed, the residual impact would reduce to Low.

No impacts are expected for the local and regional social localities.

Cumulatively, only landholders directly affected by multiple projects footprint, and/or adjacent to other renewable energy projects, might also experience increased stress due to fears of increased insurance costs and changes to property value.

Table 7.11 Assessment of the impact: Stress due to perception of possible decline in land prices, increased insurance costs and tax implications for properties near or intersected by the project

Social impact	Stress due to perception of possible decline in land prices, increased insurance costs and tax implications for properties near or intersected by the project		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders neighbouring infrastructure in the direct social locality	Possible	Minor	Medium
Landholders directly affected by the project footprint in the direct social locality	Possible	Minor	Medium
Local and regional social localities	Negligible impacts anticipated.		

Table 7.12 Cumulative impact assessment: Stress due to perception of possible decline in land prices, increased insurance costs and tax implications for properties near or intersected by the project

Social impact	Stress due to perception of possible decline in land prices, increased insurance costs and tax implications for properties near or intersected by the project		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders neighbouring projects infrastructure and other relevant future projects in the direct social locality	Likely	Minor	Medium
Landholders directly affected by the project footprint and other relevant future projects in the direct social locality	Possible	Minor	Medium
Local and regional social localities	Negligible impacts anticipated.		

7.4 Surroundings

7.4.1 *Reduced sense of place and belonging due to project infrastructure (transmission lines and structures)*

Changes to the landscape and space can alter the sense of place and belonging, especially for farming communities with long-standing attachments to their land. During SIA engagement activities, nine community members expressed that the project would significantly impact their countryside lifestyle and enjoyment of natural spaces and surroundings. They are particularly worried about visual changes to the landscape in Jerilderie, Conargo, Moulamein, Mallan, and Wanganella.

As detailed in section 4.1.8, through Transgrid's engagement activities since May 2022 with local councils, government agencies, energy consumer representative groups and Aboriginal and Torres Strait representatives, the preferred corridor for the project has been refined in response to stakeholder and community feedback, as outlined in the *Preferred Route Report* (Transgrid, 2024c). These include route adjustments to the west and north of Moulamein away from residential areas, avoiding multiple Creek crossings of the Billabong Creek, and modifications to the west of Cobb Highway, providing a reduction in direct visual and amenity impacts for residents.

Technical paper 3 – Landscape character and visual impact assessment (Iris, 2025) identified that the project would have a temporary moderate landscape character impacts on the Murray River rural valley landscape character zones due to the increased sensitivity of the Murray River and low landscape character impact on the remaining of the landscape character zones during day time and low visual impact to the Delta Creek rural plains Landscape Character Zone (LCZ) at night, due to the presence of the future Dinawan substation.

Additionally, *Technical Paper 3 – Landscape character and visual impact assessment* (Iris, 2025) considered impacts to private and public views. For the NSW/Victorian border to the future Dinawan substation component, no moderate or high visual impacts to private views are expected. For the network augmentation works, the project would have a low visual impact to seven private viewpoints.

For the NSW/Victorian border to the future Dinawan substation component, moderate, low and very low visual impacts from public viewpoints were determined. The moderate visual impacts were identified from roads passing under or parallel to the transmission line corridor in the open rural landscapes of Moulamein and Hay plains, where there is limited natural screening vegetation. For the network augmentation works, very low and low visual impacts from public viewpoints due to the small incremental increase in magnitude of change due to this project.

Technical paper 1 – Biodiversity Development Assessment Report (WSP, 2025a) identified impacts to threatened ecological communities, threatened fauna and threatened flora species, and that offsets would be required.

Regarding the project's potential to modify the land and increase the risk of flooding, *Technical paper 9 – Hydrology, flooding and water quality impact assessment* (WSP, 2025e) concluded that the foundations of the transmission line structures are expected to influence flood levels and flow paths only in their immediate vicinity. Therefore, it is not anticipated that these structures will affect flooding beyond the project footprint. Minor changes in flood behaviour would occur in the vicinity of the expanded Dinawan substation, however, this would occur in areas already impacted during flood events.

During the SIA engagement, landholders directly affected by project footprint in Gregadoo (direct social locality) emphasised the significance of their natural environment and the potential impacts of the project on their landscape views. Additionally, one landholder expressed concern about the potential effects on local flora and fauna (refer to section 5.1).

Consequently, even though technical papers assessed potential impacts into landscape and biodiversity overall as low, diminished sense of belonging due to loss of aesthetic values and perceived loss of biodiversity is likely to be experienced for both neighbouring and landholders directly affected by the project footprint in the direct social locality, resulting in a High unmitigated impact (refer to Table 7.13). For the local social locality, the unmitigated impact is possible and of minor magnitude, resulting in a Medium unmitigated impact.

Cumulatively, landholders and community members might experience increase changes to sense of place and belonging due to multiple renewable energy projects changing the landscape. *Technical paper 3 – Landscape character and visual impact assessment* (Iris, 2025) identified cumulative landscape character impacts from the project together with EnergyConnect (NSW – Eastern section) and Humelink, approved and proposed renewable energy projects to the north of Moulamein and to the east in the vicinity of the future Dinawan substation and the existing Wagga 330 kV substation. During SIA engagement, community members and neighbouring landholders expressed concerns about potential landscape alterations due to multiple energy-related projects in the area (Jerilderie, Conargo, Moulamein and Wanganella), resulting in a High cumulative impact for landholders directly affected by multiple project footprint and neighbouring project infrastructure and community members in the local social locality (refer to Table 7.14).

Negligible impacts are anticipated for other residents within the regional social locality in this regard.

Table 7.13 Assessment of the impact: Reduced sense of place and belonging due to project infrastructure

Social Impact	Reduced sense of place and belonging due to project infrastructure		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by the project footprint and neighbouring project infrastructure in the direct social locality	Likely	Moderate	High
Local social locality	Possible	Minor	Medium
Regional social locality	Negligible impacts anticipated.		

Table 7.14 Cumulative impact assessment: Reduced sense of place and belonging due to project infrastructure

Social impact	Reduced sense of place and belonging due to project infrastructure		
Extent	Likelihood	Magnitude	Unmitigated significance
Landholders directly affected by multiple project footprint and neighbouring project infrastructure in the direct social locality	Likely	Major	High
Local social locality	Likely	Moderate	High
Regional social locality	Negligible impacts anticipated.		

8 Management and mitigation measures

This chapter describes how the project would be managed to reduce potential environmental impacts throughout detailed design, construction and operation.

The approach to environmental management and mitigation of potential social impacts for the construction of the project would be carried out through the development of a project specific Construction Environmental Management Plan (CEMP) for the main construction works and the implementation of individual property management plans developed in consultation with landholders.

Operation of the project would be managed through Transgrid's EMS, which is accredited to ISO 14001 requirements. The EMS includes an *Environmental Assessment Framework*, which contains checklists, procedures, guidance notes and an *Environmental Handbook* (Transgrid, 2021d) to assess and manage the potential impacts of maintenance activities.

Specifically, this chapter provides:

- mitigation and enhancement measures that relate to each of the impacts
- the residual social impact significance. The residual impact significance relates to the level of significance remaining for each impact after the mitigation measure has been implemented
- monitoring and evaluation framework for the adaptive management of social impacts.

The following principles informed the development of management measures:

- informed by consultation: stakeholders were consulted about how Transgrid could manage the impacts and enhance the benefits of the project, the input was considered when developing measures and a management framework
- specific and relevant: measures will be designed to address the negative social impact being mitigated.

8.1 Management measures

Site-specific mitigation measures have been proposed to minimise social impacts associated with the project. Mitigation measures are presented in Table 8.1 provides a summary of mitigation and management measures identified for the project, indicating the relevant phase, impact area and applicable mitigation measure.

Mitigation measures identified in the EIS and supporting technical papers for other impact topics that are relevant to the management of social impacts have been reviewed and considered in the development of this report. To avoid duplication, those measures have not been listed in this chapter, however, have been considered in the assessment of residual social impacts (refer to section 8.2). This includes the general approach to environmental management in EIS Chapter 25 (Environmental management), and mitigation measures included in the following technical papers:

- *Technical paper 2 – Aboriginal Cultural Heritage Assessment Report* (Navin Officer, 2025a)
- *Technical paper 3 – Landscape character and visual impact assessment* (Iris, 2025)
- *Technical paper 4 – Agricultural impact assessment* (Tremain, 2025)
- *Technical paper 7 – Noise and vibration impact assessment* (WSP, 2025c)
- *Technical paper 8 – Traffic and transport impact assessment* (WSP, 2025d)
- *Technical paper 11 – Non-Aboriginal heritage impact assessment* (Navin Officer, 2025b)
- *Technical paper 12 – Bushfire impact assessment* (Australia Bushfire Protection Planners, 2025)
- *Technical paper 15 – Air quality impact assessment* (WSP, 2025g).

Table 8.1 Summary of mitigation and management measures – Social

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI1	Health and wellbeing	A Community wellbeing strategy will be developed and implemented throughout the construction phase. The strategy will: — maintain landholder mental health support – via an independent provider – and extend the service to neighbouring landholders and community members — identify the mechanisms that will be used to provide information and support to landholders and residents who report wellbeing issues — identify the protocols to be used to liaise with local services and community service providers to identify potential increases in health service demand that may be as a result of the proposal's amenity changes — identify existing or new programs and activities to strengthen community cohesion, resilience and wellbeing.	Pre-construction and construction	Direct and local social localities

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI2	Community – impact of temporary worker accommodation facilities	A Temporary worker accommodation facility management plan will be prepared and implemented. The plan will be developed in consultation with the relevant local councils and Transport for NSW. The plan will: — outline how workers will be accommodated during the construction of the temporary worker accommodation facilities — outline how workers not housed within the temporary worker accommodation facilities during construction will be accommodated and mechanisms to monitor any pressures on local temporary accommodation market — outline worker mandatory training, such as cultural awareness training for the workers and worker code of conduct — include measures to facilitate worker cohesion, safety, health and wellbeing and provision of on-site medical services — include strategies to promote a positive interaction with local community, which may include promoting workers participation in community life (sports, events, volunteering). The implementation of the plan would be monitored every six months to identify and manage any unanticipated impacts. The plan will identify potential opportunities for any infrastructure to be repurposed or donated to a local council or community organisations, subject to those parties making suitable arrangements to accept and site the infrastructure.	Pre-construction and construction	Direct and local social localities

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI3	Livelihood – construction workforce	A Workforce and workforce development plan Participation Plan will be prepared and implemented. It will include the following initiatives: — identification of local skills gaps and potential worker skills and training requirements — investigate opportunities for the delivery of training and upskilling programs for local labour force — initiatives to promote local employment, such as early engagement with local employment agencies and local councils, communication of employment opportunity via relevant local mediums of information, contract workers through existing local businesses, etc. — initiatives to promote the integration of female workers into the project, e.g. supporting childcare and flexible work rosters for females.	Pre-construction and construction	Social locality (direct, local and regional)
SI4	Livelihood – construction workforce	A Local industry participation plan will be prepared in consultation with the relevant local councils and implemented which will: — identify services and goods that could be sourced locally — identify the capacity of local businesses and suppliers to be ready for potential additional demand — provide local procurement targets — identify tailored ‘meet-the-contractor’ events for local businesses to learn about potential opportunities associated with the delivery of the project — monitor the availability of key goods and services to the local community when procured locally.	Pre-construction and construction	Social locality (direct, local and regional)

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI5	Community – consultation during construction	A Community and stakeholder engagement plan will be prepared and implemented to ensure: — landholders, businesses and local residents, and potentially impacted receivers are notified in a timely manner about the timing of activities and potential for impacts, and the measures that will be implemented to minimise the potential for impacts on individual properties — procedures and mechanisms for the regular distribution of information are set out — public liaison officer(s) to engage with the local community are appointed and include proactive methods of communication with affected parties and strategies to reach vulnerable members of the community such as doorknocking, text messages, newsletters and or phone calls — enquiries and complaints are managed, and a timely response is provided for concerns raised and information about how solutions are being investigated is provided to the community.	Pre-construction and construction	Social locality (direct, local and regional)
SI6	Decision-making – complaints management	A complaints management system will be maintained throughout the construction period and for a minimum of 12 months after the completion of construction is finished. The complaints management system will include the following (at a minimum): — contact details for a 24-hour response line and email address for ongoing stakeholder contact throughout the project — details of all complaints received will be recorded — verbal and written responses describing what action will be taken will be provided to the complainant (or as otherwise agreed by the complainant) — method for escalation of complaints to senior management based on a risk assessment of the complaint.	Construction and operation (minimum 12 months after completion of construction)	Social locality (direct, local and regional)

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI7	Culture – inclusion of First Nations peoples	An Aboriginal and Torres Strait Islander peoples’ participation plan will be prepared and implemented to enhance and maximise opportunities for employment, procurement, education and other potential project related benefits. The plan will include: — strategies for maximising training and employment opportunities — identify the capacity of Aboriginal and Torres Strait Islander businesses and suppliers to be ready for potential additional demand — provide Aboriginal and Torres Strait Islander procurement targets — identify tailored ‘meet-the-contractor’ events for Aboriginal and Torres Strait Islander businesses to learn about potential opportunities associated with the delivery of the project. The plan will be informed by an Aboriginal and Torres Strait Islander peoples’ advisory group. Members of the Aboriginal and Torres Strait Islanders advisory group will include representatives from Local Aboriginal Land Councils and Aboriginal Representative Organisations. The following stakeholders would also be invited to participate as needed: — relevant social, health and support services — educational organisations and services — employment agencies — relevant business organisations/groups. In the event EnergyCo has established a working group with the above aims for the South West REZ, then Transgrid will also participate in those meetings and inform the project strategies in coordination with other developers.	Pre-construction and construction	Social locality (direct, local and regional)

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI8	Community cohesion and unequal distribution of impacts and benefits	A Community Investment and Benefits Plan (CIBP) will be implemented for the project which will guide the development of Transgrid's community investment opportunities for the project. The CIBP outlines how the local community and key stakeholders, including landholders, Aboriginal and Torres Strait Islander peoples, local councils and representative groups will be engaged to: — identify needs — develop viable investment opportunities that are meaningful and mutually beneficial to communities and stakeholders, and remain aligned with Transgrid's social licence framework and corporate programs — secure funding for these initiatives. The CIBP will identify the frequency and duration of monitoring of the initiatives implemented. Projects and initiatives identified through the CIBP process will be tested for prudence and efficiency and submitted to the Australian Energy Regulator.	Pre-construction, construction and operations	Social locality (direct, local and regional)

Ref	Impact	Mitigation measures	Timing	Application location(s)
SI9	Community – management of social impacts	A Social impact management sub-plan will be developed and implemented. The plan will be prepared by suitably qualified and experienced person(s) in consultation with local councils and relevant affected stakeholders. The Plan will: — include a summary of the social baseline and assessment of social impacts and risks, including the social impact ratings — describe the measures that would be implemented to enhance positive social impacts, and to manage and mitigate negative social impacts from the development, including any relevant cumulative impacts — include a program to monitor, evaluate and publicly report on the effectiveness of these measures and any social impacts of the development during construction, including: — identifying performance indicators, incorporating trigger action response plan — a yearly independent survey of the attitudes of the community about the development — procedures for analysing and comparing the results of monitoring and surveys against the baseline, the predicted social impacts and results of previous monitoring and surveys — recording community engagement and complaints as they relate to social issues — adaptive management measures implemented or proposed; and preparing a quarterly monitoring report, to be publicly available on the project website; and include details of who would be responsible for monitoring, reviewing and implementing the plan — include an engagement strategy for the initial five years of operation that details how communications with those located in close proximity to the transmission line will be maintained to provide updated information and monitor experience and concerns. The strategy would be reviewed, and as required, updated on an annual basis.	Pre-construction, construction and operation (first 5 years)	Social locality (direct, local and regional)

8.2 Residual impacts

Table 8.2 and Table 8.3 summarise the predicted social impacts identified in Chapters 6 and 7 of this report. These impacts are expected to occur in the pre-construction, construction and operation phases of the project.

