Appendix 11

SOCIAL IMPACT ASSESSMENT

umwelt
Environmental & Social Consultants

SPARK RENEWABLES

MALLEE WIND FARM

Social Impact Assessment

FINAL

September 2024

MALLEE WIND FARM

Social Impact Assessment

FINAL

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Spark Renewables

Project Director: Nathan Baker
Project Manager: Jessica Henderson-Wilson
Technical Director: Dr Sheridan Coakes
Technical Manager: Rhiannon Jaeger-Michael
Report No. 22494/R12
Date: September 2024

Environmental & Social Consultants

This report was prepared using Umwelt's ISO 9001 certified Quality Management System.

Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.

Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
Final	Sheridan Coakes	16 September 2024	Jess Henderson-Wilson	16 September 2024

Author Declaration

As outlined in Appendix B of the NSW Department of Planning, Housing and Infrastructure (DPHI) Social Impact Assessment Guidelines for State Significant Project (the SIA Guideline), (DPE, 2023), suitably qualified and experienced practitioner/s should be involved in the preparation of the SIA scoping report and the SIA report. A suitably qualified person must have:

- Suitable qualifications in a relevant social science discipline.
- Proven experience over multiple years and substantial competence in social science research methods and SIA practices.

This SIA has been prepared by Rhiannon Jaeger-Michael (the SIA Technical Manager) under the guidance and review of Dr Sheridan Coakes (the SIA Technical Director). We declare that this SIA, completed on 16 September 2024:

- was prepared by a team that has suitable qualifications, proven experience and competence in SIA practice, and relevant professional memberships as outlined in **Table AD.1**;
- that the authors understand their legal and ethical obligations in the preparation of the SIA;
- that none of the information included in the SIA is false or misleading; and
- that the SIA contains all relevant information.

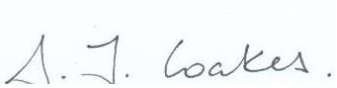
We declare that through the development of this SIA, the authors have adhered to:

- the SIA principles outlined in Table 2 of the SIA Guideline (DPE, 2023); the EIANZ Code of Ethics and Professional Conduct (EIANZ, 2021); and
- the IAIA Professional Code of Conduct, and Ethical Responsibilities (IAIA, 2009)

SIA Technical Manager

Rhiannon Jaeger-Michael

SIA Technical Director



Dr Sheridan Coakes

Table AD.1 Author Qualifications

Requirement	SIA Project Manager – Rhiannon Jaeger-Michael	SIA Project Director – Dr Sheridan Coakes
Suitable qualifications	Bachelor of Science – Psychology Master of Disaster Resilience and Sustainable Development	Bachelor of Applied Science – Psychology Honours First Class – Psychology Doctor of Philosophy – Psychology
Proven experience in SIA practice	6 years	30 years
Professional memberships	International Association of Impact Assessment – Member Environmental Institute of Australia and New Zealand – Associate Member	International Association of Impact Assessment – Longstanding Member Environmental Institute of Australia and New Zealand – Associate Member and Co-convenor of the SIA Community of Practice (SIA CoP) Former Chair – SIA Strategic Environmental Advisory Committee – responsible for the development of the first global SIA specialist certification (CEnvP SIA).

Executive Summary

Spark Renewables Pty Ltd (Spark Renewables) propose to develop the Mallee Wind Farm (the Project) located approximately 16 kilometres (km) north-east of Buronga in the Murray region of southwestern New South Wales (NSW) within the Wentworth Local Government Area (LGA) and 17 km northeast of Mildura, Victoria (Vic).

The Project will include the installation, operation, maintenance and decommissioning of up to 76 wind turbine generators (WTGs), a single grid scale 100 megawatts (MW) / 200-megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project will have an installed generation capacity of up to 402 megawatts (MW).

Umwelt has been engaged by Spark Renewables to undertake a Social Impact Assessment (SIA) in relation to the development of the Project. The Project is State Significant Development (SSD) as defined under State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) and requires development consent under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

Methodology

This SIA has been prepared to address relevant aspects of the NSW Planning Secretary's Environmental Assessment Requirements (SEARs) for the Project and in accordance with the NSW Department of Planning, Housing and Infrastructure (DPHI) Social Impact Assessment Guideline for State Significant Projects (the SIA Guideline) (DPE, 2023), as well as giving consideration to construction workforce accommodation requirements.

This SIA Report has followed the following key methodological steps:

- Definition of the social locality.
- Stakeholder analysis and mapping to ascertain those likely most affected by the Project.
- Review and update social baseline profile, including compilation of community characteristics, analysis of existing social conditions and trends, including opportunities and challenges across the social locality.
- Community and stakeholder consultation to ensure participatory social assessment methods.
- Impact identification and evaluation, including an impact significance assessment and scenario analysis, including validation of the proposed assessment of social impacts as outlined in the Social Impact Scoping Report (2022).
- Consider potential Project design refinements in response to identified social impacts.
- Development of mitigation, enhancement and management measures to address social impacts.
- Preparation of a social impact management framework to guide the implementation of the proposed social impact management strategies.
- Preparation of an accommodation and employment strategy to guide the Project's approach to maximising local participation and minimising impacts on local accommodation service providers and users.

Social Baseline Summary

The social baseline provides a comprehensive overview of the existing social conditions and trends in the social locality, which covers the host local government area (LGA) of Wentworth and the proximal LGA of Mildura. It draws on various sources of primary and secondary data to describe the key characteristics and existing conditions of the communities within the social locality.

The social locality is characterised as a region with significant natural capital including national parks and rich biodiversity, all which have been identified as highly valued by the community and are key draws for tourists to the region. The area also supports agricultural production and mineral sands mining, both key industries of employment in the region. The social locality has a rich Indigenous history and continues to have a high Indigenous population.

Despite planned housing growth in some localities, the LGA of Wentworth is predicted to experience population decline and has an ageing population. The social locality has low rates of further education when compared to the NSW average, however, declining unemployment rates across the two LGAs reflect an engaged workforce. There is also a relatively low cost of living in the region when compared to the State.

The community are relatively engaged and stable with high rates of volunteering and low rates of mobility, however there are high rates of socio-economic disadvantage within some localities and a prevalence of youth disengagement.

It is important to note that the key service centre for the Project, Mildura, is located within Victoria. When considering both LGAs, there is a high level of connectivity between the region and major cities and relatively good access to key services and facilities within Mildura. However, there are challenges in providing health care and educational services.

Outcomes of Assessment

The SIA has identified and assessed potential positive impacts of the Project. Impacts that are likely to be of medium to high significance are likely to include:

- Increased local procurement and economic spend in local communities.
- Increased local employment.
- Increased human capital for local communities (expertise) due to the provision of training and skills development.

The SIA has also identified and assessed potential negative impacts of the Project. Impacts that are likely to be of medium to high significance to the community are likely to include:

- Temporary increase in population, increasing pressure on housing and accommodation and health and emergency services.
- Impacts to Aboriginal Cultural Heritage values, including artefacts, cultural sites, and connection to Country.
- Concern for the loss of valued migratory bird species due to potential for bird strikes.
- Reduced road access and safety.

- Changes to rural amenity due to industrialisation of the landscape.
- Impacts on future generations relating to decommissioning.
- Decrease in community cohesion and change to composition of the community due to temporary influx of the construction workforce.
- Increased strain on community infrastructure and facilities.
- Reduced workforce health and wellbeing due to isolation of the TWA facility.
- Safety risks associated with height of WTGs.

In response to these identified impacts, a number of mitigation and enhancement strategies are proposed through which the identified impacts can be managed effectively and opportunities enhanced.

Social Impact Management Planning

A social impact management planning framework has been outlined to guide the implementation of proposed strategies relating to management of key social impacts and opportunities. The strategies in the framework include Spark Renewables developing and implementing:

- An Accommodation and Employment Strategy (this strategy has been developed and is contained within this SIA report).
- An Indigenous and Aboriginal Participation Plan.
- Community Benefit Sharing Fund.
- An ongoing Community and Stakeholder Engagement Plan.

Abbreviations

Abbreviation	Definition
ABS	Australian Bureau of Statistics
APZ	Asset Protection Zone
AEMO	Australian Energy Markey Operator
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
CEMP	Construction Environment Management Plan
CSEP	Community and Stakeholder Engagement Plan
DRP	Decommissioning and Rehabilitation Plan
EIS	Environmental Impact Statement
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*
DPE	Department Planning and Environment (former)
DPHI	Department Planning, Housing and Infrastructure (current)
FTE	Full Time Equivalent
GW	Gigawatt
ha	Hectare
HHIA	Historic Heritage Impact Assessment
IEO	Index of Education and Occupation
IRSD	Index of Relative Socio-economic Disadvantage
km	Kilometre
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LOTE	Language other than English
LSPS	Local Strategic Planning Statement
LVIA	Landscape and Visual Impact Assessment
m	metres
MPRA	Murdi Paaki Regional Assembly
MW	Megawatts
MWh	Megawatt hour
NEM	National Electricity Market
NVIA	Noise and Vibration Impact Assessment
NSW	New South Wales
OEMP	Operational Environmental Management Plan

Abbreviation	Definition
PCT	Plant Community Type
PHIDU	Public Health Information Development Unit
REZ	Renewable Energy Zone
SAL	Suburb and Locality
SEARs	Secretary's Environmental Assessment Requirements
SEIFA	Socio-Economic Indexes of Area
SIA	Social Impact Assessment
SISR	Social Impact Scoping Report
SEPP	State Environmental Planning Policy
SSD	State Significant Development
SUA	Significant Urban Area
TNB	Tenaga Nasional Berhad
TWA facility	Temporary Workforce Accommodation facility
Vic	Victoria
WTG	Wind Turbine Generator