Table 8.2 and Table 8.3 identify the recommended mitigation or enhancement measures for each social impact or refer to the relevant EIS technical paper that details a specific mitigation measure that would address the identified social impact.

The residual social impact rating has been determined after implementation of the recommended mitigation or enhancement measure. As noted in section 3.3.4, social impacts are experienced by different people to different extents. This means that the residual impact rating may differ for some people more so than for others. This is dependent on a range of factors and has been taken into consideration when designing mitigation measures and applying residual risk ratings to project decisions.

Table 8.2 Residual impact assessment of construction impacts

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Changes to community cohesion	Direct social locality (SL)	Medium	High	Medium	Medium	Community wellbeing strategy	Medium	Low	Low	Low
	Local SL	Medium	High	Medium	Medium	Community Investment and Benefits Plan (CIBP)	Low	Medium	Low	Low
	Regional SL	Negligible	Negligible	Low	Low	Social impact management sub-plan	Negligible	Negligible	Low	Low
Enhanced community wellbeing from CIBP	Social locality (direct, local, regional)	Medium (positive)	High (positive)	Medium (positive)	High (positive)	Community Investment and Benefits Plan (CIBP) Community wellbeing strategy	High (positive)	High (positive)	High (positive)	High (positive)
Reduced sense of place due to construction-related amenity impacts	Direct SL	Medium	High	Medium	High	Individual Property Management Plans (PMPs) (General EIS mitigation measure) Community wellbeing strategy Community and stakeholder engagement plan Pertinent management measures outlined in Technical paper 3, 7 and 15	Low	Medium	Low	Medium
	Local SL	Low	High	Low	High		Low	Medium	Low	Medium
Changes to sense of safety and the way people move and work	Direct SL	High	High	Medium	High	Temporary worker accommodation facility management plan	Medium	Medium	Low	Medium
	Local SL	Medium	High	Medium	High	Community wellbeing strategy Community and stakeholder engagement plan Pertinent management measures outlined in Technical paper 8	Low	Medium	Low	Medium

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Enhanced livelihoods due to increased local employment opportunities	Local SL	Low (positive)	High (positive)	Low (positive)	Medium (positive)	Local industry participation plan Aboriginal and Torres Strait Islander peoples' participation plan	Medium (positive)	High (positive)	Medium (positive)	High (positive)
	Regional SL	Medium (positive)	High (positive)	Low (positive)	Medium (positive)		High (positive)	High (positive)	Medium (positive)	High (positive)
Local business opportunities and economic stimulus	Businesses within direct SL	Negligible	Negligible	Negligible	Negligible	Local industry participation plan Aboriginal and Torres Strait Islander peoples' participation plan	Negligible	Negligible	Negligible	Negligible
	Businesses within local SL	Low (positive)	High (positive)	Low (positive)	Negligible		Medium (positive)	High (positive)	Medium (positive)	Low (positive)
	Businesses within regional SL	Medium (positive)	High (positive)	Low (positive)	High (positive)		High (positive)	High (positive)	Medium (positive)	High (positive)
Labour shortages due to increase demand in local workforce	Local businesses within local and regional SL	Medium	High	Low	Medium	Local industry participation plan Participate and collaborate with the South West Renewable Energy Zone Regional Reference Group (established by Energy Co)	Medium	High	Low	Medium

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Disruptions to agricultural activities and property management restrictions	Directly affected landholders by project footprint in direct SL	Medium	High	Low	Low	Individual Property Management Plans (PMPs) (General EIS mitigation measure) Social Impact Management Plan Pertinent management measures outlined in Technical paper 4	Medium	Medium	Low	Low
	Directly affected landholders by project compounds and temporary worker accommodation facilities in direct SL	High	High	Negligible	Negligible		Medium	Medium	Negligible	Negligible
	Landholders neighbouring project infrastructure in direct SL	Low	High	Low	Low		Low	Medium	Low	Low
Overburdening of health, emergency and hospitality services	Direct	Medium	Negligible	Low	Negligible	Temporary worker accommodation facility management plan Community wellbeing strategy Participate and collaborate with the South West working groups	Low	Negligible	Low	Negligible
	Local SL	Medium	High	Low	High		Low	Medium	Low	Medium
	Regional SL	Low	High	Low	High		Low	Medium	Low	Medium

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Impacts to short-term accommodation	Local SL	Medium	Very High	Negligible	Medium	Temporary worker accommodation facility management plan Social impact management sub-plan Participate and collaborate with the South West Renewable Energy Zone Regional Reference Group (established by Energy Co)	Low	High	Negligible	Low
	Regional SL	Low	Very High	Negligible	Medium		Low	High	Negligible	Low
Disruption to telecommunications, especially phone and internet	Direct and local SL	High	High	Low	Medium	Telstra have committed to working with Transgrid, EnergyCo and other relevant stakeholders to identify solutions for this issue.	Medium	Medium	Low	Low
Diminished mental health amongst landholders and community members	Directly affected landholders by project footprint in direct SL	Medium	High	Low	High	Community wellbeing strategy	Low	Medium	Low	Medium
	Landholders subject to compulsory acquisition in direct SL	High	High	Not applicable	High		Medium	Medium	Not applicable	Medium
	Landholders neighbouring infrastructure in direct SL	High	High	Low	High		Medium	Medium	Low	Medium

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Loss of Aboriginal cultural values	Aboriginal people within SL	Medium	High	Low	Low	Aboriginal and Torres Strait Islander peoples' participation plan	Low	Medium	Low	Low
	Non-Aboriginal communities, organisations and individuals within SL	Medium	High	Low	Low	Pertinent management measures outlined in Technical paper 2 and 11	Low	Low	Low	Low
Diminished capacity to influence decisions regarding changes that may affect people's own lives	Directly affected landholders by project footprint and neighbouring project infrastructure in direct SL	Medium	High	Low	Medium	Community and stakeholder engagement plan Complaints management system Social impact management sub-plan	Low	Medium	Low	Low
	Aboriginal and Torres Strait Islanders in the direct and local SL	Medium	High	Medium	Medium		Low	Medium	Low	Low
	Local and Regional SL	Low	Medium	Low	Medium		Low	Low	Low	Low

Table 8.3 Residual impact assessment of operational impacts

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Changes to community composition due to population growth	Direct SL	Low (positive)	Negligible	Negligible	Low (positive)	Community Investment and Benefits Plan (CIBP)	Medium (positive)	Negligible	Negligible	Medium (positive)
	Local SL	Low (positive)	High (positive)	Negligible	Low (positive)	Community wellbeing strategy	Medium (positive)	High (positive)	Negligible	Medium (positive)
	Regional SL	Negligible	High (positive)	Negligible	Low (positive)		Negligible	High (positive)	Negligible	Medium (positive)
Unequal distribution of impacts and benefits	Directly affected landholders by project footprint in direct SL	Negligible	Not applicable	Medium	Medium	Include representation from neighbouring landholders in the community investment working group related to CIBP and consider initiatives benefiting neighbouring landholders	Negligible	Not applicable	Low	Low
	Landholders neighbouring infrastructure in direct SL	Medium	High	Medium	High		Low	Medium	Low	Medium
	Aboriginal and Torres Strait Islander peoples in local SL	Medium	Medium	Medium	Medium		Low	Low	Low	Low

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Enhanced landholder social and economic livelihoods associated with the Strategic Benefit Payments Scheme	Directly affected landholders by project footprint in direct SL	Medium (positive)	Not applicable	Medium (positive)	Not applicable	No further enhancement measure identified	Medium (positive)	Not applicable	Medium (positive)	Not applicable
	Directly affected landholders by project footprint and other renewable energy projects in direct SL	Not applicable	Very High (positive)	Not applicable	Very High (positive)		Not applicable	Very High (positive)	Not applicable	Very High (positive)
Landholder activities impacted due to property management restrictions or alternations	Directly affected landholders by project footprint	Medium	Medium	Medium	Medium	Individual Property Management Plans (PMPs) (General EIS mitigation measure) Social impact management sub-plan Community and stakeholder engagement plan Complaints management system Pertinent management measures outlined in Technical paper 4	Medium	Low	Low	Low
	Landholders neighbouring project infrastructure	Low	Medium	Low	Medium		Low	Low	Low	Low

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Stress over health and safety risks associated with EMF and bushfire risk	Neighbouring landholders and landholders subject to compulsory acquisition in direct and local SL	Medium	High	Medium	High	Community wellbeing strategy Community and stakeholder engagement plan Pertinent management measures outlined in Technical paper 12	Low	Medium	Low	Medium
	Landholders subject to acquisition of easements through mutual agreement and residents in direct and local SL	Low	High	Low	High		Low	Medium	Low	Medium
Stress due to perception of possible decline in land prices and increased insurance costs for properties near or intersected by the project	Landholders neighbouring infrastructure in direct SL	Medium	Medium	Medium	Medium	Community and stakeholder engagement plan Community wellbeing strategy	Low	Low	Low	Low
	Directly affected landholders by project footprint in direct SL	Medium	Medium	Medium	Medium		Low	Low	Low	Low

Social impact	Extent	NSW/Victorian border to the future Dinawan unmitigated impact		Network augmentation works unmitigated impact		Management measures	NSW/Victorian border to the future Dinawan residual impact		Network augmentation works residual impact	
		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative		Direct/ Indirect	Cumulative	Direct/ Indirect	Cumulative
Reduced sense of place and belonging due to project infrastructure (transmission lines and structures)	Directly affected landholders by project footprint and neighbouring project infrastructure in direct SL	High	High	High	High	Community Investment and Benefits Plan (CIBP) Community wellbeing strategy	Medium	Medium	Medium	Medium
	Local SL	Medium	High	Medium	High		Low	Medium	Low	Medium

8.3 Monitoring and evaluation

A plan for monitoring and managing the project's social performance, referred to as a Social impact management sub-plan, will be prepared by Transgrid prior to construction.

The SIM Plan will outline the project social performance measurements for each management plan (refer to section 8.1, including the desired outcome, indicators, performance target, method of tracking, frequency of monitoring and responsibility).

Monitoring findings will also be presented to the project's Community Consultative Committee meetings (if active) and to an annual community meeting where feedback will be sought on the monitoring program and whether actions or targets require revision.

8.3.1 *Social impact management plan reviews*

Transgrid will track implementation of the Social impact management sub-plan and review performance measures quarterly, to facilitate continual improvement. The Social impact management sub-plan will be reviewed annually and updated based on monitoring data and community and stakeholder feedback to adaptively manage social impacts and respond to unanticipated events, breaches, grievances and non-compliance.

In addition to the monitoring review, the social mitigation measures will also be reviewed to assess whether they are still applicable and on track to meet the residual risk rating applied in the EIS. Any new issues or initiatives that have emerged and that should be included in ongoing mitigations and/or monitoring will be addressed.

A review of the Social impact management sub-plan will be undertaken by an independent third party by the end of the first year of construction, prior to commissioning of the project and again during the third year of operation. Reviews will require consultation with affected landholders, councils, local businesses, LALCs, local and regional emergency management committees, NSW Government agencies and community representatives.

The purpose of the Social impact management sub-plan reviews is to identify the effectiveness of the Social impact management sub-plan strategies and whether changes are required. The results of Social impact management sub-plan reviews will be published on the Transgrid website. Social impact management sub-plan reviews are generally undertaken on an annual basis after the Social impact management sub-plan has been published.

9 References

- Abplanalp, J. & Beckman, K. J. 2014. Electric transmission visibility and visual contrast threshold distances in western landscapes.
- AdaptNSW (n.d.). Climate change in the Murray/Murrumbidgee. Available at: [Climate change in the Murray/Murrumbidgee | AdaptNSW](#)
- AusNet Services, 2015. A guide to living with transmission line easements.
- Australian Bureau of Statistics (ABS, 2021), Census of Population and Housing 2021.
- Australian Bureau of Statistics (ABS, 2016), Census of Population and Housing 2016.
- Australian Bureau of Statistics (ABS, 2018), IRSAD. Available at: <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSAD~20>.
- Australian Energy Infrastructure Commissioner (AEIC, 2021). Considerations for landholders before entering into commercial agreements. Retrieved from: https://www.aeic.gov.au/sites/default/files/documents/2022-06/landholders_agreement_matters_to_consider_-_australian_energy_infrastructure_commissioner.pdf.
- Australian Institute of Aboriginal and Torres Strait Islander Studies (n.d.). AIATSIS Language and Peoples Thesaurus. AustLang. Retrieved from <https://collection.aiatsis.gov.au/austlang/search>.
- Australian Institute of Aboriginal and Torres Strait Islander Studies (1996). Map of Indigenous Australia. Retrieved from <https://aiatsis.gov.au/explore/map-indigenous-australia>.
- Australian Mining Review (2019), Mining in the Hunter Valley: the black star. Available at: <https://australianminingreview.com.au/features/mining-in-the-hunter-valley-the-black-star/#:~:text=Today%2C%20the%20Hunter%20Valley%20is,distance%20of%20up%20to%20380km>.
- Balarald Shire Council. (2022, February). Community Strategic Plan 2032. Available at: <https://balarald.nsw.gov.au/wp-content/uploads/2022/06/ADOPTED-CSP-Community-Strategic-Plan-2022-May-2022.pdf>.
- Berrigan Shire Council (2023), Berrigan Shire Community Strategic Plan 2040. Available at: [bsc2136_berrigan-shire-council-rebrand-project_publication_strategic-plan_hr3.pdf \(nsw.gov.au\)](https://www.berrigan-shire-council.nsw.gov.au/publications/strategic-plan/bsc2136_berrigan-shire-council-rebrand-project_publication_strategic-plan_hr3.pdf).
- Briggs et al (2022). Employment, Skills and Supply Chains: Renewable Energy in NSW. Retrieved from: [employment-skills-and-supply-chains-renewable-energy-in-nsw-final-report.pdf](#).
- Butcher, G. A. (1992, August 25). Ambient Water Quality Objectives for the Lower Columbia River: Hugh Keenleyside Dam to Birchbank. Retrieved December 4, 2013, from Environmental Protection Division: <http://www.env.gov.bc.ca/wat/wq/objectives/birchbank/birchbank.html>.
- City of Wagga Wagga (2021). Wiradjuri and First Nations Community. Cultural protocols. A guide for Councillors and Council staff. Retrieved from: [WWCC_WFNC_CulturalProtocols_WEB.pdf \(nsw.gov.au\)](#).
- City of Wagga Wagga (2022). Innovate Reconciliation Action Plan December 2022 – December 2024. Retrieved from: [Reconciliation Action Plan 2022 - 2024 | Wagga Wagga City Council \(nsw.gov.au\)](#).
- City of Wagga Wagga (2017). Community Strategic Plan 2040. Retrieved from: [Community Strategic Plan 2040 | Wagga Wagga City Council \(nsw.gov.au\)](#).
- Columbia Basin Trust. (2012, September). Climate Change, Impacts and Adaptation in the Canadian Columbia Basin: From Dialogue to Action. British Columbia, Canada.
- de Zeeuw, J., & Reeman, A. (2024). "Chapter 17: Vulnerable people in the context of social impact assessment and management". In *Handbook of Social Impact Assessment and Management*. Cheltenham, UK: Edward Elgar Publishing. Retrieved Oct 23, 2024, from <https://doi.org/10.4337/9781802208870.00027>.

Department of Industry (2017), *Travelling stock reserves - Interim update*. Published November 2017.

Department of Planning, Industry and Environment NSW (DPIE, 2023a). Social Impact Assessment Guideline. Available at:

https://www.planningportal.nsw.gov.au/sites/default/files/documents/2023/GD1944%20SIA%20Guideline_NEW%20VI_14_02_23.pdf.

Department of Planning, Industry and Environment NSW (DPIE, 2023b). Technical Supplement Social Impact Assessment Guideline for State Significant Projects. Available at: [Social Impact Assessment Guideline - Technical Supplement \(nsw.gov.au\)](#).

Department of Planning, Industry and Environment NSW (DPIE, 2023c). Social Impact Assessment Scoping Worksheet. Available at: [SIA Scoping Worksheet.xlsm \(live.com\)](#).

Department of Planning, Industry and Environment NSW (DPIE, 2022a). Practice Note: Engaging with Aboriginal Communities. Available at: [Practice Note - Engaging with Aboriginal communities \(nsw.gov.au\)](#).

Department of Planning, Industry and Environment (DPIE, 2022b). Cumulative Impact Assessment Guideline for State Significant Projects. Available at: [Cumulative Impact Assessment Guidelines for State Significant Projects – October 2022](#).

Department of Planning, Housing and Infrastructure NSW (DPHI, 2024). Undertaking Engagement Guidelines for State Significant Projects. Available at: [Undertaking Engagement Guidelines for State Significant Projects \(nsw.gov.au\)](#).

Department of Planning and Environment (DPE, 2022). Draft Central West and Orana Regional Plan 2041. Available at: [Central West and Orana Regional Plan 2041](#).

Department of the Environment, Water, Heritage and the Arts. (September, 2011). Environmental Water Delivery: Edward-Wakool System. Available at: <https://www.dcceew.gov.au/sites/default/files/documents/ewater-delivery-edward-wakool.pdf>.

Dubbo Shire Council (September 2016), Dubbo Regional Council Local Government area economic profile. Available at: <https://www.dubbo.nsw.gov.au/ArticleDocuments/358/Dubbo%20Region%20Economic%20Profile%20September%202016.pdf>.

Edward River Council. (2022). Community Strategic Plan 2022-2050. Available at: <https://www.edwardriver.nsw.gov.au/Council/Integrated-Planning-and-Reporting/Community-Strategic-Plan>.

Elliott, P. & Wadley, D. 2002. The impact of transmission lines on property values: Coming to terms with stigma.

EnergyCo (February 2023). NSW Renewable Energy Zones geographical areas. Available at: https://www.energyco.nsw.gov.au/sites/default/files/2023-02/nsw-rez-map_0.pdf.

Gannawarra Shire Council. (2021). Growing Gannawarra - 2021-2025 Council Plan. Retrieved from: https://www.gannawarra.vic.gov.au/files/assets/public/v/1/document-resources/council-plan-2021-2025/final_council-plan-2021-2025.pdf.

Gieryn, T. F. (2000). A Space for Place in Sociology. *Annual Review of Sociology*, 26(1), 463-496. [DOI: 10.1146/annurev.soc.26.1.463].

Han, HJ. & Elliott, P. (2013). Impact of High Voltage Overhead Transmission Lines on Property Value. Retrieved from: https://wbc2013.apps.qut.edu.au/papers/cibwbc2013_submission_332.pdf.

Hay Shire Council. (n.d.). Community Strategic Plan 2022-2032. Available at: <https://www.hay.nsw.gov.au/Home/ArtMID/594/ArticleID/1792>.

Holms, G. B., Pommen, L. W., & Cf, P. (1999, September). State of Water Quality of Columbia River at Birchbank. Retrieved December 4, 2013, from State of Water Quality of Columbia River at Birchbank : <http://www.env.gov.bc.ca/wat/wq/quality/birchbank/index.htm>.

Institute for Sustainable Futures (ISF) and SGS Economics and Planning (2021). Employment, Skills and Supply-Chains: Renewable Energy in NSW – Summary Presentation. Retrieved from: isfsgs-nsw-rez-research-summary-presentation.pdf.

LLS (2022), *Travelling Stock Reserves - State Classification Map*. Available at arcgis.com/apps/webappviewer/index.html?id=dd585551cd5c4320bfcd2d671d8f2364. Accessed 6 September 2024.

Ministry of Forests. (1996). Community Watershed Guidebook. Retrieved December 4, 2013, from Community Watershed Guidebook: <http://www.for.gov.bc.ca/TASB/LEGSREGS/FPC/FPCGUIDE/WATRSHED/Watertoc.htm>.

Murray Darling Basin Authority. (n.d.). Selected Area - Edward, Kolety, Wakool. Retrieved from <https://flow-mer.org.au/selected-area-edward-kolety-wakool/>.

Murray River Council. (n.d.). Community Strategic Plan 2022-2032. Available at: <https://www.murrayriver.nsw.gov.au/files/assets/public/v/4/documents/ipampr-docs-and-budgets/community-strategic-plan-2022-2032.pdf>.

Murray Wildlife (2008). Central Riverina Wildlife. Available at: Central_Riverina.pdf (murraywildlife.com.au).

Murrumbidgee Council. (n.d.). 2022-2032 DRAFT Community Strategic Plan. Available at: <https://www.murrumbidgee.nsw.gov.au/files/2022---2032-DRAFT-Community-Strategic-Plan.pdf>.

National Rural Health Alliance. (2021). Mental Health in Rural and Remote Australia. Retrieved from <https://www.ruralhealth.org.au/sites/default/files/publications/nrha-mental-health-factsheet-july2021.pdf>.

New South Wales Department of Planning and Environment (2023, January). Riverina Murray Regional Plan 2041. Available at: <https://www.planning.nsw.gov.au/sites/default/files/2023-03/riverina-murray-regional-plan-2041.pdf>.

New South Wals Government, Environment and Heritage (2003). Riverina bioregion. Available at: [Riverina bioregion | NSW Environment and Heritage](http://Riverina_bioregion_NSW_Environment_and_Heritage).

NGH environmental (2018). Aboriginal Cultural Heritage Assessment. Gregadoo Solar Farm. Retrieved from: [2020-8643 8. Gregadoo Solar - Appendix G Aboriginal Cultural Heritage Part 1.pdf](http://2020-8643_8_Gregadoo_Solar_-_Appendix_G_Aboriginal_Cultural_Heritage_Part_1.pdf).

Riverina Murray Regional Alliance (n.d). Available at: [RMRA represents Aboriginal Communities in the Riverina Region of NSW | About Us](http://RMRA_represents_Aboriginal_Communities_in_the_Riverina_Region_of_NSW_About_Us).

Swan Hill Rural City Council. (2021). Community Vision and Council Plan 2021-2025. Retrieved from: https://www.swanhill.vic.gov.au/files/assets/public/v/2/our-council/plans-strategies-documents/council-plan/council-plan-2021_2025.pdf.

The Murray (2024). Places to go. Available at: <https://www.visitthemurray.com.au/places-to-go>.

Transgrid. (n.d.). Easement Payments. Retrieved from <https://www.transgrid.com.au/community/landholders/easement-payments>.

Transgrid. (n.d.). Landholder easement and compensation guide. Retrieved from <https://www.transgrid.com.au/media/grzfqs1/landholder-compensation-easement.pdf>.

Transgrid (2023a). SIA HumeLink. Retrieved from: [HumeLink \(nsw.gov.au\)](http://HumeLink(nsw.gov.au)).

Transgrid (2023b). Transgrid Consultation Protocol for Review of Environmental Factors (REF). Available at: <https://www.transgrid.com.au/media/vsuggd00/environmental-assessments-consultation-protocol.pdf>.

Transgrid (2024a). Easement Guidelines – Living and working with electricity transmission lines. June 2024.

Transgrid (2024b). Community Partnerships Program Round 1 – 2024 Recipients. Available at: https://www.transgrid.com.au/media/uaubebvkc/cpp-2024-recipients_r1.pdf.

Transgrid (2024c). Victoria to New South Wales Interconnector West (VNI West) (NSW) Preferred Route Report – NSW March 2024. Available at <https://www.transgrid.com.au/media/5whhsuo2/vni-west-preferred-route-report-march-2024.pdf>.

Upper Hunter Shire Council (2022), Our Shire. Available at: <https://upperhunter.nsw.gov.au/our-shire.aspx>.

Visit NSW (n.d.). Deniliquin. Available at: <https://www.visitnsw.com/destinations/country-nsw/the-murray/deniliquin>.

Wagga Wagga City Council. (n.d.). Community Strategic Plan 2040. Available at: <https://wagga.nsw.gov.au/the-council/planning-and-reporting/community-planning/current-community-plans/community-strategic-plan>.

Warrumbungle Shire Council (2022), About Warrumbungle Shire. Available at: <https://www.warrumbungle.nsw.gov.au/our-council/community-and-economic-profile/about-the-shire/about-warrumbungle-shire>.

Welcome to Country (2019), Hunter Valley. Available at: <https://upperhunter.nsw.gov.au/our-shire.aspx>.

WSP (2024a). Victoria to New South Wales Interconnector West (VNI West) (NSW). Scoping Report – NSW. Available at: [Victoria to New South Wales Interconnector West \(VNI West\) \(NSW\)](#).

WSP (2024b). Victoria to New South Wales Interconnector (West). Social Screening Assessment Report. Available at: [Victoria to New South Wales Interconnector \(West\)](#).

YourCouncil NSW (2020), Mid-Western Regional, Available at <https://www.yourcouncil.nsw.gov.au/council-data/mid-western-regional-1632188804/>.

Appendix A

Social locality criteria



A1 Social locality criteria

These criteria were used to identify the social locality in a first stage of the SIA process.

The direct social locality was included at a later stage in the process for determining the social locality, therefore is not included in this table.

Table A.1 Criteria used to define the social locality

Criteria	Description
Stakeholders affected by the project	The local social locality was defined by considering: — landholders/landholders hosting transmission, substation and auxiliary infrastructure — residents/landholders within 5 km of distance of the project (Moulamein, Wanganella, Conargo and Gregadoo) due to changes to landscape and character — potential impacts to cultural heritage — potential impacts on servicing communities, including Murray River, Edward River, Murrumbidgee and Wagga Wagga, as well as social service providers (including health services and emergency services) due to influx of non-residential workers — potential impacts on community character resulting from an influx of non-residential workers. The regional social locality considered: — workers and business in NSW and Victoria (Benjeroop and Murrabit West).
Scale and nature of the project	The local social locality considered: — the project intersects 19 ABS Suburbs and Localities (SALs) in NSW (Argoon, Barratta, Bundure, Cobramunga, Conargo, Cunninyeuk, Gala Vale, Gonn, Gregadoo (Wagga Wagga substation to Gugaa substation section of the project), Jerilderie, Mabins Well, Mallan, Mellool, Moonbria, Moulamein, Steam Plains, Wanganella, Wetuppa and Willurah), and two SALs in Victoria (Benjeroop and Murrabit West). The regional social locality considered: — seven LGAs in NSW (Murray River, Edward River, Murrumbidgee, Hay, Berrigan, Balranald and Wagga Wagga) and two in Victoria (Gannawarra and Swan Hill) that could source workforce and services to the project — in addition to the transmission infrastructure, the project will make use of transportation routes and will require local and regional workers and supply chain.

Criteria	Description
Vulnerable or marginalised individuals around the project footprint	The local social locality considered: — prevalence of elderly residents in Moonbria, Barratta, and Cunninyeuk who live in small localities, with population sizes ranging from approximately 10 to 25 individuals. The regional social locality considered: — the populations residing in Hay Shire, Gannawarra, and Murrumbidgee are characterised by high levels of socio-economic disadvantage when compared to other LGAs within the same regional social locality — Aboriginal and Torres Strait Islander populations across all LGAs as they are relatively higher than averages for both NSW (around 3.4 per cent) and Victoria (around 1 per cent). Notably, the Murrumbidgee LGA has the highest representation at 8.6 per cent (ABS, 2021).
Aboriginal and Torres Strait Islander groups	The regional social locality considered: — although no Native Title has been officially recognised within the local social locality, an application for Native Title was submitted by the Wamba Wamba people in December 2021. Despite not being accepted for registration, this application potentially indicates the ongoing interest of Aboriginal and Torres Strait Islander communities in asserting their rights to Aboriginal land — Balranald Local Aboriginal Land Council (LALC), Cummeragunja LALC, Deniliquin LALC, Griffith LALC, Hay LALC, Wamba Wamba LALC and Wagga Wagga LALC.
Natural features on or near the project	The local social locality considered: — the project may alter the landscape’s visual character of the Riverina Murray region. This region is characterised by fertile agricultural land, and important watercourses like Murrumbidgee Murray, and Edward Rivers — communities have identified that the western and central portions of the project study area (generally north of the Murray River and along Pretty Pine Road and north of Conargo) have been subject to several historical flooding events. In November 2022, the town of Moulamein experienced severe flooding due to heavy rainfall and rising river levels. The regional social locality considered: — the local social locality is surrounded by several parks and forests: Southwest Woodland Nature Reserve (at the project’s eastern end) and the Murray Valley National Park (Wetuppa Forest) (at the project’s western end).

Criteria	Description
Relevant social, cultural, and demographic trends	The local social locality considered: - the population is dispersed across smaller towns like Moulamein (489 people), Jerilderie (922 people), and Conargo (117 people), with even smaller settlements in Cobramunga, Gonn, Mallan, Mellool, and Wanganella, and tiny communities in Argoon, Barratta, Bundure, Gala Vale, Mabins Well, Moonbria, and Wetuppa. Agriculture is central to the community's culture and identity, with activities including grazing, irrigated horticulture, and cropping (rice, cotton, sunflower, and corn). There are high levels of socio-economic disadvantage in some areas, particularly Moulamein and Jerilderie. The labour force participation rate is 55.2%, slightly below the NSW average of 58.7%, with Jerilderie and Moulamein having high employment and low unemployment rates. The regional social locality considered: - the region's demographic trends suggest a shift towards an older population, coupled with a decrease in youth retention and limited job prospects. These patterns could potentially signal a possible labour shortage or an increased stress on an already tight labour market. Due to this labour scenario, major employment hubs — Swan Hill, Hay, Balranald, Deniliquin and Wagga Wagga – are included as part of the regional social locality.