Key Project Terms

Term	Definition
Ancillary infrastructure	All permanent infrastructure necessary for the construction and operation of the wind farm with the exception of WTGs and battery storage, including but not limited to internal roads, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
Associated dwellings	Dwellings not located on land within the Project Area or hosting infrastructure, however, the Proponent has a negotiated agreement in place with the landowner regarding Project impacts and are therefore associated with the Project. **For Mallee Wind Farm there are no associated dwellings.**
Associated landholder	The owner(s) of an associated dwelling. An associated landholder has reached a private agreement with Spark Renewables in relation to the Project and management of impacts. An associated landholder is distinct from a host landholder in that no Project infrastructure is proposed to be built on the associated landholder's property. **For Mallee Wind Farm there are no associated landholders.**
Battery storage	Compound and technology for storing and discharging energy. Includes the battery energy storage system (BESS), as well as associated buildings, shipping containers and other infrastructure to contain the chosen technology and to connect the battery storage infrastructure with the WTGs, and substations via underground and/or overhead cables.
Benefit sharing	Benefit sharing aims to distribute benefits generated by a project between the Proponent and the community through mutually agreed opportunities such as funding or sponsoring local community initiatives, programs or projects.
Construction	The construction of the Project, including but not limited to the construction of WTGs, battery storage, ancillary infrastructure but excluding pre-construction works.
Decommissioning	The removal of WTGs, battery storage and ancillary infrastructure.
Development Consent	State significant development consent to carry out the Project granted by the consent authority as nominated under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).
Disturbance Footprint	This is the actual disturbance area required for the Project. The Disturbance Footprint is shown conceptually in **Figure 3.1, Figure 3.12, Figure 3.13** and **Figure 3.14** in the EIS. The actual location and extent of the Disturbance Footprint will be determined prior to construction, subject to the micro-siting provisions outlined in this EIS. It includes disturbance associated with the seven (7) proposed permanent meteorological masts, but excludes access to these meteorological masts that would be provided via existing farm tracks or cleared agricultural land.
Ground Disturbance	Activities that cut into the existing ground surface. To avoid any doubt this does not include activities that occur on the ground surface including but not limited to driving vehicles on the ground, parking vehicles, placing infrastructure or materials such as stockpiles on the ground.

Term	Definition
Heavy Vehicle	As defined under the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks (less than eight (8) tonnes and with no more than two (2) axles) and buses containing more than 12 seats.
Host Landholder	The owner(s) of a host dwelling. A host landholder has reached an agreement with Spark Renewables to host Project infrastructure within their landholdings and in relation to the management of impacts.
Host Dwellings	A dwelling on privately-owned land in respect of which the owner has reached an agreement with Spark Renewables to host Project infrastructure and in relation to the management of impacts.
Internal Access Tracks	Access tracks established and/or upgraded within the Project Area for the purposes of constructing, operating, maintaining and decommissioning the Project, and includes all waterway crossings where located within the Project Area, but does not include off-site road works areas.
Light Vehicle	A car or rigid truck up to eight (8) tonnes gross vehicle mass or a bus containing up to 12 seats.
Local Transport Route	The transport route extending from Sturt Highway/ Carey Street Euston to the Project access points on Arumpo Road, as shown on **Figure 3.14** in the EIS.
Micro-siting	This is commonly the process of locating WTGs, battery storage, ancillary infrastructure and temporary infrastructure during detailed design without further approval, providing that certain thresholds are met. In this case, and as a broader Development Corridor is not proposed, these include: • ground disturbance is wholly contained within the Disturbance Footprint • no WTG is moved more than 100 m from the relevant GPS coordinates listed in **Appendix 3** of the EIS, and any ground disturbance is contained within the Disturbance Footprint • the revised location of the blade of a WTG is at least 50 m from the canopy of existing hollow-bearing trees; or where the proposed location of the blade of a WTG is already within 50 m of the canopy of existing hollow-bearing trees, the revised location is not any closer to the existing hollow-bearing trees.
Non-associated landholder	The owner of a non-associated dwelling.
Non-associated Dwelling	A dwelling on privately-owned land in respect of which the owner has not entered into a private agreement with Spark Renewables in relation to the Project's impacts. or A dwelling on privately-owned land in respect of which the owner has reached an agreement with Spark Renewables in relation to the Project's impacts, but the agreement does not cover the relevant impact, or the performance measure for such impact (under that agreement) has been exceeded.
Off-site Road Works	Proposed upgrades to the local transport route including adjacent the site access points as shown in **Figure 3.14** and **Figure 3.1** in the EIS.
Project	The Mallee Wind Farm
Project Area	The Project Area encompasses all land within and including the Project Boundary.
Project Boundary	The outer boundary of the Project Area. The Project Boundary is the maximum spatial extent of potential land access defined by the boundaries of the host landholder properties (i.e. all agreed lots owned by host landholders).

Term	Definition
Proponent	Spark Renewables Pty Limited
Rehabilitation	The restoration of land disturbed by the Project to its former condition, to ensure it is safe, stable, and non-polluting.
Residence	Has the same meaning as a 'dwelling' as defined under the Standard Instrument – Local Environmental Plan, and also includes: • residences that have development consent, but have yet to commence or complete construction • proposed residences that are subject to a development application that has been lodged prior to the DA for the Project but is yet to be determined • a residence does not include moveable dwellings (i.e. tents, caravans or other portable devices used for human habitation), or any derelict dwelling or dwelling that has been built illegally, as confirmed by the relevant Council.
Substation	A facility in an electrical power system where voltage is transformed from high to low or vice versa, and where power is routed and distributed to various areas. It typically includes transformers, circuit breakers, and other equipment.
Study Area	The specific assessment area adopted for each technical study.
Switchyards	A section within a substation or a standalone facility where electrical power is switched and routed between different transmission lines or equipment. It mainly involves circuit breakers, switches, and busbars for controlling the flow of electricity.
Telecommunications Facility	A telecommunications facility is any part of the infrastructure of a telecommunications network or any line, cable, optical fibre, equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network. Telecommunications facilities provide for transmission of voice, data, image, graphic and video information between or among points by wire, cable, optical fibre, microwave, radio, satellite or similar facilities.
Temporary Facilities	Temporary facilities used for the construction, repowering and/or decommissioning of the Project, including but not limited to the temporary workforce accommodation (TWA), site offices, amenities, construction compounds and laydown areas (including stockpiling and materials storage areas, concrete or asphalt batching plants, minor 'work front' construction access tracks, environmental management and monitoring and signage.

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1.0 Introduction

Spark Renewables Pty Ltd (Spark Renewables) propose to develop the Mallee Wind Farm (the Project) located approximately 16 kilometres (km) north-east of Buronga in the Murray region of southwestern New South Wales (NSW) within the Wentworth Local Government Area (LGA) and 17 km north east of Mildura, Victoria (Vic). The Project will include the installation, operation, maintenance and decommissioning of up to 76 wind turbine generators (WTGs), a single grid scale 100 megawatts (MW) / 200 megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project will have an installed generation capacity of up to 402 megawatts (MW).

Umwelt (Australia) Pty Ltd (Umwelt) has been engaged by Spark Renewables to undertake a Social Impact Assessment (SIA) in relation to the development of the Project. Spark Renewables intents to generate renewable wind energy and supply to the National Electricity Market (NEM). The Project will also contribute to reducing greenhouse gas (GHG) emissions associated with energy generation and provide significant economic benefits to the Murray region of NSW.

The Project is State Significant Development (SSD) as defined under State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) and requires development consent under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report documents the process and outcomes of the SIA undertaken by Umwelt for the Project and has been prepared to address the requirements of the NSW Department of Planning, Housing and Infrastructure (DPHI) (formerly Department of Planning and Environment (DPE)) *Social Impact Assessment Guideline for State Significant Projects* (2023) (the SIA Guideline) and associated *Technical Supplement* (DPE, 2023), *Undertaking Engagement Guidelines for State Significant Projects* (DPE, 2024) as well as the Secretary's Environmental Assessment Requirements (SEARs) issued for the Project on 17 February 2023 and the Supplementary SEARs issued for the Project on 28 June 2023.

The SIA builds on the Social Impact Scoping Report (SISR) prepared for the Project and submitted in November 2022.

1.1 Project Overview

The Project Area encompasses approximately 57,330.13 hectares (ha) of relatively flat land used for cropping and grazing with patches of remnant vegetation. The Project Area is at an elevation between 40 m and 130 m above sea level across the site with a good available wind resource.

The Project Area is predominantly zoned as RU1 Primary Production within the Wentworth Local Environmental Plan (LEP) 2011 with some areas of C2 Environmental Conservation. There are no C2 zoned lands within the Disturbance Footprint and no infrastructure will be sited within C2 land. The closest dwelling to a proposed WTG is approximately 10 km away. The Project EnergyConnect transmission line corridor is located to the south-west of the Project Area. The Project Area is bordered by Mallee Cliffs National Park to the southeast.

The Project will include the installation, operation, maintenance and decommissioning of up to 76 WTGs, Battery Energy Storage System (BESS) facilities, ancillary infrastructure and temporary facilities associated with construction of the Project. The Project will have an installed capacity of up to 402 MW and a maximum blade-tip height of 280 m above ground level.

The key components of the Project include:

- Up to 76 (three (3) blade) WTGs, with a maximum blade-tip height of 280 m above ground and a maximum blade length of 85 m.
- A single grid-scale 100 MW /200 MWh BESS.
- Permanent ancillary infrastructure including internal access tracks, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
- Temporary facilities including Temporary Workforce Accommodation (TWA) facility, site offices, amenities, construction compounds and laydown areas, concrete or asphalt batching plants, minor 'work front' construction access tracks, environmental management and monitoring and signage.
- Off-site road works, involving upgrades to the proposed Local Transport Route and establishment of site access points.

1.1.1 TWA Facility

A TWA facility will be required during construction of the Project. The TWA facility would take up an area up to approximately 3.5 ha and will be located in the northern extent of the disturbance footprint, north of Arumpo Road.

The TWA facility will include accommodation and amenity facilities, car parking, food and catering facilities, recreation facilities, first aid facilities and telecommunications facility for personnel use. The TWA facility will consist of prefabricated demountable units, that will be delivered and installed on site. The TWA facility will meet the relevant requirements of the Building Code of Australia.

The TWA facility will be established early in the construction phase of the Project and will accommodate up to 300 workers. The TWA facility will include:

- modular and relocatable single rooms/quarters
- office building(s)
- mess area (including stores, kitchen and dining area)
- laundry facilities
- toilet and shower facilities
- car and shuttle bus parking area
- a medical centre or first aid room staffed by personnel with suitable first aid/medical training
- recreation areas.

During the construction phase of the Project, the TWA facility will require water, telecommunications, sewage treatment, electricity, diesel, grease and waste management. This includes the following:

- Potable water will be delivered by truck, and stored in tanks that are connected to the units and communal infrastructure.
- Rainwater tank/s will be installed to capture water that can be used for nonpotable functions such as toilet flushing, laundry, vehicle washing and landscape irrigation.
- An onsite sewage treatment plant will be installed and will produce treated wastewater. Subject to appropriate treatment, treated water may be used during construction to supplement rainwater captured for nonpotable functions such as toilet flushing. Any wastes associated with the sewage treatment plant that are not suitable for re-use on-site will be disposed of off-site to a suitably licenced facility. Onsite sewerage collection/treatment infrastructure will continue to be used during operation.
- The cellular network will be used for telecommunications during construction.
- Electricity may be sourced from the local distribution network (where available), onsite using solar panels/batteries and diesel generation where access to the grid is unavailable.
- Diesel will be delivered and stored within bunded storage tanks that comply with the relevant standards.
- The accommodation facilities kitchens will be equipped with a grease trap that will be pumped out regularly.
- The TWA facility will generate putrescible waste, recyclable waste and general waste. Waste will be collected and stored in waste bins that are emptied and removed by truck to licensed landfill and recycling centres, which have the required capacity, at least weekly. No waste will be deposited on site.
- Minimal night lighting is expected to be required at the TWA facility and would be limited to locations within the camp where it is essential for safety reasons. Where lighting is required low brightness lights will be used that would not be visible to off-site receptors in accordance with relevant Australian standards.
- The layout of the TWA facilities will be determined during detailed design. The facilities will use modular and relocatable single rooms/quarters and will be ‘scaled up’ and ‘scaled down’ based on construction workforce requirements.
- Additionally, a construction compound including storage areas, material stockpile and temporary power supply for construction will be located immediately west adjoining the TWA facility during construction.

Upon completion of the construction works, all temporary facilities will be removed and, or as agreed with the landowner and in accordance with the requirements of the planning approval.

1.2 The Proponent

Spark Renewables is one of Australia's leading developers and long-term owners of renewable energy generation assets. Founded in 2018, the company was established as the renewables arm for the Spark Infrastructure Group, a A$5 billion company with investments in leading energy infrastructure across Australia. Since September 2023, Spark Renewables has been owned by Tenaga Nasional Berhad (TNB), the largest listed energy utility company in Southeast Asia, with a market capitalisation of A$26 billion.

Spark Renewables has grown rapidly and employs an experienced team of 30 people, with over 250 years of experience in end-to-end development, construction and operations of wind, solar and BESS projects between them. The company retains industry experts across the key areas of engineering, development, consenting, financing, construction and commissioning, with the team having cumulatively worked on over 36 GW of capacity globally.

1.3 Project Objectives

The objectives of the Project are to:

- increase renewable energy generation in NSW and contribute to strategic objectives and targets of the NSW and Commonwealth governments
- provide for cleaner reliable electricity generation and assist with meeting current load demand while GHG emissions and the impacts of climate change
- provide regional investment in the NSW renewable energy sector
- contribute to achieving the target of 2.5 GW of renewable energy generation from the South West Renewable Energy Zone (REZ)
- create employment opportunities during Project construction, operations and decommissioning
- support communities by providing economic and employment benefits for regional NSW and to reinforce Spark Renewables' commitments under the Clean Energy Council's 'Best Practice Charter' with respect to socially responsible development
- develop the Project in a manner which supports long-term productive relationships with the local community, Traditional Owners, regulators, and industry
- avoid and minimise environmental, biodiversity, cultural heritage and social impacts where practicable through careful design and best practice environmental protection and impact mitigation.

1.4 Report Purpose

In line with the SIA Guideline (DPE, 2023), the purpose of the SIA is to:

- Validate social data, assumptions and outcomes of the engagement undertaken to date and assessment of social impacts as outlined in the November 2022 Social Impact Scoping Report.
- Predict and analyse the extent and nature of likely social impacts (positive and negative) associated with the Project, informed by further engagement with key stakeholders.

- Develop appropriate and justified responses to social impacts identified as moderate to high, including consideration of potential Project design refinements, mitigation and enhancement measures to address social impacts.
- Propose arrangements to monitor and manage any residual social impacts over the life of the Project.

2.0 Methodology

SIA is an approach to predicting and assessing the likely social consequences of a proposed Project change and developing strategies to reduce negative social impacts or enhance positive social impacts associated with a Project.

Best practice SIA is participatory and involves understanding impacts from the perspectives of those involved in a personal, community, social or cultural sense, to provide a complete picture of potential impacts, their context and implications.

2.1 Social Impact Assessment Requirements

A 'best practice' approach to the SIA has been adopted in the current assessment and addresses the *SIA Guideline* (DPE, 2023) and the *Undertaking Engagement Guidelines for State Significant Projects* (DPE, 2024), with this process illustrated in **Figure 2.1** and **Figure 2.2**.

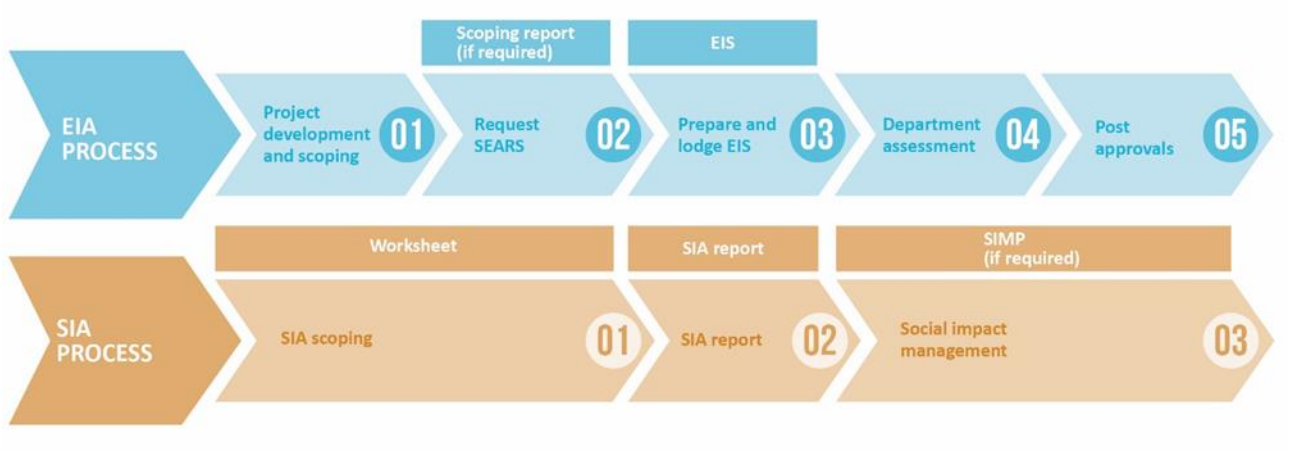


Figure 2.1 SIA and EIA Process

Source: DPE, 2023.

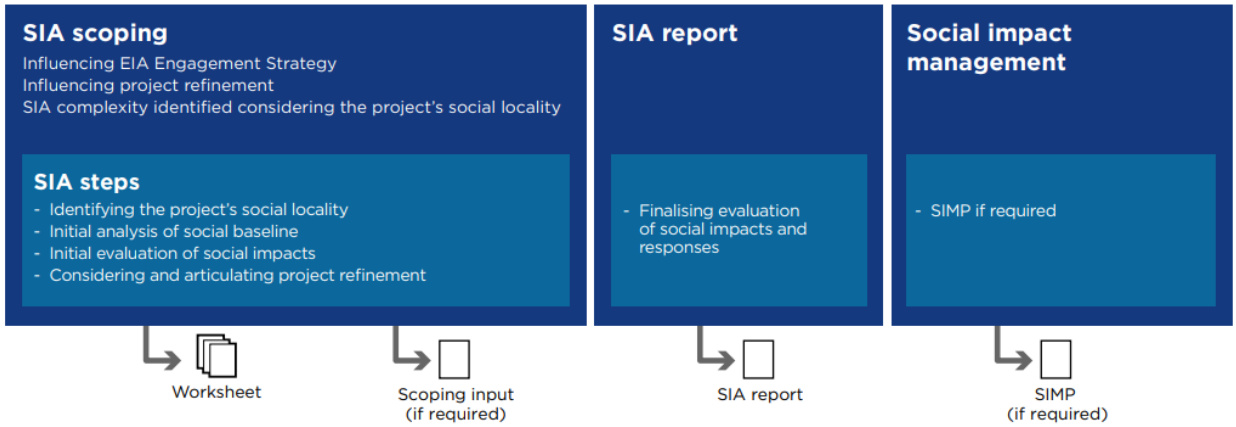


Figure 2.2 SIA Phases and Steps

Source: DPE, 2023.

The SIA has been completed to address the SEARs and Supplementary SEARs for the Project, as issued by DPHI, with relevant requirements relating to undertaking an assessment of social impacts in accordance with the SIA Guideline (DPE, 2023) and consideration of construction workforce accommodation requirements.

The report contains the following:

- **Section 2.0** – a description of the methodology of the assessment including a definition of the social locality, identification of stakeholders and an overview of the engagement undertaken to inform the preparation of this SIA.
- **Section 3.0** – a description of the social locality and the Project's development context.
- **Section 4.0** – identification and evaluation of the positive and negative social impacts that may arise from the Project, including community perceptions on potential Project impacts.
- **Section 5.0** – an overview of the assessment of identified social impacts and a description of the management measures designed to address impacts.
- **Section 6.0** – a description of the Project design refinements in response to social impacts, an overview of the social impact management framework and the subsequent sub-plans: accommodation and employment strategy, community benefit sharing fund, industry and Aboriginal participation plan, and community and stakeholder engagement plan.