Appendix B

Author declaration



B1 SIA team and author declaration

The SIA has been developed by an experienced team of social scientists.

Carla Martinez is the lead author for Phases 1 and 2 of the SIA. Carla is a Certified Social Impact Assessment Specialist by the Environmental Institute of Australia and New Zealand.

Carla holds a Master of Development Practice majoring in Planning for Social Development from the University of Queensland. Carla is a SIA practitioner with experience in the resource and energy sector in Chile and Australia, having led SIAs in NSW, Queensland and South Australia. Her SIA experience in Australia includes:

- Central West Orana Transmission, NSW (2023): Energy Corporation
- Western Sydney Airport Flight Path (2023): Department of Infrastructure, Transport, Communications and Art
- Tchelery Windfarm, NSW (2023): Neoen
- CopperString Social Impact Management Plans, Queensland (2024 – 2025): Powerlink Queensland
- Gippsland Offshore Windfarm, Victoria (2023): Iberdrola
- Clean Energy Precinct, NSW (2023): Port of Newcastle
- Mineral Sands Atacama Project, South Australia (2022): Iluka Resources
- Eathorpe Battery Storage Facility, NSW (2022): Neoen
- Albury to Illabo Inland Rail, NSW, Australia (2021): Australian Rail Track Corporation
- Burra Park Precinct stage 1, NSW (2021): BHL.

Maite Reyes and Kim-Cherie Davidson are the co-authors of the SIA. Maite holds a degree in Anthropology from the University of Chile and holds a Master of Development from the University of Queensland. Kim-Cherie brings 15 years' experience in community engagement around regional NSW. Kim-Cherie has completed the Critical Perspectives in Social Impact Assessment Certificate Course from The University of Queensland and the Social Impact Assessment Training from the International Association of Impact Assessment (IAIA).

Carla Martinez and Maite Reyes are members of the Environmental Institute of Australia and New Zealand.

This SIA has been peer-reviewed by Felicity Richards. Felicity is a SIA specialist at WSP with over 10 years' experience in the field. Her expertise is SIA in major infrastructure and development projects across Australia. Felicity holds a Master of International Business from Monash University and has completed a Graduate Certificate in Social Impact Assessment at Macquarie University.

Author declaration

This report was prepared by Carla Martinez, National Technical Executive – Communities and Social Performance at WSP Australia. Carla holds a Bachelor of Public Administration from the University of Santiago, a Diploma of Environmental Management and a Diploma of Community Relations from the Catholic University of Chile, Master of Development Practice major in Planning for Social Development from the University of Queensland. Carla has also completed a SIA course from the University of Strathclyde.

The assessment was undertaken during May 2024 and June 2025, based on information available at the time of writing.

It contains information relevant to the SIA for the project, and to my knowledge does not contain information that is false or misleading.



Carla Martinez, BPA, MDP, GradCertSIA

National Technical Executive, Communities and Social Performance, WSP Australia

Appendix C

Social baseline disaggregated data



C1 Social locality SAL codes

Table C.1 Social locality SAL codes

Suburbs and localities			
NSW	Code	Victoria	Code
Argoon	SAL10081	Benjeroop	SAL20211
Barratta	SAL10212	Murrabit West	SAL21841
Big Springs (Wagga Wagga substation to Gugaa substation section of the project)	SAL10344		
Bundure	SAL10674		
Cobramunga	SAL10955		
Conargo	SAL10998		
Cunninyeuk	SAL11166		
Gala Vale	SAL11582		
Gonn	SAL11701		
Gregadoo (Wagga Wagga substation to Gugaa substation section of the project)	SAL11779		
Jerilderie	SAL12023		
Lake Albert (Wagga Wagga substation to Gugaa substation section of the project)	SAL12246		
Mabins Well	SAL12437		
Mallan	SAL12466		
Mellool	SAL12572		
Moonbria	SAL12711		
Moulamein	SAL12754		
Rowan (Wagga Wagga substation to Gugaa substation section of the project)	SAL13445		
Steam Plains	SAL13671		
Wanganella	SAL14151		
Wetuppa	SAL14282		
Willurah	SAL14326		

C2 Existing social data

Table C.2 Regional social locality – demographic overview

	Regional social locality NSW (LGAs)														State		Regional social locality Victoria (LGAs)				State	
	Murray River		Edward River		Murrumbidgee		Hay		Berrigan		Balranald		Wagga Wagga		NSW		Swan Hill		Gannawarra		Victoria	
Population	12,850		8,456		3,353		2,882		8,665		2,208		67,609		8,072,161		21,403		10,683		6,503,491	
Families	3,493		2,160		872		742		2,278		518		17,273		2,135,964		5,326		2,842		1,718,779	
Occupied private dwellings	4,875		3,331		1,291		1,134		3,373		733		24,776		2,900,468		7,718		4,359		2,390,232	
Indigenous population	492	3.8%	410	4.8%	290	8.6%	238	8.3%	263	3%	141	6.4%	4,471	6.6%	278,043	3.4%	967	4.5%	268	2.5%	65,646	1%
Median age	49		46		45		48		52		43		35		39		39		51		38	
Median weekly household income	\$1,260		\$1,240		\$1,401		\$1,236		\$1,128		\$1,370		\$1,638		\$1,829		\$1,379		\$1,071		\$1,759	

Table C.3 Socio-Economic Indexes for Areas (SEIFA) Index for Relative Socio-economic Advantage and Disadvantage (IRSAD)

	Regional social locality NSW (LGAs)							Regional social locality Victoria (LGAs)	
	Murray River	Edward River	Murrumbidgee	Hay Shire	Berrigan Shire	Balranald	Wagga Wagga	Swan Hill	Gannawarra
IRSAD score	965	939	951	926	927	934	971	927	919
IRSAD decile	7	4	5	3	4	4	7	4	3

Table C.4 Local social locality – demographic overview

	Local social locality NSW (SALs)																							
	Argoon		Barratta		Bundure		Cobramunga		Conargo		Cunninyeuk		Gala Vale		Gonn		Gregadoo		Jerilderie		Mabins Well		Mallan	
Population	16		12		17		41		117		24		13		42		274		922		8		45	
Families	0		0		4		8		32		4		5		13		81		228		0		11	
Occupied private dwellings	0		0		3		15		43		6		4		14		76		363		0		14	
Indigenous population	0	0%	0	0%	0	0%	0	0%	4	3.42%	0	0%	0	0%	0	0%	10	3.6%	49	5.31%	0	0%	0	0%
Median age	45		41		49		45		48		27		37		44		41		51		25		39	
Median weekly household income	\$2,750		\$2,249		\$2,624		\$974		\$1,325		\$2,249		\$2,374		\$1,562		\$2,305		\$1,166		\$2,250		\$1,749	
	Local social locality NSW (SALs)																Local social locality Victoria (SALs)							
	Mellool		Moonbria		Moulamein		Steam Plains		Wanganella		Wetuppa		Willurah		Benjeroop		Murrabit West							
Population	43		8		489		0		61		6		0		56		41							
Families	12		0		125		0		14		3		0		12		13							
Occupied private dwellings	17		0		189		0		20		4		0		20		16							
Indigenous population	0	0%	0	0%	12	2.45%	0	0%	7	11.48%	0	0%	0	0%	4	7.14%	0	0%						
Median age	57		61		48		56		41		61		–		37		39							
Median weekly household income	\$1,312		\$1,625		\$1,116		–		\$1,333		\$1,187		–		\$1,812		\$1,624							

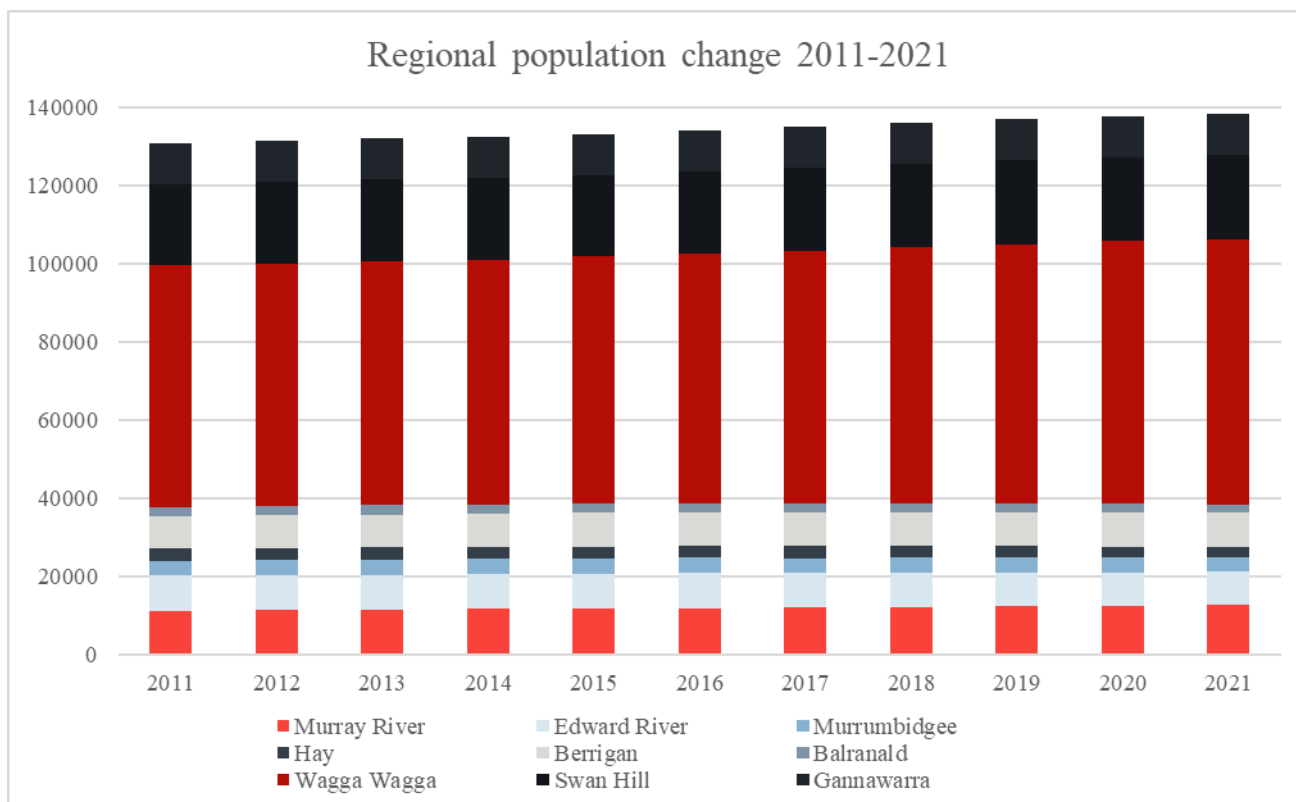


Figure C.1 Regional population change 2011–2021 (ABS, 2021)

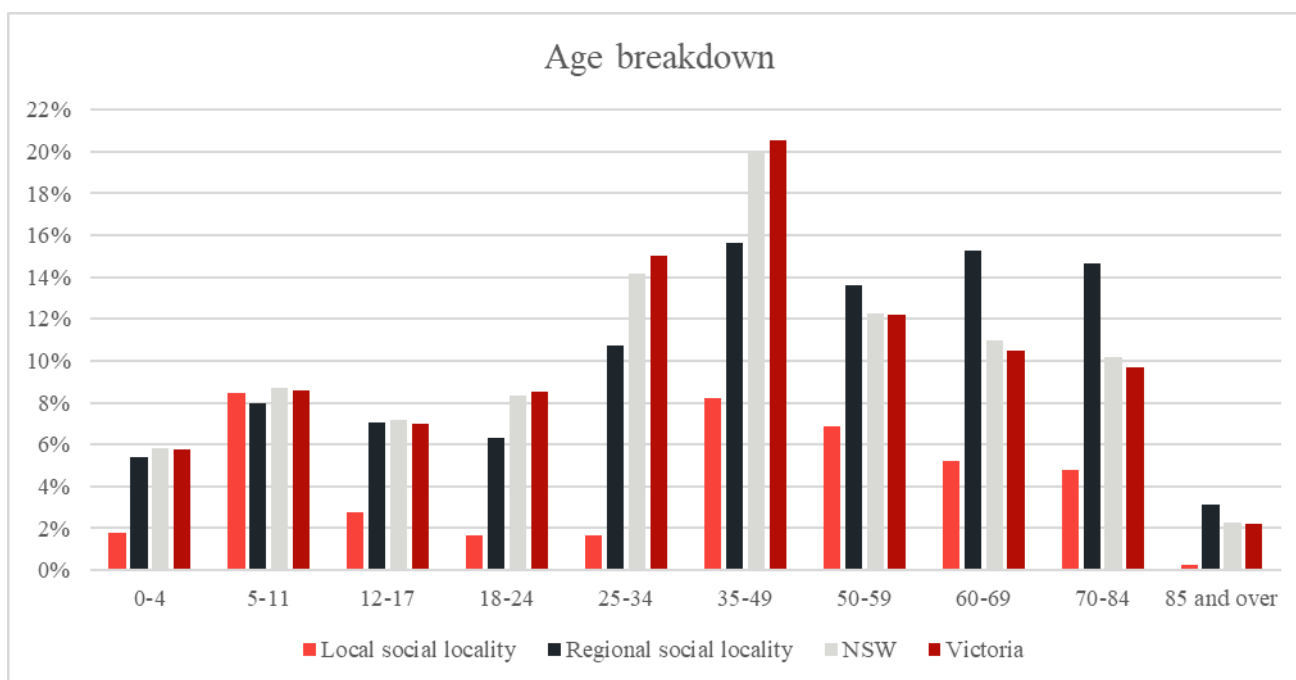
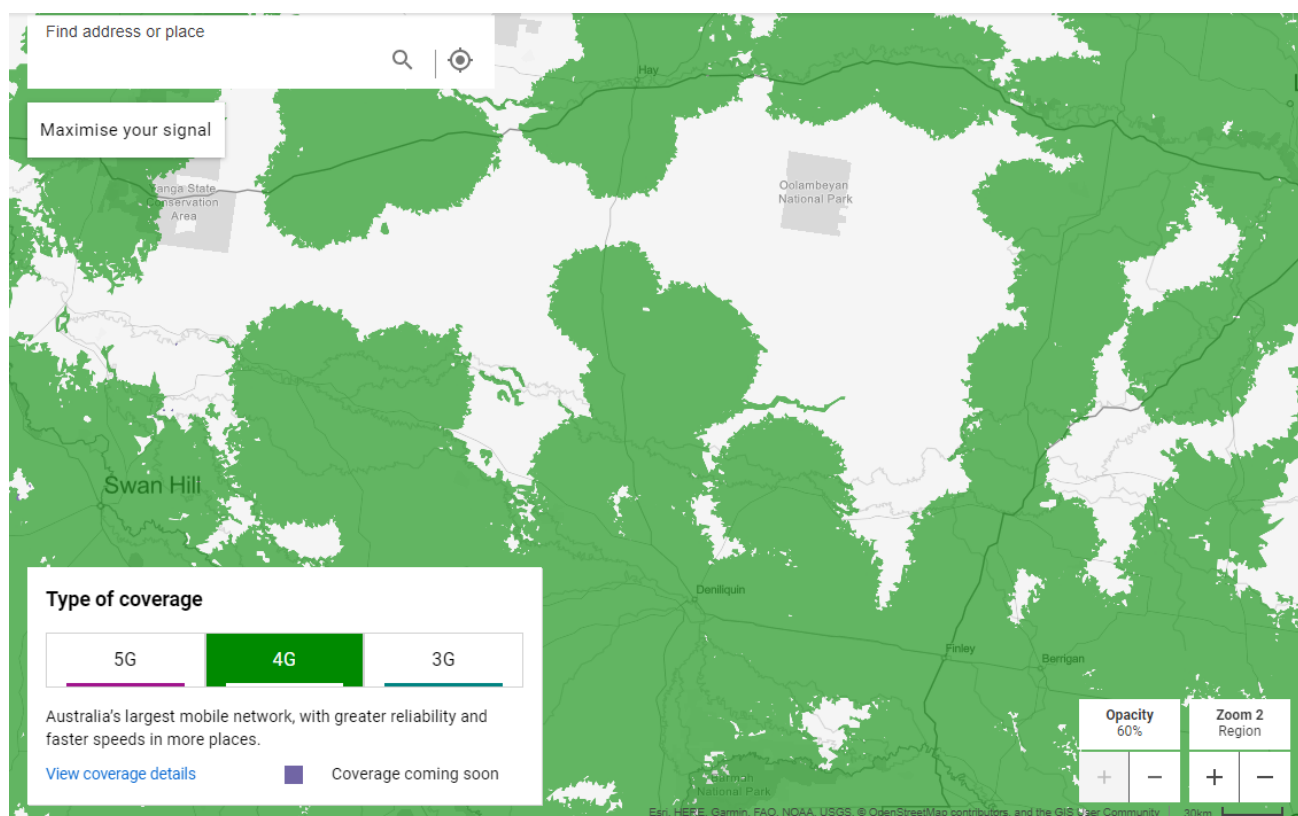