The preparation of this report has also taken into consideration the requirements of Appendix C (Review Questions) of the SIA Guideline. These review questions and where this SIA has addressed of these requirements is provided at **Appendix A** of this report.

Community and stakeholder engagement is a key component of a SIA, to identify key social impacts from the perspectives of those likely to be most affected/interested in the Project, and to explore strategies that may be put in place to reduce negative impacts and enhance positive social impacts and outcomes.

A SIA, informed by community and stakeholder engagement, affords opportunities to effectively identify, integrate and address social impacts within the detailed Project planning, design and assessment phase. The phases involved in identifying and managing social impacts and activities undertaken in each phase, are further outlined in **Figure 2.3**.

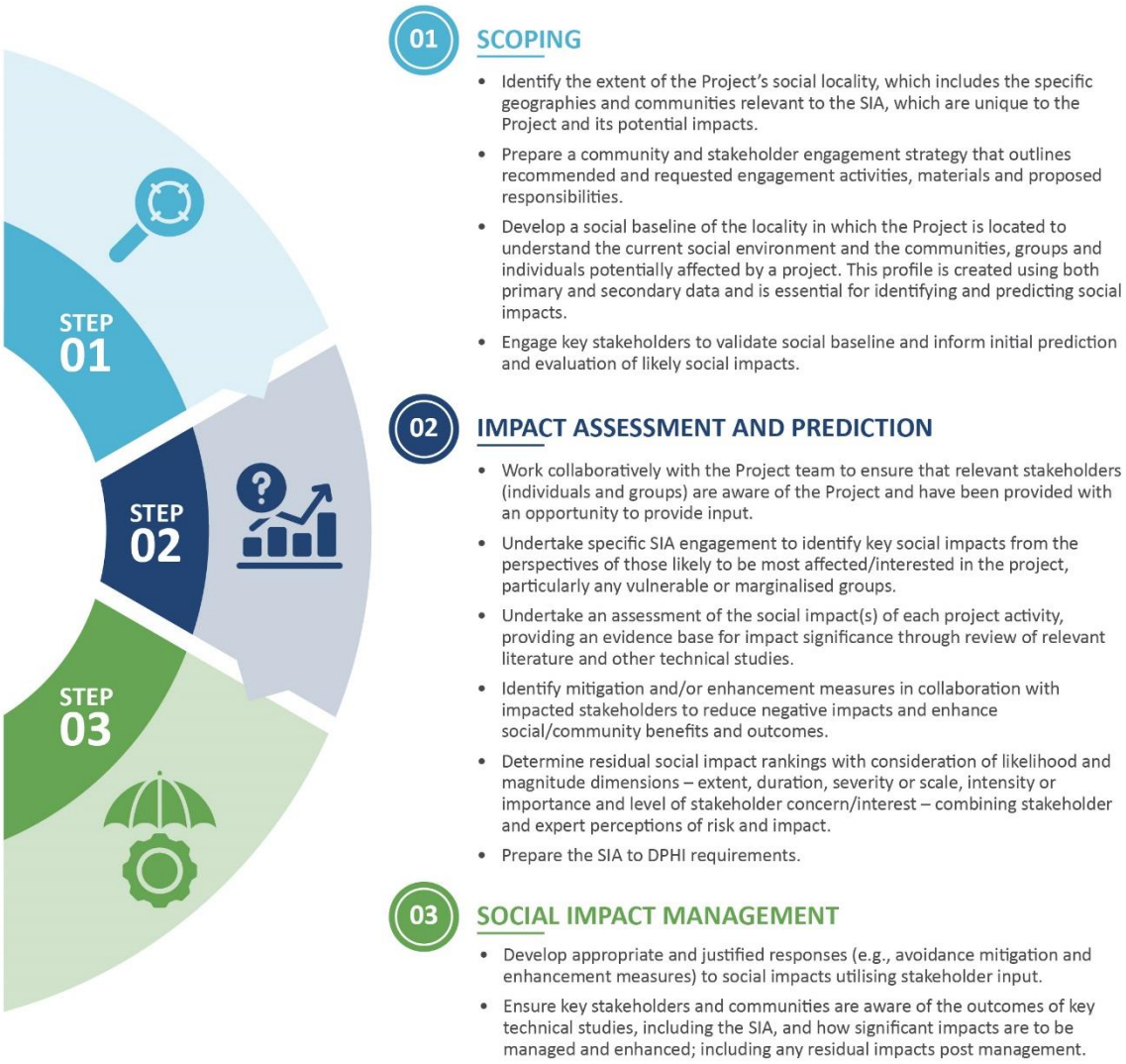


Figure 2.3 SIA Program Phases

Umwelt, 2024.

According to the SIA Guideline, and as outlined in **Figure 2.4**, social impacts can be grouped according to several categories and may involve changes to people's way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision-making systems.

Figure 2.4 Social Impact Categories

Umwelt, 2024 (Derived from: DPE, 2023).

While some social impacts may directly occur because of the Project, others may be indirectly caused by changes in the biophysical environment and biophysical impacts, as outlined in **Figure 2.5**. Consequently, both direct and indirect social impacts are equally valid and should be considered.

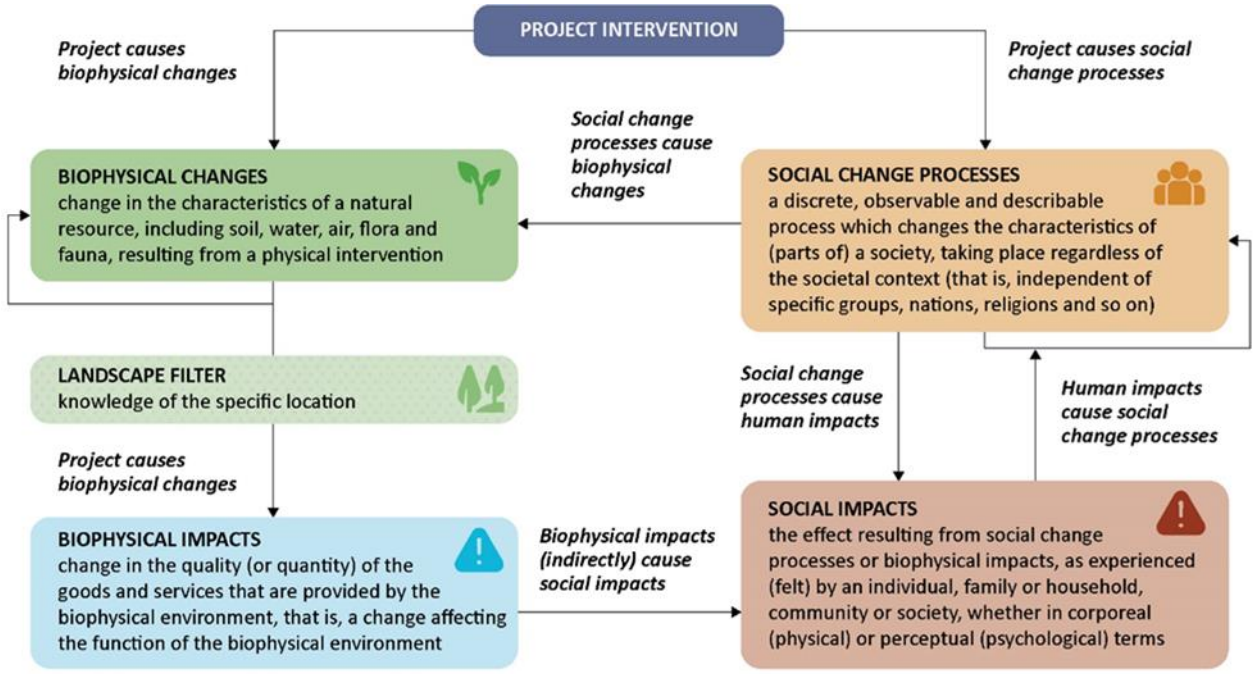


Figure 2.5 Direct and Indirect Social Impacts

Source: Umwelt, 2023, Adapted from Slootweg et al, 2013 (p.28).

As is the case with any type of change, some individuals or groups within the community may be positively impacted because of the Project, while others may experience negative impacts. Social impacts may also manifest as *tangible* impacts, these being impacts that may have a material outcome on the lives of individuals and communities, and more *intangible* impacts, such as justified fears or aspirations associated with a project:

'Social impacts may be physically observable or may manifest as rational or justified fears or aspirations; may be experienced positively and negatively by different stakeholders; and may be tangible or more tangible' (DPE, 2023).

If negative impacts are predicted, it is the role of the SIA to determine how such impacts may be addressed effectively through Project design or management measures to reduce the degree of disruption to those affected. If positive impacts are predicted, the aim of the SIA is to identify how positive impacts and opportunities might be further enhanced and realised.

Ongoing monitoring and evaluation are also key components of a SIA process, to identify any unanticipated impacts that may arise because of the Project, and which may not have been anticipated, and to monitor social impacts, should the project proceed.

Section 4.0 provides a description of the Project's potential social impacts and opportunities, including an overview of the community's perception of these impacts, and an evaluation of the likelihood and magnitude of these impacts in line with the criteria outlined in the SIA Guideline (DPE, 2023) (refer to **Figure 2.4**).

Social impact rankings are determined based on an assessment of social baseline conditions and the likely change that may result due to the presence of the Project in the social locality, engagement with those most likely to be affected by the Project, social research relating to key social impact matters, outcomes of other technical studies undertaken as part of the broader EIS process, proposed management measures to be implemented to address identified social impacts, and the experience of the SIA practitioner. **Section 5.0** provides an overview of the evaluation of the significance of each of the potential social impacts both pre and post mitigation/enhancement.