Figure C.2 Age breakdown comparison local and regional social locality

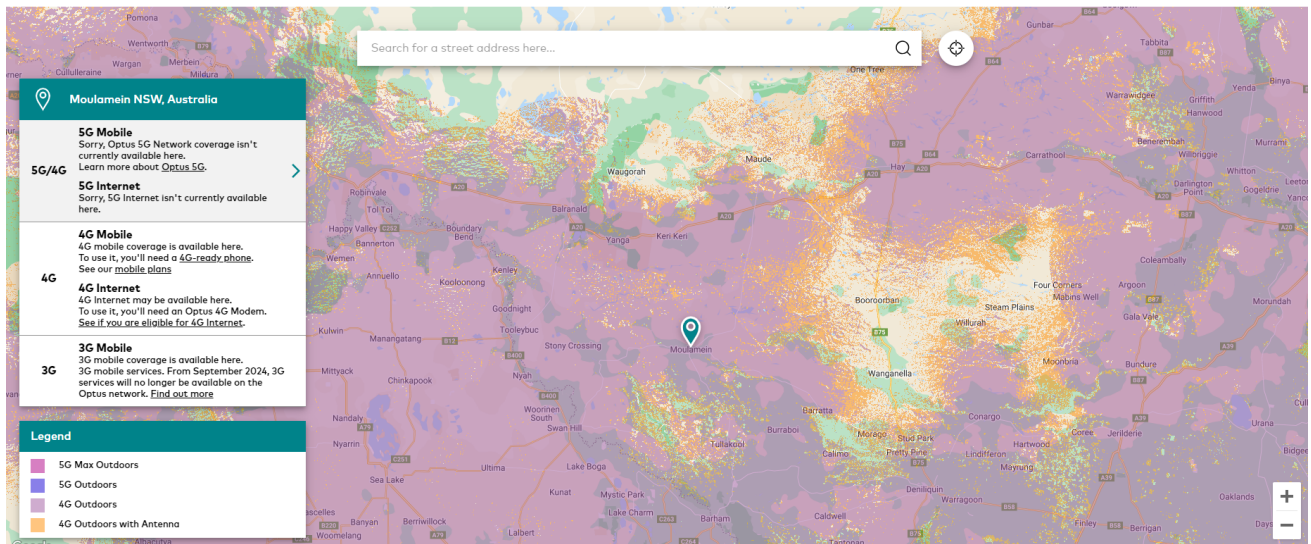
Table C.5 Need for assistance, disability, and carers in the regional and local social locality, ABS 2021

	NSW	Victoria	Regional social locality	Local social locality
Core activity need for assistance	5.76%	5.87%	6.36%	2.8%
People caring for people with disability, health condition or old age	11.5%	12.92%	12.79%	8.9%
Persons aged 0–17 years with need for assistance	3.19%	3.4%	3.07%	0.1%



Source: Telstra, 2024

Figure C.3 Telstra 4G network coverage within the local social locality



Source: Optus, 2024

Figure C.4 Optus network coverage within the local social locality

C3 Local government planning policies

Table C.6 Council Community Strategic Plans in the Regional social locality

Community Strategic Plan (CSP)	Key interests
Murray River Council Community Strategic Plan 2022–2032	Murray River Council CSP 2022–2032 aims to promote local renewable energy projects by collaborating with energy providers to fulfill climate change and natural hazard planning priority. The CSP's measure of success include the number of renewable energy projects underway and completed.
Edward River Council Community Strategic Plan 2022–2050	Edward River Council CSP 2022–2050 identifies the need to increase resilience to natural hazards and climate change and to create a valued and enhanced natural environment. Its priorities include developing key assets to enhance agriculture, boost tourism, and support existing businesses, as well as supporting the development of renewable energy initiatives.
Murrumbidgee Council Community Strategic Plan 2022–2032	Murrumbidgee CSP 2022–2032 has a strong focus on developing a resilient agricultural sector. This means that the Council will actively enhance and maintain key economic drivers to the agricultural supply chain, including road networks, and influence the protection and enhancement of Murrumbidgee's agricultural supply chain's economic output, investment, and employment.
Hay Shire Council Community Strategic Plan 2022–2032	Hay Shire Council CSP 2022–2032 aims to create environmental sustainability by reducing non-renewable energy and exploring other energy options. Hay Shire Council will also focus on identifying opportunities to grow the agriculture sector.
Berrigan Shire Community Strategic Plan 2040	In Berrigan Shire Council CSP 2040 residents highly value the area's relaxed and safe lifestyle, family-friendly atmosphere, and ideal location. They appreciate the rich culture, strong community spirit, and close-knit social fabric, as well as the celebration of arts and heritage. The natural beauty, particularly the Murray River and Finley Lake, along with abundant outdoor recreation opportunities, is also a key aspect of life in the Shire.
Balranald Shire Community Strategic Plan 2032	Balranald CSP 2032 is relevant to the project as it refers to exploring opportunities within the renewable energy sector to support local businesses (Balranald Shire Council, 2022).
Growing Gannawarra – 2021–2025 Council Plan	The CSP 2021–2025 identified what is most valued in the community including the natural environment, the community and the lifestyle provided by living in Gannawarra.
Swan Hill Rural City Council Community Vision and Council Plan 2021–2025	The CSP Plan 2021–2025 describes the community as friendly, caring and inclusive, providing great sporting events and attractions with a variety of opportunities for the promotion of local tourism and cultural events.
City of Wagga Wagga Community Strategic Plan 2040	City of Wagga Wagga CSP 2040 objectives include to support a growing economy by supporting connectivity, tourism, education and training, and employment growth. A key priority is planning Wagga Wagga's future growth in a sustainable manner.

C4 Transgrid Corporate Sponsorship program

Table C.7 Current Transgrid Corporate Sponsorships Programs

Program	Description	Application to VNI West
Girls at the Centre	Partnership with The Smith Family's Girls to support Aboriginal and Torres Strait Islander girls in Years 7 to 12. The program supports them through coaching, evidence-based programs, activities and events.	Establishing the program within the region.
Career Trackers	Career Trackers is a not-for-profit organisation that helps Indigenous young adults attend university and graduate with high marks, gain industry experience and work towards bright professional futures.	Local opportunity for education and employment outcomes for this cohort within the project area.
The Clontarf Foundation	The Clontarf Foundation is a charitable organisation that works to improve the education and employment prospects of young Aboriginal and Torres Strait Islander men. The program works on building students' self-esteem and confidence to help them complete year 12 in school.	Local opportunity for education and employment outcomes for this cohort within the project area.
University of New South Wales (UNSW) Women in Engineering program	Transgrid has partnered with UNSW to sponsor a scholarship and summer camp as part of the Women in Engineering program.	Opportunities for field-based mentorships on VNI West to generate employment outcomes. School visits to VNI West project site and office locations within the project footprint.
Charles Sturt University (CSU) MOU	Partnership with Charles Stuart University to establish a \$2 million Transgrid Engineering Scholarship Fund.	Opportunities for student placements and cadetships in communities within the project footprint.

C5 Key events in the regional social locality

Table C.8 Key events in the regional social locality

LGA	Event	Time	Characteristics
Edward River	Deni Ute Muster	End of September	Parade and celebration of the Ute (abbreviation for a utility, basically a vehicle with an open cargo area at the rear.). The event takes place in Deniliquin and attracts around 20,000 people annually (Visit the Murray, 2023).
Hay	Hay Rodeo	February or March (various dates depending on year)	Hay Rodeo is an annual twilight rodeo, generally on the first Saturday in March at Hay Showgrounds. It is hosted by the Hay Rodeo Club.
	Merino Sheep Show	June or July (various dates depending on year)	Annual sheep show that is held at the Hay Showgrounds.
	Booligal Sheep Races	September or October	An annual sheep racing event for the local community. People can hire a racing sheep to participate, and some sheep are also auctioned. There is an all-day BBQ and a kids jumping castle.
Murray River	Moama Lights	End of June – mid July	It shows multiple immersive experiences and installations with light and sound.
	Moulamein Picnic Races	Mid December	Annual race meeting of the Moulamein Racing Club. This pre-Christmas event includes a six-race program and fashions on the field event.
	ConFest	Beginning of November	ConFest, short for Conference Festival, is an alternative lifestyle festival that takes place annually. The event is typically held around Easter and attracts around 5,000 participants.
Balranald	Five Rivers Outback Festival	End of September – beginning of October	The festival celebrates the spirit of rural life and Australian outback communities.
Berrigan	Berrigan Agricultural Show	Sunday 6 October 2024	Celebration of the region's vibrant agricultural heritage. This event features livestock competitions, arts and crafts, and a carnival.
	Sounds of the Lake	March	Music festival that features a lineup of local and international performers, food and drink stalls.
Swan Hill (Victoria)	River Lights	June 28 through until July 7	River Lights is a night-time activation, which includes light sculptures, dazzling laser effects, interactive projection and magical holograms. It sets in the Pioneer Settlement.

LGA	Event	Time	Characteristics
	Swan Hill District Show	4 and 5 October 2024	The show includes food vendors, game stalls, rides, a zoo for kids and fireworks display during the night.
Murrumbidgee	Jerilderie Gold Cup Races	21 September 2024	This is a day of country horse racing with bookmakers, bars, food, Fashions on the Field and free children's entertainment.
	Jerilderie Fun Fair	March 2025	The event's intention is to assist bridging the rural-metro gap in exposure to cultural activities for residents and surrounding communities.
	Jerilderie Round Up B&S Ball	End of July	This event is a fundraising and provides great opportunity for people from rural communities to come together and have a good time. It has ~ 1,200 participants.
Gannawarra (Victoria)	Great Day Out' in Kerang	Easter Saturday and late December	The event offers horse racing, children's entertainment, shops, and food options.
	Cohuna Show	March	The event includes a night of entertainment, food, drink, local businesses, community groups, and a showcase of the local talent.
Wagga Wagga	Fusion Botanical	October	A multicultural festival with a combination of live music, street food and culture.
	FRESH	June-July	A collection of activities that aims to bring people of different ages, backgrounds, cultures and walks of life together. Activities include all-ability dance classes, concerts, music video filming and jewellery-making.
	Koorinal Kicks and Tricks	January	A mini-youth festival including skate competition, DJ, BBQ, workshops, haircuts, library and school supplies, developed through consultation with local young people.
	Seniors Festival	March	The festival celebrates ageing positively and recognises the important role and contributions older adults make to the community. The festival includes free events to get out and about, pick up new skills, learn what activities and services are available, join local clubs and groups in the community and meet others.

Appendix D

SIA engagement



D1 SIA engagement questionnaire

Table D.1 Questionnaire for relevant stakeholders

Stakeholder group	Questionnaire			
Councils	What are the current issues/challenges facing your community and organisation? How would you describe the current capacity of the below services to meet community demand?			
	Service	Surplus capacity	At capacity	Over capacity
	Public Indoor Recreation (i.e., Courts)			
	Outdoor Recreation (physical assets i.e. Ovals, parks)			
	Aquatic Recreation			
	Health			
	Emergency			
	Schools			
	Vocational education providers (i.e. TAFE)			
	Are there any places or segments of the population that are particularly under-served by the services listed above? What do you think would be the implications of workers utilising the local services above? Are there any other key services likely to be impacted by workers that we should be considering? What do you think could be done to support local service providers to better meet community needs? What do you think could done to support the community in accessing local services? Do you have good examples of proponents' solutions and/or support in the past? Thinking of VNI West proposal: What potential proposal benefits and impacts during construction has your organisation identified? What potential proposal benefits and impacts during operation has your organisation identified? How do you think the proposal may impact or provide benefit to (further exploratory questions in case issue is not raised in the two questions above): — The local housing/accommodation market? — Agriculture or productive land? — Cohesiveness of the community? — Community values, sense of place?			

Stakeholder group	Questionnaire
	Are there any vulnerable members of the community that may be particularly impacted by the proposal? How can Transgrid manage or reduce potential impacts during construction and operation? How can Transgrid manage or increase potential benefits to the community? Thank you for your time, are there any final comments you would like to make?
Landholders directly affected and residents/landholders within 1 km of transmission corridor	Can you tell me about yourself and your property? What is the predominant use of your land? Residential/agricultural/other business (if so, what kind) What do you value most about your property and lifestyle? Is this property your primary place of residence? (How many dwellings are located in your property?) Are there any locations within your property that are key to your operations? (such as access to a certain paddock, bore water etc that are important for the property) Do you generate an income from this property? If so, to what degree are you financially dependent on that income? What impacts are you most concerned about? (Unprompted: Noise/land access/visual/economic disadvantage/agency etc.). What are the long-term changes that you think the proposal will bring to your property – either positive or negative? How do you think the proposal may impact or provide benefit to (further exploratory questions – in case issue is not raised in the two questions above); — Agriculture or productive land? Cohesiveness of your local community and neighbours? Community values, sense of place? Landscape and natural environment? What does a successful proposal look like for you and your family? How can Transgrid manage or reduce potential impacts during construction and operation, and bring benefit to the community? Thank you for your time, are there any final comments you would like to make?
Aboriginal and Torres Strait Islander communities'	What are some of the interests or priorities of the local Indigenous community (i.e. within the study area)? What local services and facilities are important to you and your organisation? What are the specific challenges facing the local Indigenous community? How do you think the proposal could impact (both positively and negatively) the local Indigenous Community? Any concerns about: Local Indigenous heritage, history and cultural values. Employment and livelihoods. Cohesiveness of the local community. Landscape and natural environment. How could Transgrid mitigate or manage potential negative impacts?

Stakeholder group	Questionnaire																																
	What can Transgrid implement to further benefit the local Indigenous community during construction and operations? Thank you for your time, are there any final comments you would like to make?																																
Social service providers and community organisation representatives	Can you tell me a little bit about your organisation/group and what/who you represent? How would you describe your local community? What changes has the community experienced recently? To services only: What is the current capacity of your organisation to meet community demand for services. Multiple choice answer: 1. Existing capacity, 2. At capacity, 3. Over capacity Why? Potentially – what data/ reports do you use to assess capacity across these catchments? Can we access it?																																
	<table border="1"> <thead> <tr> <th>Service</th><th>Surplus capacity</th><th>At capacity</th><th>Over capacity</th></tr> </thead> <tbody> <tr> <td>Public Indoor Recreation (i.e., Courts)</td><td></td><td></td><td></td></tr> <tr> <td>Outdoor Recreation (physical assets i.e. Ovals, parks)</td><td></td><td></td><td></td></tr> <tr> <td>Aquatic Recreation</td><td></td><td></td><td></td></tr> <tr> <td>Health</td><td></td><td></td><td></td></tr> <tr> <td>Emergency</td><td></td><td></td><td></td></tr> <tr> <td>Schools</td><td></td><td></td><td></td></tr> <tr> <td>Vocational education providers (i.e. TAFE)</td><td></td><td></td><td></td></tr> </tbody> </table>	Service	Surplus capacity	At capacity	Over capacity	Public Indoor Recreation (i.e., Courts)				Outdoor Recreation (physical assets i.e. Ovals, parks)				Aquatic Recreation				Health				Emergency				Schools				Vocational education providers (i.e. TAFE)			
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	Are there any places or segments of the population that are particularly under-served by the services listed above? <i>Are there any other key services likely to be impacted by temporary workers that we should be considering?</i> What do you think would be the implications of workers utilising the local services above? What do you think could be done to support local service providers to better meet community needs? What do you think could done to support the community in accessing local services? Do you have good examples of proponents' solutions and/or support in the past? What are the current issues/challenges facing your community/organisation? Do you currently serve workers in your organisation?																																

Stakeholder group	Questionnaire
	<i>Thinking of Victoria NSW Interconnector West (VNI West) proposal:</i> What proposal benefits and impacts during construction has your organisation identified? What proposal benefits and impacts during operation has your organisation identified? Are there any vulnerable members of the community that may be particularly impacted/benefited by the proposal? How can Transgrid manage or reduce potential impacts during construction and operation, and bring benefit to the community? Thank you for your time, are there any final comments you would like to make?

D2 Survey results

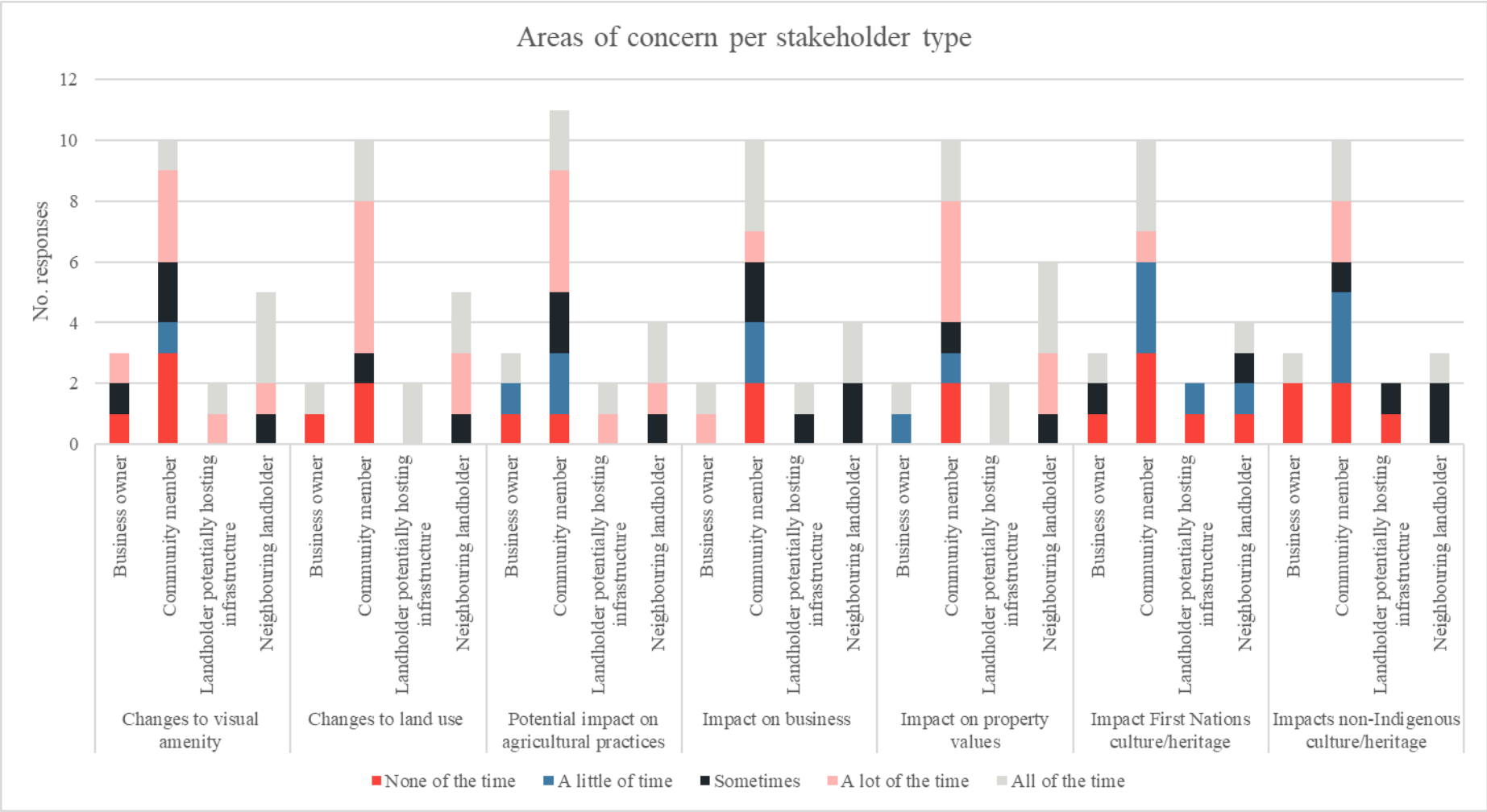


Figure D.1 Areas of concern per stakeholder type by survey respondents

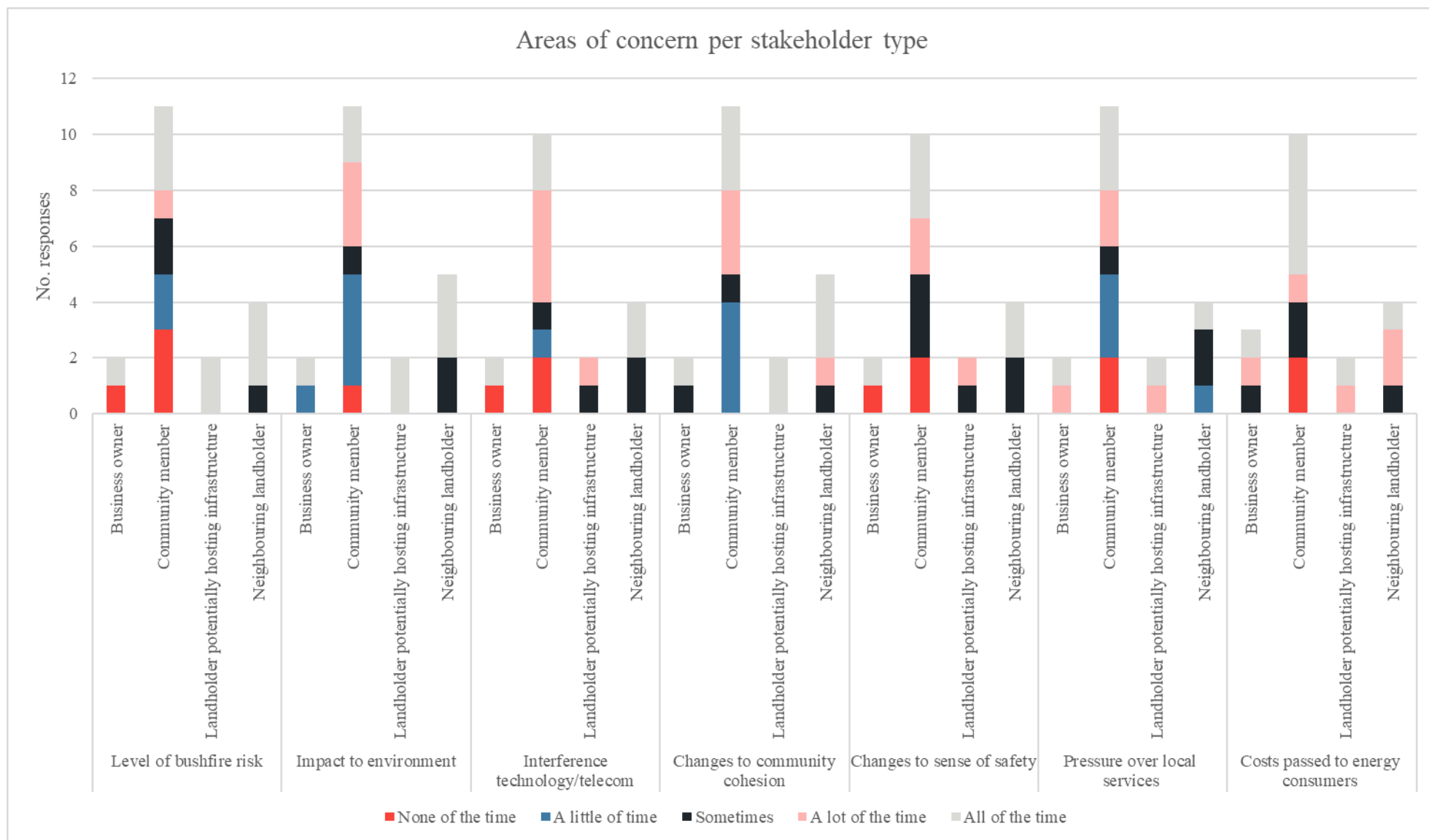


Figure D.2 Areas of concern per stakeholder type by survey respondents

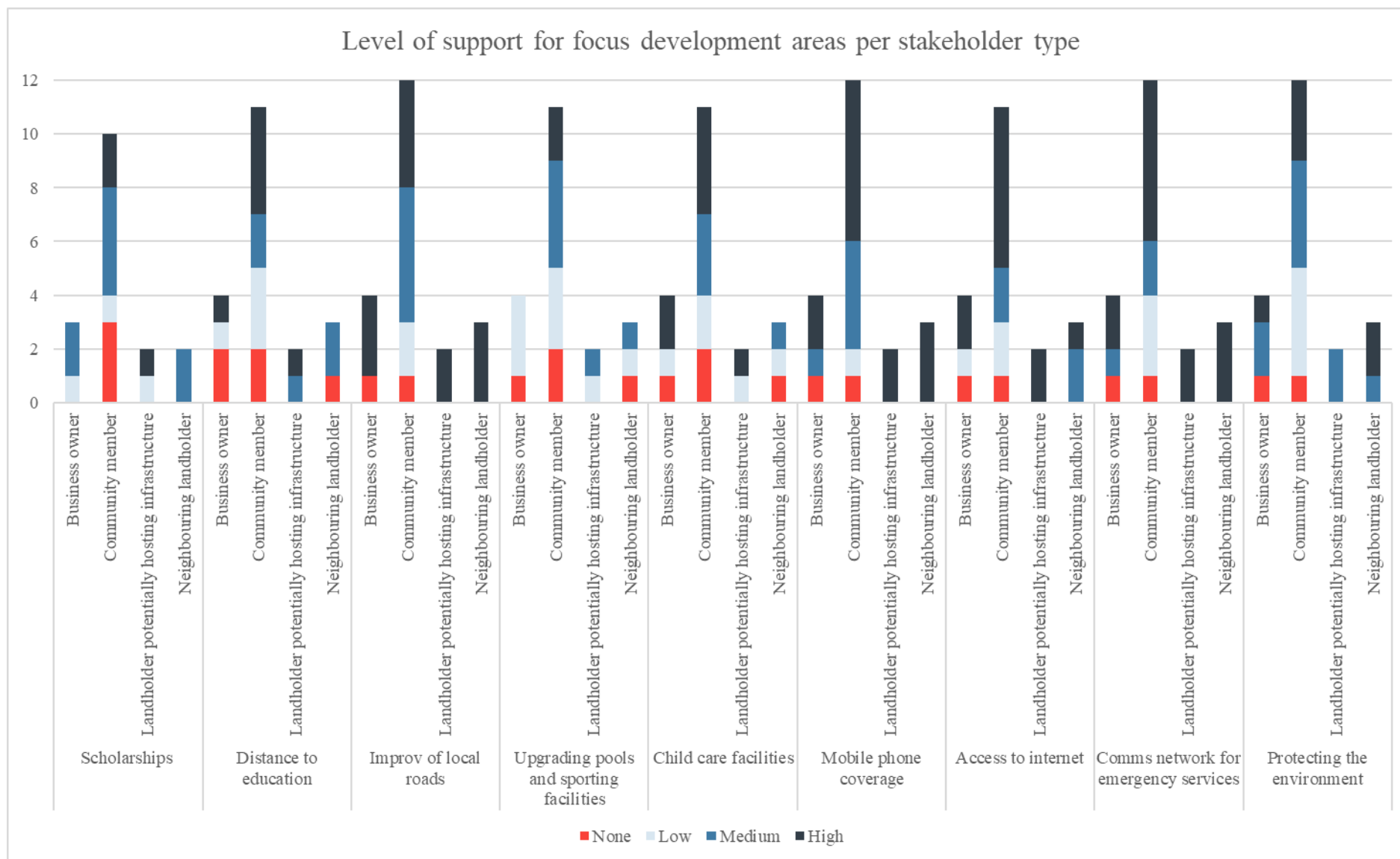


Figure D.3 Level of support for focus development areas per stakeholder type by survey respondents