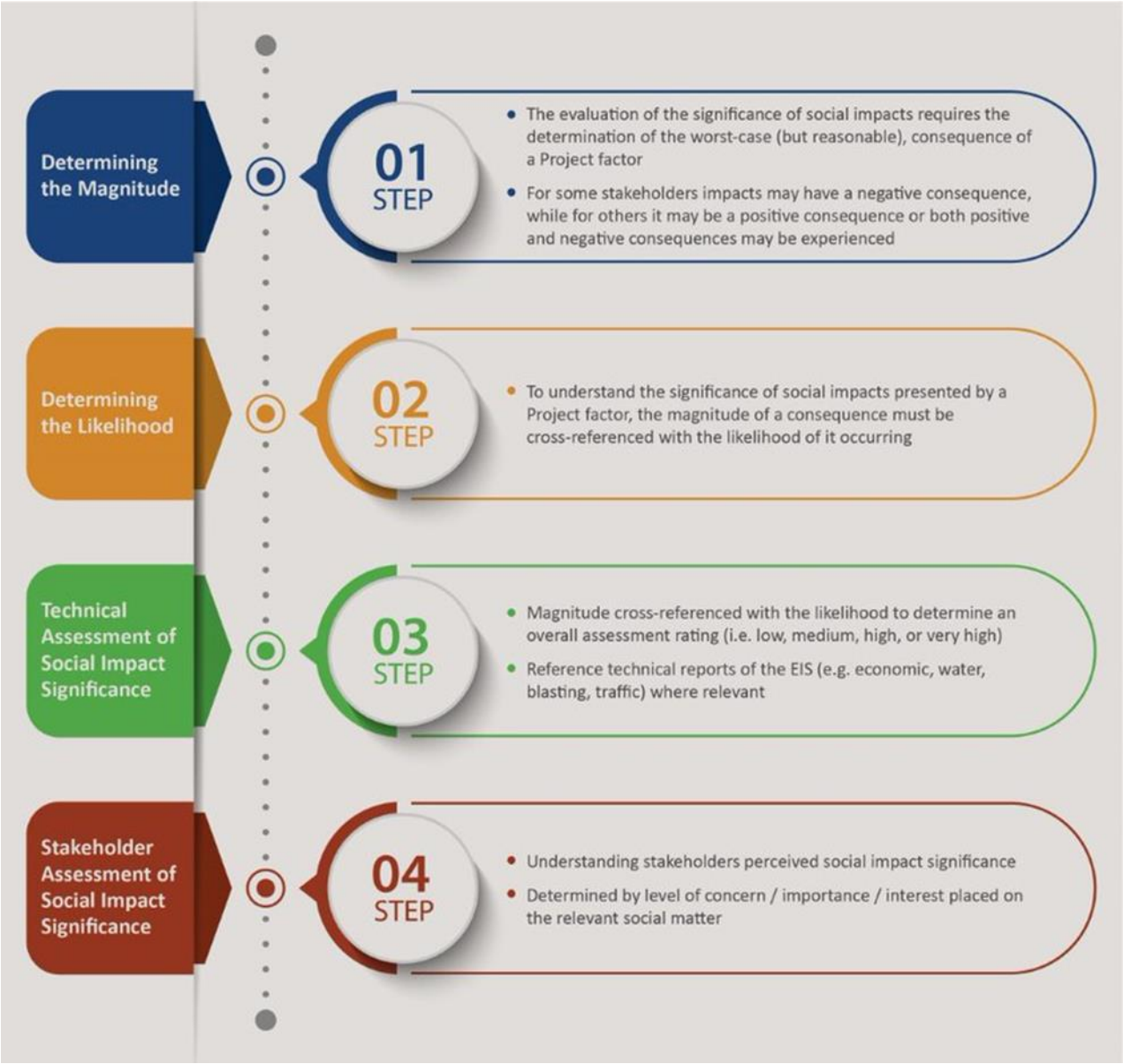


Figure 2.6 Social Impact Evaluation Process

Source: Umwelt, 2024.

Appendix A further details the methodology, data sources and consultation mechanisms utilised for the SIA.

2.2 Social Locality

2.2.1 Defining the Social Locality

The term 'social locality' or area of social influence is commonly used in SIA practice. There is no fixed meaning or predefined geographic boundary to a social locality (e.g., the local suburb, or 'within 500 m'). Instead, the scale of the social locality should be established on a case-by-case basis, having regard to the nature of the project and its likely impacts (DPE, 2023).

For further direction, the SIA Guideline states that the social locality should be defined by:

- the scale and nature of the project
- who may be affected by the project
- whether any vulnerable or marginalised people may be affected by the project
- built or natural features on or near the project that could be affected, and the intangible values that people may associate with these features
- relevant social, cultural, demographic trends or social change processes
- the history of the proposed project and the area.

2.2.2 Social Locality for the Project

The social locality for the Project has been defined at both a localised and regional scale, given the likely positive and negative social impacts that may be experienced. The Project Area, South West REZ boundary and proximal projects are illustrated in **Figure 2.7**, to demonstrate the geographical setting of the social locality in relevance to current developments and service townships. **Table 2.1** further defines and justifies how the social locality has been determined. It is important to note that whilst the Project is located within NSW, the key regional service centre of Mildura, which will likely service the Project, is located within Victoria, therefore the social locality includes and draws from data from both jurisdictions to define the characteristics of the community relevant to the Project.

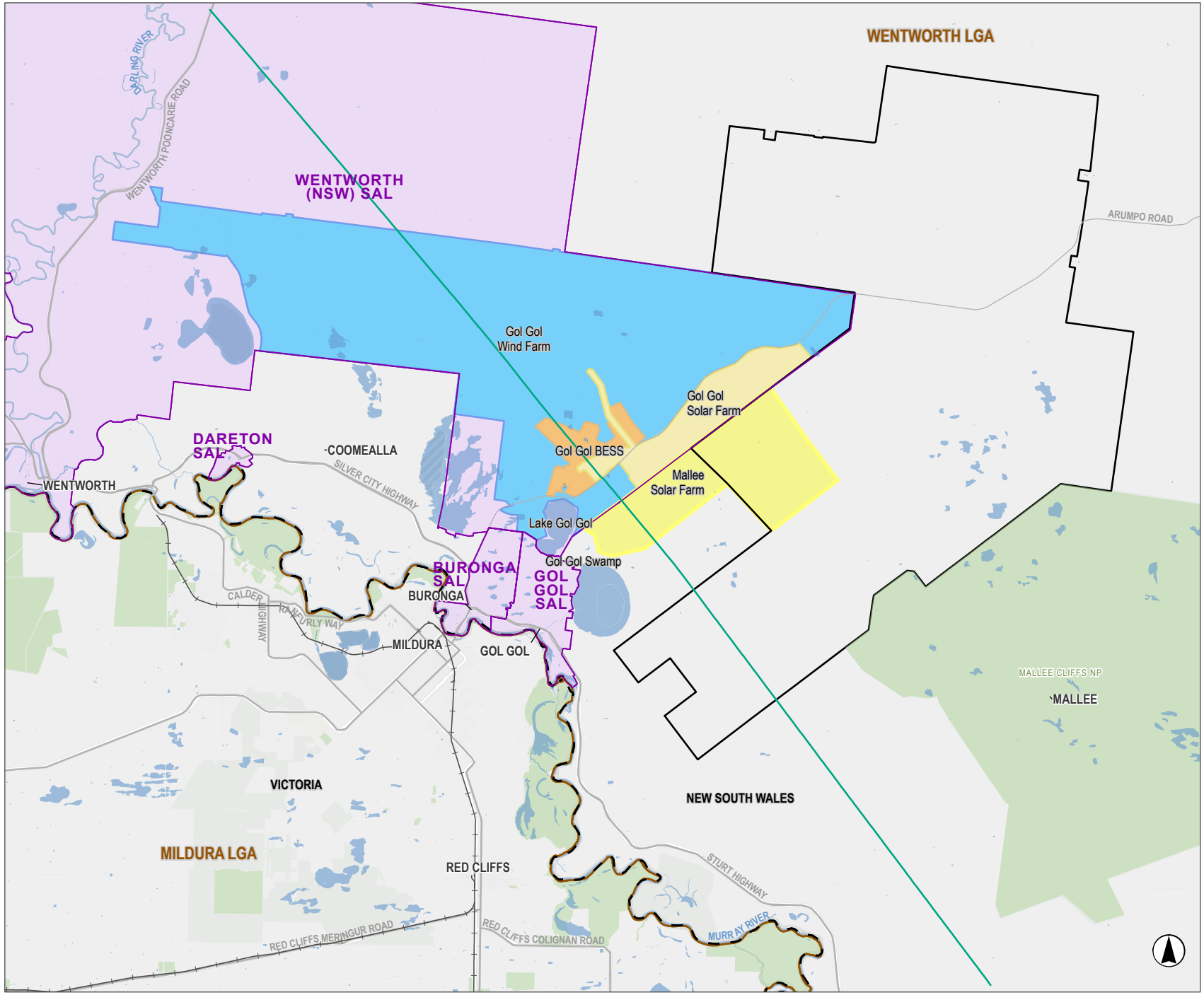
Table 2.1 Social Locality Inclusions and Justifications

Aspect	Data Boundary	Locality	Reason for Inclusion
Host landholder	NA	Project Area	There are four host landholders, with one host dwelling located adjacent the Project Boundary.
Proximal landholders	NA	10 km from WTG	As there are no host, associated or non-associated dwellings within 10 km of a WTG, it has been classified that there are no proximal dwellings to the Project. The nearest dwellings are between 10 km and 12 km from WTGs, predominately located within the townships of Buronga and Gol Gol.
Proximal communities to the Project Area	Suburb and Locality (SAL)	Residents located in Buronga and Gol Gol.	The SAL's of Buronga and Gol Gol are the closest geographic localities, providing indicative insights into the communities most likely to experience positive and negative Project impacts.
Natural Features	NA	Mallee Cliffs National Park Mungo National Park Willandra Lakes Regional World Heritage Area Gol Gol Lake Wentworth Irrigation Area	Key natural features and areas in the locality that are likely to be valued by residents in the social locality and those that may visit the area. Additionally, the main access point to Mungo National Park is via Arumpo Road.