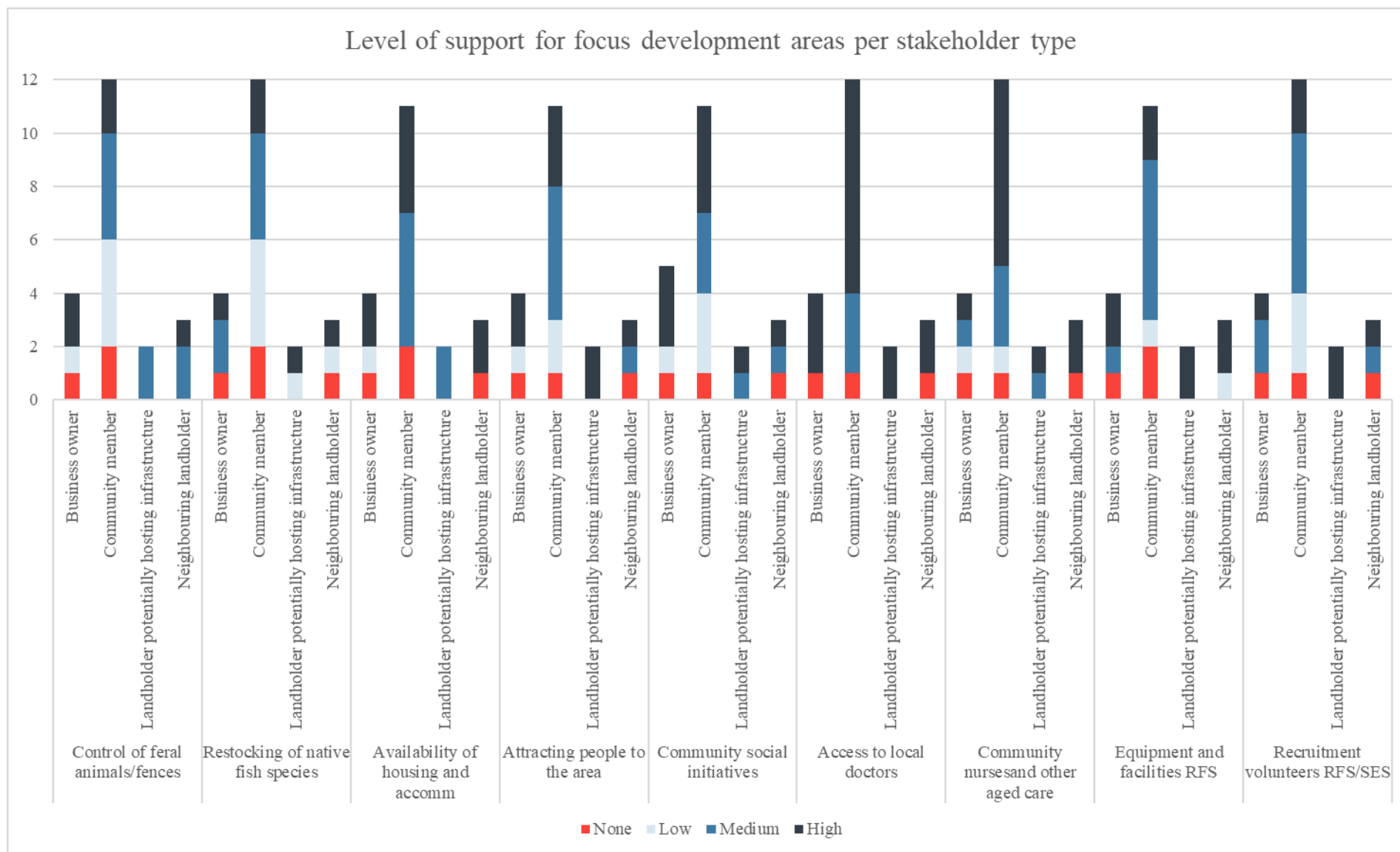


Figure D.4 Level of support for focus development areas per stakeholder type by survey respondents

Appendix E

Checklist NSW SIA requirements



E1 Checklist NSW SIA requirements

Table E.1 NSW SIA Guideline review questions

SIA Guideline review questions		Where addressed in the SIA Report
1	Does the lead author meet the qualification and experience requirements?	Section 3.4
2	Has the lead author provided a signed declaration?	Appendix B1
3	Would a reasonable person judge the SIA report to be impartial, transparent and suitably rigorous given the nature of the project?	Chapter 3
4	Does the SIA report identify and describe all the different social groups that may be affected by the project?	Section 3.3.3 and Chapter 4
5	Does the SIA report identify and describe all the built or natural features that have value or importance for people, and explain why people value those features?	Chapter 4 – Sections 4.1.2, 4.1.4, 4.1.6 and 4.1.7
6	Does the SIA report identify and describe historical, current, and expected social trends or social changes for people in the locality, including their experiences with this project and other major development projects?	Chapter 4 – Sections 4.1.1 and 4.1.3
7	Does the social baseline study include appropriate justification for each element, and provide evidence that the elements reflect both relevant literature and the diversity of views and likely experiences?	Chapters 5, 6 and 7
8	Does the social baseline study demonstrate social-science research methods and explain any significant methodological or data limitations?	Section 3.5
9	Does the SIA report adequately describe likely social impacts from the perspectives of how people may experience them, and explain the research used to identify them? When undertaken as a part of SIA scoping and initial assessment, has the plan for the SIA report been detailed?	Chapters 5, 6 and 7
10	Does the SIA report apply the precautionary principle to identifying social impacts, and consider how they may be experienced differently by different people and groups?	Section 3.3.4 and Chapter 6 and 7
11	Does the SIA report describe how the preliminary analysis influenced project design and EIS engagement strategy?	Sections 4.1.8, 4.2.8, and 6.7.1
12	Were the extent and nature of engagement activities appropriate and sufficient to canvass all relevant views, including those of vulnerable or marginalised groups?	Section 3.3.3 and Chapter 5
13	How have the views, concerns and insights of affected and interested people influenced both the project design and each element of the SIA report?	Chapters 6, 7 and 8
14	Does the SIA report impartially focus on the most important social impacts to people at all stages of the project, without any omissions or misrepresentations?	Chapters 6 and 7
15	Does the SIA report analyse the distribution of both positive and negative social impacts, and identify who will benefit and who will lose from the project?	Section 7.1.2
16	Does the SIA report identify its assumptions, and include sensitivity analysis and alternative scenarios? (including ‘worst-case’ and ‘no project’ scenarios where relevant)	Section 3.6
17	Do the evaluations of significance of social impacts impartially represent how people in each identified social group can expect to experience the project, including any cumulative effects?	Chapters 6 and 7

SIA Guideline review questions	Where addressed in the SIA Report
18 Are the evaluations of significance disaggregated to consider the likely different experiences for different people or groups, especially vulnerable groups?	Chapters 6 and 7
19 Does the SIA report propose responses that are tangible, deliverable, likely to be durably effective, directly related to the respective impact(s) and adequately delegated and resourced?	Chapter 8
20 Does the SIA report demonstrate how people can be confident that social impacts will be monitored and reported in ways that are reliable, effective and trustworthy?	Section 8.3
21 Does the SIA report demonstrate how the proponent will adaptively manage social impacts and respond to unanticipated events, breaches, grievances and non-compliance?	Section 8.3

Appendix F

Review of relevant future projects



F1 Relevant future projects

Table F.1 Description of relevant future projects

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
Related developments					
1. VNI West (Victoria)	Transmission Company Victoria	Victorian component of the VNI West project. VNI West (Victoria) would consist of around 240 km of new 500 kV transmission line between the connection point with VNI West (Victoria) and Bulgana, Victoria.	VNI West (Victoria) provides a direct connection into the project at NSW/Victorian border.	— TCV released its 70 m preferred easement alignment for the Victorian component in October 2024 — the project is currently undergoing environmental assessment in accordance with Victorian and Commonwealth planning processes, and is subject to ongoing preparation of an Environment Effects Statement — project approval and commencement of construction is expected to occur in 2026.	Yes
2. EnergyConnect (NSW – Eastern section) (SSI-9172452)	Transgrid	Development of a new transmission line connecting Buronga Substation and Wagga Wagga Substation, and construction of the new Dinawan Substation (around 170 km west of Wagga Wagga).	Energy Connect (NSW – Eastern Section) provides a direct connection into the project at the future Dinawan substation (being constructed as part of Energy Connect (NSW – Eastern Section)).	— project approved in September 2022 — construction began in early 2023 and is expected to continue until around mid-to-late 2025 — operation is expected to begin in 2025 with an operational life of around 50 years.	No

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
3. HumeLink (SSI-36656827)	Transgrid	Construction and operation of new transmission lines between the existing substations at Wagga and Bannaby, the future Maragle substation, and a new substation at Gugaa.	The project overlaps the HumeLink project footprint at Gregadoo and connects to the new Gugaa substation being constructed as part of HumeLink.	— project approved in November 2024 — construction is proposed to commence in 2025 and is expected to take around 2.5 years to complete — operation is expected to begin in mid-2027 with an operational life of 50 to 70 years.	Yes
Proposed projects					
4. Junction Rivers Wind Farm (SSD-30448824)	BayWa r.e. Projects Australia Pty Ltd	Development of a proposed 750 MW wind farm comprising around 96 turbines (maximum tip height of up to 300 m), battery energy storage system (BESS) and associated infrastructure across an area of around 16,367 ha.	Junction Rivers Wind Farm is located around 20 km north-west of the project.	— EIS exhibited July/August 2024; a response to submissions is currently being prepared — it is anticipated that works associated with the wind farm could commence within six months of project approval — pre-construction and construction expected to take up to 54 to 60 months and would begin within 6 months of receiving development consent (start year not noted).	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
5. Keri Keri Wind Farm (SSD-38358962)	Acciona Energy Australia	Development of a proposed 884 MW wind farm comprising around 155 wind turbines (maximum tip height of up to around 291 m), BESS and associated infrastructure across an area of around 18,055 ha.	Keri Keri Wind Farm is located around 22 km north of the project.	— EIS exhibited between May and June 2024; a response to submissions is currently being prepared — construction is proposed to begin in late 2027 and is expected to take about 24 months — operation is expected to begin in 2030 with an operational life of around 30 years.	Yes
6. Wilan Wind Farm (SSD-51306206)	Kilara	Development of a proposed 800 MW wind farm comprising around 138 wind turbines (maximum tip height of up to 300 m), BESS and associated infrastructure across an area of around 16,000 ha.	Wilan Wind Farm is located around 34 km north of the project	— SEARs issued in December 2022 (with supplementary SEARs issued in April 2023); an EIS is being prepared — construction is proposed to begin in early 2025 and is expected to take around 24 to 30 months — operation is expected to begin in late 2026 or early 2027 with an operational life of 25 to 30 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
7. Baldon Wind Farm (SSD-40138508)	Goldwind Australia	Development of a proposed 1,400 MW wind farm comprising around 180 wind turbines (maximum tip height of up to 300 m), BESS and associated infrastructure across an area of around 42,500 ha.	Baldon Wind Farm is located around 2 km north of the project of the project	— EIS exhibited between August and September 2024; a response to submissions is currently being prepared — construction is expected to begin in early 2026 and take around 36 months (if constructed in one stage) — operation is expected to begin in early 2029 with an operational life of 25 to 30 years.	Yes
8. Tchelery Wind Farm (SSD-59701722)	Neoen	Development of a proposed 800 MW wind farm comprising around 120 wind turbines (with a maximum tip height of 285 m) and associated infrastructure across an area of around 27,400 ha.	Tchelery Wind Farm is located around 2.2 km north of the project	— SEARs issued in July 2023 (with supplementary SEARs issued December 2023); an EIS is being prepared — construction is proposed to commence in early 2026 and is expected to take around 30 months — operation is expected to begin in 2028 with an operational life of around 30 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
9. Abercrombie Wind Farm (SSD-77340978)	Abercrombie Wind Farm Pty Ltd	Development of a proposed 2.5 GW wind farm comprising around 348 wind turbines (maximum tip height of up to 300 m), BESS and associated infrastructure across an area of around 91,365 ha.	Abercrombie Wind Farm is located around 12 km north of the project	— SEARs issued in December 2024; an EIS is being prepared — construction is proposed to commence in early 2028 and is expected to take around five years — operation is expected to begin in 2033 with an operational life of around 35 years.	Yes
10. Wanganella Wind Farm (SSD-78102208)	Equis Wind Australia Pty Ltd	Development of a proposed 840 MW wind farm comprising around 105 wind turbines (with a maximum tip height of 270 m), BESS and associated infrastructure across an area of around 30,737 ha.	Wanganella Wind Farm is located adjacent to the project	— SEARs issued in November 2024; an EIS is being prepared — construction is proposed to commence in 2027 and is expected to take around two years — operation is expected to begin in 2030 with an operational life of around 30 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
11. Pottinger Wind Farm (SSD-59235464)	Someva Renewables	Development of a proposed 1,300 MW wind farm comprising around 247 wind turbines (with a maximum tip height of 280 m), BESS and associated infrastructure across an area of around 26,000 ha.	Pottinger Wind Farm is located around 10 km north of the project	— EIS exhibited between June and July 2024 — submissions report submitted October 2024 and is currently under DPHI assessment — construction is expected to begin in late 2026 and is expected to take around 55 months — operation is expected to begin in 2029 with an operational life of around 35 years.	Yes
12. Pottinger Solar Farm (SSD-59254709)	Someva Renewables	Development of a proposed 300 MW solar farm comprising PV panels, BESS and associated infrastructure across an area of around 1,460 ha.	Pottinger Solar Farm is located around 20 km north of the project	— SEARs issued July 2023; an EIS is currently being prepared — construction is proposed to commence in 2026 and is expected take around 24 months — operation is expected to begin in 2027 with an operational life of 50 years.	Yes
13. Billabong Creek Regulators (SSI-50831979)	New South Wales Department of Climate Change, Energy, the Environment and Water	Replacing two existing weirs along Billabong Creek with two new environmental water regulators. The new regulators would allow for flow regulation and fish passage.	Billabong Creek Environmental Water Regulators project is located around 7 km south of the project	— EIS exhibited in November 2024; a response to submissions is being prepared — construction is anticipated to start in 2025, and be completed by 2026 — the construction period is anticipated to be around 18 months	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
14. Bullawah Wind Farm (SSD-50505215)	BayWa r.e Projects Australia	Development of a proposed 1,000 MW wind farm comprising around 143 wind turbines (with a maximum tip height of 300 m), BESS and associated infrastructure across an area of around 33,000 ha.	Bullawah Wind Farm is located around 19 km north-northwest of the project	— EIS exhibited between August and September 2024; a response to submissions is currently being prepared — construction is proposed to begin in late 2025 and is expected to take around 44 months — operation is expected to begin in 2029 with an operational life of 30 years.	Yes
15. Romani Solar Farm (SSD-67105475)	Samsung C&T Renewable Energy Australia Pty Ltd	Development of a proposed 250 MW solar farm comprising PV panels, BESS and associated infrastructure across an area of around 1,810 ha.	Romani Solar Farm is located around 12 km north of the project	— SEARs issued March 2024; an EIS is currently being prepared — construction is anticipated to start in 2025, and be completed by 2026 — the construction period is anticipated to be around 18 months.	Yes
16. West Nyangay Solar Farm (SSD-74990235)	Australian solar farms	Development of a proposed 800 MW solar farm comprising of PV panels, BESS and associated infrastructure across an area of around 5,500 ha.	West Nyangay Solar Farm is located around 19 km north of the project	— SEARs issued in September 2024; an EIS is currently being prepared — the project would be constructed over a period of around 12 to 18 months — construction commencement timeframe currently unknown.	No