Aspect	Data Boundary	Locality	Reason for Inclusion
Host LGA	Local Government Area (LGA)	Wentworth Shire	The Project is located within the Wentworth LGA. Residents within the LGA are mostly likely to experience positive and negative impacts of the Project, with the Project also drawing on local services and infrastructure where possible.
Neighbouring LGA	LGA	Mildura Rural City	The LGA of Mildura, located in Victoria is a neighbouring LGA to the Project. It is anticipated the Project will draw on Mildura for employees, suppliers and services given the proximity to the Project and relatively small population within the Wentworth LGA.
Key service centre	Significant Urban Areas (SUA)	Mildura	The Regional City of Mildura, located in Victora has been included as it is as it is a key service centre for the broader region, providing access to health care and accommodation.
Proximal projects with the capacity to result in cumulative impacts	NA	Projects further outlined in **Table 3.1**.	These projects are included as they may contribute to cumulative impacts given concurrence in Project development phases, particularly construction. There are a number of other renewable energy, infrastructure and resource projects currently in progress across the region.

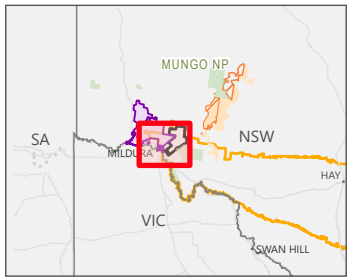
FIGURE 2.7

Social Locality



Legend

- Project Boundary
- Mallee Solar Farm
- Gol Gol Solar Farm
- Gol Gol Wind Farm
- Gol Gol BESS
- South West Renewable Energy Zone
- Willandra Lakes Region / National Heritage Property
- Willandra Lakes World Heritage Area
- State Border
- ABS SAL boundaries
- Local Government Area (LGA)
- NPWS Estate
- Water Body
- Watercourse
- Road
- Railway
- Existing HV Transmission Lines



0 5 10
Kilometres

Scale 1:300,000 at A4
GDA2020 MGA Zone 54

Image Source: ESRI Basemap (2024) **Data source:** NSW DFSI (2024), VIC DELWP (2023), Spark (2024), ABS (2021)

2.3 Social Baseline Profile

The social baseline draws on a range of indicators and data sources to understand the socio-economic, cultural, and demographic characteristics of the communities within the social locality and is used to determine how the Project may affect different aspects of people's lives.

To better understand the social locality, and to evaluate community resilience and adaptive capacity, the social baseline has utilised the Sustainable Livelihoods Approach (U.K. Department for International Development (DFID, 2001), and the community capitals approach outlined in the IAIA SIA Guidance (IAIA, 2015)), for analysis purposes. For further description of the Sustainable Livelihoods Approach refer to **Appendix A**.

The data sources used and key indicators of interest, including a brief explanation of their relevance to the Project is outlined in **Appendix A**, alongside an overview of the data collected for the social locality.

2.4 Stakeholder Engagement

2.4.1 Stakeholder Identification

SIA involves the participation and collaboration of people who have an interest in, or those that are affected by, a project. Consultation for this Project has been undertaken in accordance with the requirements of the *Undertaking Engagement Guidelines for State Significant Developments* (DPIE, 2022).

As Burdge (2004) outlines, stakeholders may be affected groups or individuals that:

- live, work, or recreate near the Project
- have an interest in the proposed action or change
- use or value a resource associated with the Project
- are directly affected by the Project.

Stakeholders for the Project were identified in the early stage of planning to inform the SIA. Key stakeholder groups engaged during the SIA are outlined in **Figure 2.8** with further detail provided in **Section 2.5.** Engagement with Government agencies was also undertaken in the development of the EIS and is summarised in **Section 5.0** of the EIS.

Figure 2.8 Key Stakeholder Groups

2.5 Stakeholder and Community Engagement

Spark Renewables undertook early community and stakeholder engagement with near neighbours and key stakeholders to inform Project design and development, and to establish and build ongoing relationships with key stakeholders. This early engagement assisted in identifying and understanding stakeholder views and the perceived issues and positive and negative impacts associated with the Project early in the planning and assessment process.

Stakeholder engagement has been undertaken over two main rounds as part of the SIA program:

- **Round 1 (Scoping):** to inform the scoping phase of the SIA and the development of the Scoping Report. This engagement round, undertaken between August – September 2022, sought to identify the perceived impacts from the perspectives of near neighbours and key stakeholders in the social locality to inform the level of assessment of these impacts in the subsequent SIA phase. Mechanisms utilised in this phase included website development, distribution of newsletters, an online survey, community information drop-in sessions, and meetings with local councils and community and special interest groups.
- **Round 2 (EIS):** engagement was undertaken in April 2023 – August 2024. Engagement sought to validate social impacts scoped in the first round of engagement, and identity management and enhancement measures for predicted social impacts. Engagement was also undertaken with local service providers to understand existing capacity and potential impacts on service provision associated with the Project. A EIS summary information sheet was also distributed in August 2024 to convey outcomes of technical assessments undertaken for the EIS.

A summary of all consultation mechanisms utilised throughout Rounds 1 and 2 is included in **Appendix B**. **Table 2.2** provides a breakdown of the stakeholder groups that have participated in the Project's planning and assessment process to date through the engagement mechanisms outlined above, and whose feedback and input has informed the SIA[1]. A Community and Stakeholder Engagement Plan (CSEP) (**Appendix C**) was developed and outlines the engagement approach and strategy used to inform both the SIA and the Scoping Report.

Table 2.2 Stakeholders Consulted

Stakeholder Group	Mechanism Used	Round 1 – Scoping Phase		Round 2 – SIA Phase	
		No. of Participants/ Times Contacted	Number of Participants Engaged	No. of Participants/ Times Contacted	Number Participants Engaged
Host landholders	Personal meetings	3	3	4	4
Broader Community Residents	Media Release	5	4	-	-
	Project Website	-	-	-	-
	Project Information Sheet	1 Newsletter Distribution to ~1,100 households	NA	4 Newsletters Distribution to Project mailing list of 131 emails Distribution to ~1,200 households	NA
	Drop-in Session	NA	22	NA	5
	Mildura Field Days Pop-up	-	-	NA	~124[2]
	Surveys	NA	9	NA	6
	EIS Summary Information Sheet	NA	NA	Distribution to project mailing list of 131 emails Discussed with stakeholders at Wentworth Show	NA
	Wentworth Show Pop-up	-	-	NA	~78
Local Government	Project briefing and interview	2	2	1	1
Traditional Owners	Project briefing and interview	3	-	13	8[3]

[1] Additional stakeholders engaged throughout the planning and assessment process whose feedback has not informed the SIA is included in Section 5.4 of the EIS.
[2] Includes interactions at the 2023 and 2024 events.
[3] Refers to number of individuals engaged, rather than number of Traditional Owner groups and Aboriginal organisations.

Stakeholder Group	Mechanism Used	Round 1 – Scoping Phase		Round 2 – SIA Phase	
		No. of Participants/ Times Contacted	Number of Participants Engaged	No. of Participants/ Times Contacted	Number Participants Engaged
Local Community, Environmental and Special Interest Groups	Project briefing and interview	10	4	5	3
Accommodation provider	Interview	NA	NA	8	7
Education and training providers	Project briefing and interview	NA	NA	7	1
		Total	**37**	**Total**	**237**

Source: Umwelt, 2024; Spark Renewables, 2024.

Quantitative and qualitative information collected through engagement activities have been evaluated to inform the analysis of social impacts associated with the Project, as outlined in **Section 4.0**.

2.6 Assessment Assumptions and Limitations

The following outlines the assumptions of importance in the development of the SIA and identify any limitations in the assessment approach.

- The SIA has been informed by information collected from secondary data sources, social research and community engagement. It is assumed that secondary data sources contain valid, representative data and have not misconstrued information.
- The views of the community represented throughout the report are based on a small sample of community members and stakeholders consulted as outlined in **Appendix A** and do not necessarily represent the views of the entire community. Given the small sample size, secondary data sources and documentary research have also been used to further supplement information collected during engagement.
- No proximal landholders were directly engaged by Umwelt as part of the SIA as there are no non-associated landholders within 10 km of a WTG. Consultation with some community members in the social locality has been conducted by Spark Renewables, with outcomes of this engagement incorporated in the SIA. As these engagement activities were not completed Umwelt they have been considered critically when preparing the SIA.
- Consultation with Traditional Owner groups and Aboriginal stakeholders has been undertaken by Spark Renewables and also Austral as part of the development of the Aboriginal Cultural Heritage Assessment Report (ACHAR) and it has been assumed that all outcomes of consultation, as provided to Umwelt, accurately reflect the outcomes of this engagement.

- Efforts have been made to consult the broader community through advertisement of community information sessions via distribution of four community information sheets (in engagement rounds 1 and 2) that were distributed to ~1,100 households in Buronga, Gol Gol, Mallee, Arumpo, Monak, Trentham Cliffs, and Mourquong via Australia Post's unaddressed mail system as well as to the project's mailing list of 131 email addresses. The information sheets invited residents to attend the community drop-in sessions, to complete a short online survey and/or to contact the Project team directly. Interest from broader community residents, however, has been low, with a total of five (5) stakeholders attending the most recent community information session held in April 2024 which was held for three (3) hours at the Buronga Midway Centre. There were 22 attendees at the community information session held in the first round of engagement. Spark Renewables has undertaken additional consultation with the broader community through hosting project information stalls at local events including Mildura Field Days in 2023 and 2024 and Wentworth Show in 2024. These local events had a much higher attendance rate with 50–80 interactions recorded at each event.

3.0 Social Baseline

This section describes the social baseline of the communities defined within the Project's social locality. It provides an analysis of the defining characteristics of the communities, considering a range of demographic, social and economic indicators (see **Appendix A**). Further, it considers the natural and physical attributes of the social locality and an understanding of how people currently live, work and recreate in the area, and the values associated with the area in which they reside.

3.1 Local and Regional Setting

The Project Area is predominantly rural with the nearest towns being Gol Gol and Buronga, NSW, which border the State of Victoria and is located within the Wentworth Shire LGA. The proposed Project Area borders the Mallee Cliffs National Park and is in proximity to the Murray River. **Figure 3.1** provides a snapshot summary of the key towns of importance within the social locality.

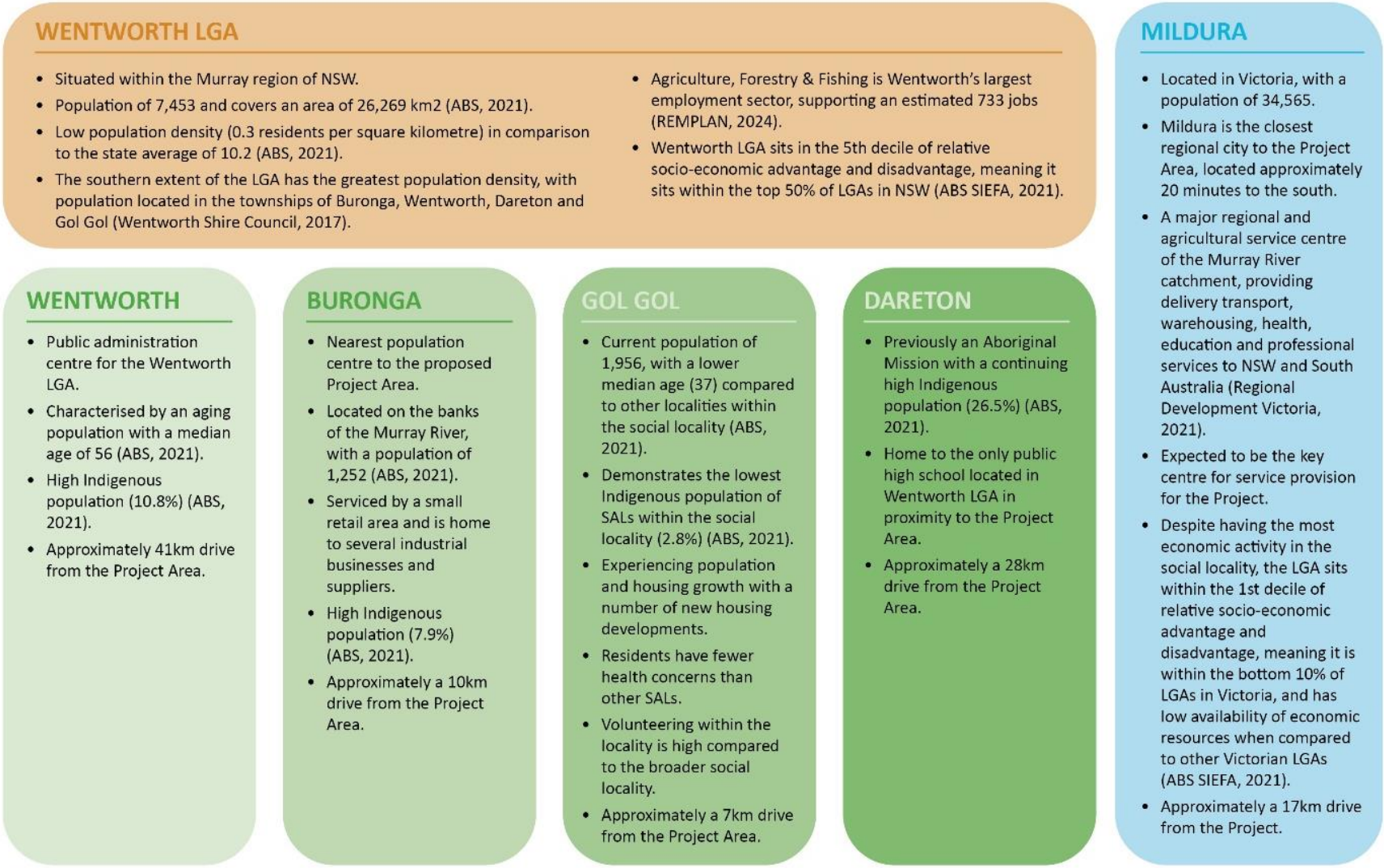


Figure 3.1 Local and Regional Setting Snapshot

3.2 Development Context

This section draws on several data sources to build an understanding of the development context within the region, and the social locality in which the Project is based. Understanding the locality's historical response to change assists in predicting how the Project may be perceived and accepted locally; the degree to which the Project aligns with community values and local sentiment; and the ability of local communities to respond to change.

3.2.1 Energy Policy in NSW

The NSW Government's current energy security policy and approach to a clean energy transition is being delivered through the strategic development of the renewable energy sector, as outlined through the NSW Government's Renewable Energy Action Plan (2013), Electricity Strategy (2019), the Electricity Infrastructure Roadmap (2020) and Net Zero Plan 2020–2030 (NSW Climate and Energy Action, 2023). The Project aligns with the objectives and direction of these policies.

Moreover, the NSW Government is currently drafting the NSW Energy Policy Framework which provides a framework to support timely and consistent decision-making and enable increased certainty for the energy industry and the relevant communities; and contains the following guidelines: Wind Energy Guideline, Transmission Guideline, Solar Energy Guideline, Benefit- Sharing Guideline and Private Agreement Guideline. The guidelines aim to ensure that communities gain benefits from renewable energy development and have improved transparency and understanding regarding the location and process of development. The framework was on public exhibition between 14 November 2023 and 29 January 2024, with the framework expected to be finalised in late 2024 (NSW Government, 2024).

The NSW Government's Electricity Strategy (2019) and Electricity Infrastructure Roadmap (2020) sets out a plan to deliver the State's first five REZs in the South-West, Central-West Orana, New England, Hunter-Central Coast and Illawarra regions. This builds on the NSW Transmission Infrastructure Strategy (2018) and supports the implementation of the Australian Energy Market Operator's (AEMO) 'Integrated System Plan'. REZs co-locate renewable energy generation, energy storage, and transmission infrastructure with the aim of providing affordable, reliable and low-emissions electricity to the grid through attracting private investment and enabling the transition to an electricity network powered by renewable energy sources.

The Project is located entirely within the boundaries of the declared South-West REZ, in the far west portion of the REZ. The South-West REZ was formally declared by the Minister for Energy under section 19(1) of the *Electricity Infrastructure Investment Act 2020* (the Act) on 4 November 2022 and has an intended network capacity of 2.5 gigawatts (GW). The REZ was chosen due to an abundance of high-quality wind and solar resources, proximity to Project EnergyConnect, relative land-use compatibility, and a strong pipeline of proposed projects (EnergyCo NSW, 2022).

The construction of Project EnergyConnect, the high voltage energy interconnector between South Australia and New South Wales has commenced. When completed, Project EnergyConnect will run between Wagga Wagga, NSW and Robertstown, SA, with an additional connection to Red Cliffs, Victoria. Project EnergyConnect is expected to generate 800 regional jobs in NSW during construction and 700 during operation; providing purpose-built camps based along the alignment, one of which is located at the Buronga substation along Arumpo Road that can accommodate up to 340 workers (Transgrid, 2022). The NSW component of the project is being carried out in two phases. The Western Section, linking the NSW and South Australia (SA) transmission networks, obtained State and Commonwealth planning approval in late 2021; and the second stage, connecting the Buronga and Wagga Wagga substations, was approved in September 2022 (NSW Government, 2024). Both stages are currently under construction.

3.2.2 Proximal Projects

Given the location of the Project in the South-West REZ, there is substantial commercial interest in the area with several other renewable energy developments in the vicinity of the Project, most at the early stages of the planning and approvals pathway.

Table 3.1 summarises projects currently under construction and proposed projects located within 75 km of the Project Area which may coincide with the Project and therefore contribute to cumulative social impacts experienced at a local and regional level. It is anticipated that there will be a reliance of the following projects on key service centres, particularly Mildura; and there is also a high chance of consultation fatigue given the number of renewable energy projects proposed. There are also a number of other renewable energy projects located within the REZ, however these projects have not been considered in the SIA as it is unlikely there would be a cumulative impact given the distance between projects.

In addition to renewable energy projects associated with the REZ, there are several other existing major projects underway, or projects currently being considered within the region, which could further contribute cumulative impacts, particularly in relation to impacts associated with concurrent construction activities.

Table 3.1 Proximal Projects

Project	Location / Distance to the Project	Timing	Description	Anticipated Construction and Operational Workforce	Cumulative Impact Considerations
EnergyConnect (Transgrid)	Transmission line connecting SA to the Buronga Substation, located 11 km South of the Project. The transmission line continues to the NSW/Victoria border near Red Cliffs.	Under construction, expected to be completed by late 2024.	Transmission line connecting South Australia to Wagga Wagga, with construction of substations at Buronga, Dinawan (170 km west of Wagga Wagga) and Wagga Wagga. A workers accommodation camp has also been constructed at Buronga (refer to **Section 3.2.1**).	Approximately 500 FTE during construction, however, works currently remaining will involve a reduced workforce.	Unlikely as Project EnergyConnect construction is likely to be completed prior to Project construction.
Buronga Landfill Expansion	14 km west of the nearest turbine	Approved, operational with expansion construction anticipated in late 2024.	Buronga Landfill Expansion from 30,000 tonnes per annum to 100,000 tonnes per annum. Construction anticipated late 2024.	Peak construction workforce of 10 FTE personnel required and 12 FTE required during peak operations.	Increased traffic movements along Arumpo Road. Minimal potential cumulative impact as the Buronga Landfill expansion does not require a significant workforce.
Mallee Solar Farm (Spark Renewables)	Located approximately 10 km north-east of Buronga and adjacent to the Mallee Wind Farm.	Preparing EIS. Construction anticipated to commence in early 2026.	600 megawatts MW solar project and BESS.	Peak construction workforce of 300 FTE, and 10 FTE during operations.	Potential cumulative impacts in relation to accessibility to services, housing and infrastructure in Wentworth LGA and Mildura. Increased traffic. Changing nature of the landscape and visual amenity impacts.
Euston Wind Farm (DP Energy)	Located approximately 8 km north of Euston and approximately 30 km southeast of the Mallee Wind Farm.	Preparing EIS. Construction expected to commence in Q2 2025 with a duration of 18–24 months.	Construction and operation of a wind farm with up to 96 wind turbines, battery storage and associated infrastructure with a generation capacity of 700 MW.	Peak construction workforce of 250, with 15 FTE during operations.	Potential cumulative impacts regarding accessibility to services and infrastructure in Mildura. Consultation fatigue.