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
17. Conargo Wind Farm (SSD-70611708)	Squadron Energy	Development of a proposed 300 MW wind farm comprising around 53 wind turbines (with a maximum tip height up to 270 m), BESS and associated infrastructure across an around of around 2,295 ha.	Conargo Wind Farm is located around 12.5 km south of the project	— SEARs issued in May 2024 (with amended SEARs issued in December 2024); an EIS is currently being prepared — the project would be constructed over a period of around 24 months from 2027 — planned to operate in 2028/2029 with an estimated operational life of 30 years.	Yes
18. Dinawan Solar Farm (SSD-50725959)	Spark Renewables	Development of a proposed 1,000 MW solar farm comprising around PV panels, BESS and associated infrastructure across an area of around 4,500 ha.	Dinawan Solar Farm is located around 100 m south of the project	— EIS exhibited between November and December 2023 — submissions report submitted September 2024 and is currently under DPHI assessment — construction is proposed to begin in early 2025 and is expected to take around 18 to 36 months — operation is expected to commence in 2026 with an operational life of 25 to 35 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
19. Dinawan Wind Farm (SSD-50725708)	Spark Renewables	Development of a proposed 1,500 MW wind farm comprising around 200 wind turbines (with a maximum tip height of up to 280 m) and associated infrastructure across an area of around 46,000 ha.	Dinawan Wind Farm (west) around 4 km north of the project The project traverses Dinawan Wind Farm (east)	— EIS exhibited between July and August 2024; a response to submissions is currently being prepared — construction is proposed to begin in 2025 and is expected to take around 60 months — operation is expected to begin in 2027/2028 with an operational life of 25 to 35 years.	Yes
20. Argoon Wind Farm (SSD-64935522)	Argoon Wind Farms	Development of a proposed 901 MW wind farm comprising around 106 wind turbines (with a maximum tip height of up to 249 m), BESS and associated infrastructure across an area of around 10,900 ha.	Argoon Wind Farms is located around 1 km south of the project	— SEARs issued in December 2023; an EIS is currently being prepared — the project would be constructed over a period of around 24 to 36 months — construction and operation commencement timeframe currently unknown.	Unknown
21. Belhaven Battery Energy Storage System (SSD-57575973)	Vena Energy	Development of a proposed 400 MW/800 MWh BESS including transmission connection and associated infrastructure.	Belhaven BESS project is located around 2 km west of the project	— SEARs issued in May 2023; an EIS is currently being prepared — construction is proposed to begin in 2025 and is expected to take 12 months — operation is expected to begin in 2026 with an operational life of around 20 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
22. Livingstone Solar Farm (SSD-80114208)	Brunsdon Pastoral Co	Development of a proposed 300 to 600 MW solar farm comprising PV panels. BESS and associated infrastructure across an area of around 2,700 ha.	Future Gugaa 500 kV substation, Livingstone Gully Road is with the Livingstone Solar Farm project area	— SEARs issued in March 2025; an EIS is currently being prepared — the project would be constructed over a period of around 12 to 24 months — construction and operation commencement timeframe currently unknown — an operational life of around 30 to 40 years is expected.	Unknown
23. Mangoplah Battery Energy Storage System (SSD-77527735)	Samsung C&T Renewable Energy Australia (SREA)	Development of a proposed 300 to 600 MW solar farm comprising PV panels. BESS and associated infrastructure across an area of around 2,700 ha.	Future Gugaa 500 kV substation, Livingstone Gully Road is with the Livingstone Solar Farm project area	— SEARs issued in November 2024; an EIS is currently being prepared — the project would be constructed over a period of around 12 to 15 months within indicative commencement in 2027 — operational commencement is expected in 2028/2029 with an expected operational life of around 20 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
Approved or project modifications					
24. Yanco Delta Wind Farm (SSD-41743746)	ViRYA Energy	Development of a proposed 1,500 MW wind farm comprising around 208 wind turbines (with a maximum tip height of up to 270 m), BESS and associated infrastructure across an area of around 42,000 hectares.	The project traverses through the Yanco Delta Wind Farm project area	— approved in December 2023 — project modified in June 2024 to correct turbine locations and development layout — construction is proposed to begin in 2026 and is expected to take around 36 months — operation is expected to begin in 2026 or 2027 with an operational life of around 30 years.	Yes
25. Gregadoo Solar Farm (SSD-8825)	Gregadoo Solar Farm Pty Ltd	Development of a proposed 47 MW solar farm comprising PV panels and associated infrastructure across an area of around 150 ha. A current modification proposal includes incorporation of a BESS, an increase in development area and a new access road.	Gregadoo Solar Farm is located adjacent to the project at the Wagga 330 kV substation	— approved in December 2018 — project modified in March 2021 and August 2023 to increase the operating capacity and number of PV panels — current modification proposal exhibited between November and December 2024 — construction is proposed to begin in 2025 and is expected to take around 12 to 18 months — operation is expected to begin in 2026 with an operational life of 30 years.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap
26. Inland Rail (Albury to Illabo)	ARTC	Enhancement works to structures and sections of track along 185 km of existing operational standard gauge rail from the Victorian/NSW border to Illabo in regional NSW.	Inland Rail (Albury to Illabo) is located around 11.5 km north west of the project and 14 km west of the project	— approved in October 2024 — construction is expected to begin in January 2025 and is expected to take around 30 months to complete — operation is expected to begin around mid-2027.	Yes

Table F.2 Relevant future projects for the network augmentation works

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap with the project
Related developments					
1. EnergyConnect (NSW – Eastern section) (SSI-9172452)	Transgrid	Development of a new transmission line connecting Buronga Substation and Wagga Wagga Substation, and construction of the new Dinawan Substation (around 170 km west of Wagga Wagga).	Provides a direct connection into the project at the future Dinawan substation (being constructed as part of Energy Connect (NSW – Eastern Section)).	— project approved in September 2022 — construction began in early 2023 and is expected to continue until around mid to-late 2025 — operation is expected to begin in 2025 with an operational life of around 50 years.	No
2. HumeLink (SSI-36656827)	Transgrid	Construction and operation of new transmission lines between the existing substations at Wagga Wagga and Bannaby and the proposed Maragle substation, and a new substation at Gugaa.	The project overlaps the HumeLink footprint.	— project approved in November 2024 — construction is proposed to commence in 2025 and is expected to take around 2.5 years to complete — operation is expected to begin in mid-2027 with an operational life of 50–70 years.	Yes
Proposed projects					
3. Belhaven Battery Energy Storage System (SSD-57575973)	Vena Energy	Construction and operation of a 400 MW/800 MWh Battery Energy Storage System including transmission connection and associated infrastructure	Around 2 km west of the project (Line 51 works)	— proponent currently preparing EIS with the aim to be completed by 2024 — Construction anticipated between 2025 and 2026.	Yes

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap with the project
4. Livingstone Solar Farm (SSD-80114208)	Brunsdon Pastoral Co	Development of a proposed 300 to 600 MW solar farm comprising PV panels. BESS and associated infrastructure across an area of around 2,700 ha.	Future Gugaa 500 kV substation, Livingstone Gully Road is with the Livingstone Solar Farm project area	- SEARs issued in March 2025; an EIS is currently being prepared - the project would be constructed over a period of around 12 to 24 months - construction and operation commencement timeframe currently unknown - an operational life of around 30 to 40 years is expected.	Unknown
5. Mangoplah Battery Energy Storage System (SSD-77527735)	Samsung C&T Renewable Energy Australia (SREA)	Development of a proposed 300 to 600 MW solar farm comprising PV panels. BESS and associated infrastructure across an area of around 2,700 ha.	Future Gugaa 500 kV substation, Livingstone Gully Road is with the Livingstone Solar Farm project area	- SEARs issued in November 2024; an EIS is currently being prepared - the project would be constructed over a period of around 12 to 15 months within indicative commencement in 2027 - operational commencement is expected in 2028/2029 with an expected operational life of around 20 years.	Yes
Approved or project modifications					
6. Gregadoo Solar Farm (SSD-8825)	Gregadoo Solar Farm Pty Ltd	Existing solar farm with increased generating capacity of around 65 MW (AC) and 75 MW (DC). Current proposal includes date of the current project approval to include a BESS.	Adjacent to the project at Wagga 330 kV substation (Line 51 works)	- main solar farm approved December 2018 and will start construction in 2025 - Construction of the proposal is expected to take up to around 9 months - modification currently in preparation for the addition of a BESS.	No

Relevant future project	Proponent	Scope	Location/distance to project	Status/timeframe	Construction overlap with the project
7. Inland Rail (Albury to Illabo)	ARTC	Enhancement works to structures and sections of track along 185 kilometres of existing operational standard gauge rail from the Victorian/New South Wales border to Illabo in regional NSW. The project forms part of the Inland Rail project.	11.5 km north west of the project and 14 km west of the project (Line 51 works)	— approved 8 October 2024 — construction is proposed to begin in late 2024 and is expected to take around 16 months to complete — operation is expected to begin in late 2026.	No

Table F.3 Relevant future projects – anticipated workers numbers and intended accommodation camps

Project	Document reviewed	Relevant social locality (LGA)	Construction overlap	Construction workers	Operational workers	Construction local employment target	Accommodation camp
1. VNI West (Victoria)	Scoping	Gannawarra (Kerang)	Q3 2026 – Q4 2029	Unknown	Unknown	Unknown	Unknown
2. EnergyConnect (NSW – Eastern section)	SIA	Balranald, Murray River, Edward River, Hay, Murrumbidgee and Wagga Wagga	No overlap	500	5	20%	Yes
3. HumeLink	SIA	Wagga Wagga, Yass	Q3 2025 – Q2 2027	1,200	5	Unknown	Yes
4. Junction Rivers Wind Farm	SIA	Murray River and Balranald	Q3 2025 – Q2 2030	400	40	20%	Yes
5. Keri Keri Wind Farm	SIA	Balranald, Hay, Murray River (Moulamein) and Swan Hill	Q3 2025 – Q2 2030	400	10	40%	Yes
6. Wilan Wind Farm	Scoping	Murray River, Hay and Balranald	Q4 2027 – Q3 2029	400	Unknown	Unknown	Yes
7. Baldon Wind Farm	SIA	Murray River, Hay and Edward River	Q3 2025 – Q2 2027	350	Unknown	Unknown	Yes
8. Tchelery Wind Farm	Scoping	Edward River, Murray River, Hay and Balranald	Q1 2026 – Q4 2028	500	Unknown	Unknown	Yes
9. Abercrombie Wind Farm	Scoping	Hay	Q1 2028 – Q4 2029	600	35	Unknown	Yes
10. Wanganella Wind Farm	Scoping	Edward River	Q1 2027 – Q4 2028	420	19	Unknown	Yes (if required)
11. Pottinger Wind Farm	SIA	Hay, Edward River and Murrumbidgee (Jerilderie)	Q1 2026 – Q2 2028	450	40	Unknown	Yes
12. Pottinger Solar Farm	Scoping	Hay	Q3 2025 – Q1 2030	220	4	Unknown	Yes
13. Billabong Creek	SIA	Edward River, Murrumbidgee (Jerilderie)	Q1 2026 – Q4 2027	26	Unknown	Unknown	No
14. Bullawah Wind Farm	SIA	Murrumbidgee (Jerilderie), Hay, Edward River	Q4 2025 – Q2 2029	350	40	Unknown	Yes
15. Romani Solar Farm	Scoping	Edward River	Q3 2025 – Q4 2026	Unknown	Unknown	Unknown	Yes
16. West Nyangay Solar Farm	Scoping	Edward River	Unknown	Unknown	Unknown	Unknown	Unknown

Project	Document reviewed	Relevant social locality (LGA)	Construction overlap	Construction workers	Operational workers	Construction local employment target	Accommodation camp
17. Conargo Wind Farm	Scoping	Edward River	Q3 2026 – Q2 2028	Unknown	Unknown	Unknown	No
18. Dinawan Solar Farm	SIA	Murrumbidgee (Jerilderie) and Edward River	Q3 2025 – Q4 2026	400	10	25%	Yes
19. Dinawan Wind Farm	SIA	Murrumbidgee (Jerilderie) and Edward River	Q3 2025 – Q4 2029	400	Unknown	Unknown	Yes
20. Argoon Wind Farm	Scoping	Murrumbidgee (Jerilderie)	Unknown	350	6 to 12	Unknown	Unknown
21. Belhaven Battery Energy Storage System	Scoping	Wagga Wagga	Q3 2025 – Q4 2026	100	6 to 10	Unknown	No
22. Livingstone Solar Farm	Scoping	Wagga Wagga	Unknown	Unknown	Unknown	Unknown	Yes (if required)
23. Mangoplah Battery Energy Storage System	Scoping	Wagga Wagga	Q1 2027 – Q1 2028	60	2	Unknown	No
24. Yanco Delta Wind Farm	SIA	Murrumbidgee (Jerilderie) and Edward River	Q3 2025 – Q2 2028	300	30	Unknown	No
25. Gregadoo Solar Farm	EIS	Wagga Wagga	No overlap	100	2 to 3	Unknown	No
26. Inland Rail (Albury to Illabo)	SIA	Wagga Wagga	No overlap	770	0	Unknown	No
Total (minus projects with no overlap)				7,426	253		

Table F.4 Relevant future projects – review of SIA construction impacts of cumulative projects that overlap during construction

Project	Community cohesion	Benefit sharing program	Amenity impacts	Local procurement target	Disruption to agricultural activities	Reduced sense of safety	Health and hospitality services	Housing and accommodation	Emergency services	Phone reception and internet	Mental health	Aboriginal cultural values
Junction Rivers Wind Farm	Medium	Yes	Medium	NA	NA	Medium	High	Very high	High	N/A	N/A	Medium
Keri Keri Wind Farm	Medium	Yes	NA	NA	Medium	High	Medium	Medium	Medium	N/A	N/A	High
Baldon Wind Farm	Medium	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pottinger Wind Farm	Medium	Yes	High	High positive	NA	High	High	Very High	High	High	NA	High
Billabong Creek	High positive	Yes	Medium	Low positive	NA	Medium	NA	Medium	NA	NA	NA	Medium
Bullawah Wind Farm	High	Yes	Medium	NA	NA	Medium	High	High	Low	Low	Low	Medium
Dinawan Solar Farm	Medium	Yes	Medium	30%	Medium	Medium	Medium	Low	Medium	Medium	NA	Medium
Yanco Delta Wind Farm	Medium	Yes		NA	Medium		Medium	High	Medium	NA	NA	NA
HumeLink	Medium	Yes	Medium	High positive	High	Medium	High	Medium	High	Medium	Medium	Medium

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