Project	Location / Distance to the Project	Timing	Description	Anticipated Construction and Operational Workforce	Cumulative Impact Considerations
Lake Victoria Wind Farm (WestWind Energy)	Approximately 24 km northwest of Wentworth	Preparing EIS. Construction expected to begin in 2028.	Generation capacity of 1.5 GW with approximately 200–210 turbines. The Project is located outside the REZ.	An anticipated peak construction workforce of 375 FTE employees and 35 FTE for operations.	Potential cumulative impacts regarding accessibility to services and infrastructure in Wentworth LGA and Mildura. Consultation fatigue.
Euston Mineral Sands Project (Iluka Resources)	Overlapping within Project Area	Preparing EIS. Construction is anticipated to commence in 2026, with commissioning expected in 2028.	An exploration licence and an assessment lease on areas that overlap the project footprint. Expected to have an operational life of up to 12 years, including the construction phase, with an additional 14 years allowed for rehabilitation post operations. An accommodation camp is proposed to be established either on site, or close to Euston township for the construction workforce, and operational workforce to be DIDO.	It is anticipated that construction will require approximately 250–350 FTE, with an operational workforce of 15–250 FTE.	Potential cumulative impacts regarding accessibility to services and infrastructure in Wentworth LGA and Mildura. However, a TWA facility is proposed which may reduce pressure on surroundings' accommodation.
Koorakee Energy Park	The project is approximately 70 km southeast of Mildura, and 12 km north of Euston. 40 km southeast of the Project	Preparing EIS. Construction is expected to commence in late 2025 and take approximately 24–36 months	Construction and operation of a 2 GW energy park, comprising 1 GW solar farm, 1 GW wind farm (including 167 WTGs up to 270 m in height, and approx. 2.2 million panels) and a 1 GW/12 GWh BESS. No proposed workforce accommodation.	A workforce of approximately 300–400 FTE personnel will be required on-site during peak construction. Expected operational life in excess of 25–30 years.	Potential cumulative impact as construction timeframes may overlap resulting in an influx of workers that may increase road traffic and the need for services and accommodation. Workforce accommodation will be considered in the EIS with consideration to an accommodation facility.

Project	Location / Distance to the Project	Timing	Description	Anticipated Construction and Operational Workforce	Cumulative Impact Considerations
Gol Gol Solar Farm	Same Project Boundaries to the western side of the Project Area 3.3 km to the northwest to the nearest piece of Project Infrastructure	Preparing EIS. Construction commencement date unknown, however expected to take approximately 24–36 months.	The development of a 600 MW solar farm and associated infrastructure within an area of approximately 1,500 ha. Approximately 2 million solar panels.	Approximately 200 FTE during peak construction. During operation, the project will require up to 4 full-time on-site employees.	Potential cumulative impacts due to the proximity of the projects, however it will depend on proposed construction time. Consultation fatigue.
Gol Gol Wind Farm	Same Project Boundaries to the western side of the Project Area 8.3 km to the northwest turbine to turbine	Preparing EIS. Construction estimated to commence late 2028 and expected to take approximately 24–36 months.	Construction and operation of a 840 MW wind farm, including 120 WTGs up to 280 m in height.	A workforce of approximately 300–400 FTE personnel will be required on-site during peak construction and 10–15 FTE during operations.	Construction of the Project likely to be complete prior to commencement of Gol Gol Wind Farm construction however overlap of construction periods may also occur. Consultation fatigue.
Gol Gol BESS	9 km to the northwest between turbine to BESS substation	Preparing EIS. Construction phase of the project is expected to take approximately 12–24 months.	Development of a 1500 MW / 12 GWh battery storage system and associated infrastructure including grid connection.	Construction will require approximately 150 FTE. Operations are expected to require 10–15 FTE employees.	Potential cumulative impacts on local workforce demand depending on construction timeframe.

According to the Victorian Department of Transport and Planning, an additional five (5) projects have been approved but are not operational in the Mildura LGA and could contribute to further cumulative impacts, particularly in relation to access to services and infrastructure in Mildura if construction timelines are concurrent. These projects include:

- Nowingi Solar Farm (250 MW) – approved but not operational.
- Mildura 10 Solar Farm (3.2 MW) – approved but not operational.
- Red Cliff Solar Power Station (28 MW) – approved, not yet constructed, commissioning expected in 2026.
- Yelta Solar Farm (5 MW) – approved but not operational, 9 month construction period with up to 50FTE.
- Red Cliffs Terminal Station (220 kv) – approved, under construction.
- Fifth Street Merrebin Solar Farm (7.5 MW) – approved but not operational, (DTP, n.d.).

3.3 Sustainable Livelihoods Approach – Community Capitals

As discussed in **Section 2.2** to understand the communities of interest to the Project and to evaluate their resilience and adaptive capacity to change, a Sustainable Livelihoods Framework or Community Capitals Approach (DFID, 1999) has been adopted. This includes analysis of the seven Community Capitals as illustrated in **Appendix A**.

The DFID approach draws on broad categories of community capitals as a fundamental basis to identifying and further enhancing community capacity and resilience. This methodology has been further developed by Coakes and Sadler (2011) for application in SIA practice. The vulnerability of each capital area (human, social, natural, physical and economic) can be assessed through the selection of a suite of socio-economic indicators specific to each capital area to assess a community's vulnerability to change or conversely their adaptive capacity; and has been widely applied within the renewable energy project context. Elements of each capital area are further outlined in **Figure 3.2**.

According to Hart (1999), natural, human, social, and built capitals are key assets to defining community resilience and sustainability over time. Central to Hart's model is the inter-relationship and linkages that exist across different community capitals and assets, such that where one capital is depleted, other community capitals and assets are also likely to be correspondingly compromised. For example, should human capital be depleted, in terms of a potential deterioration in levels of education or health, the subsequent maintenance of built capitals (e.g., economic infrastructure) are likely to also become affected, thus compromising the overall sustainability of the community.

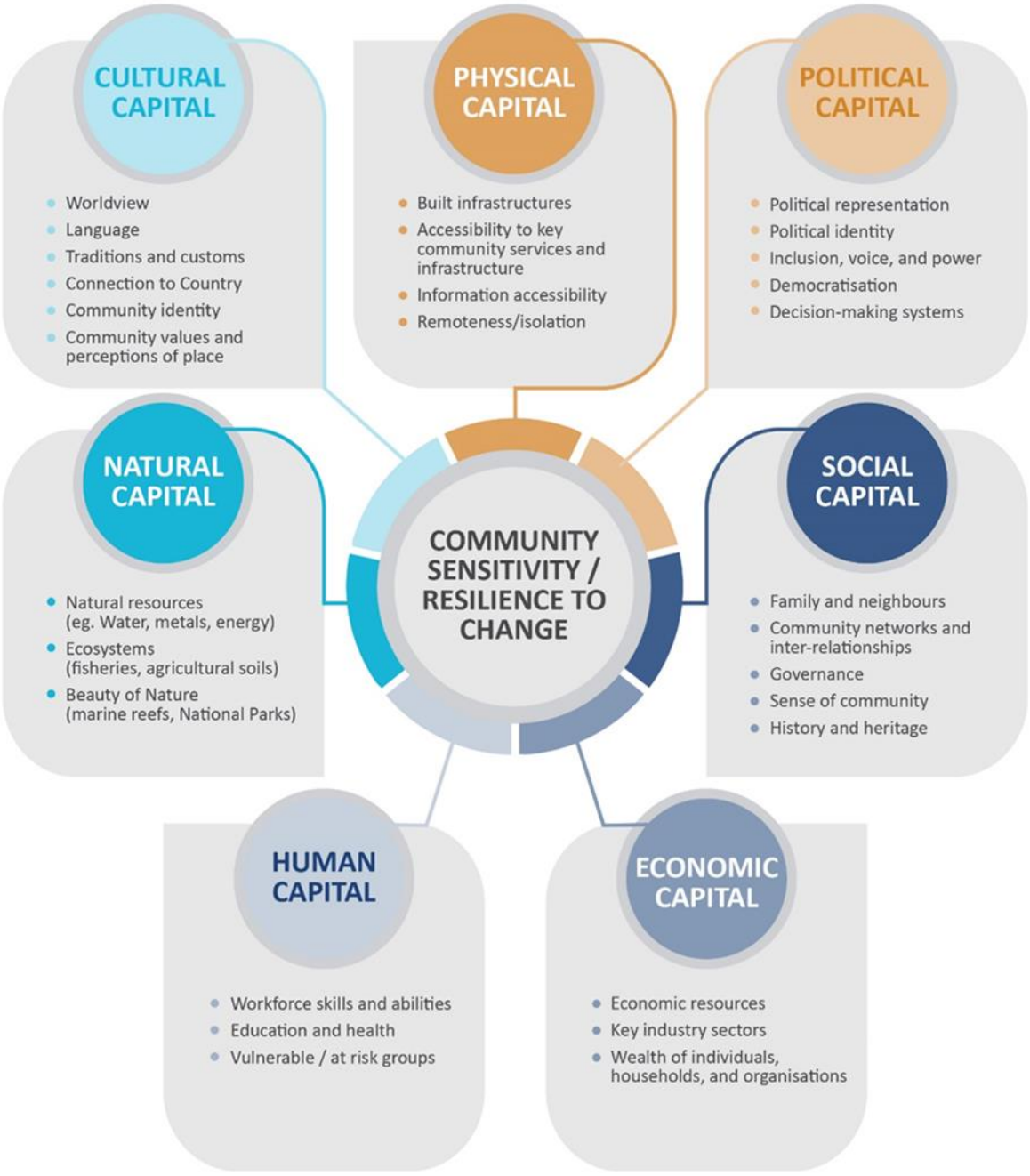


Figure 3.2 Community Capitals Framework

Adapted from Coakes and Sadler (2011).

3.3.1 Natural Capital

Natural capital refers to the natural assets and resources that contribute to community sustainability. Natural capital can include resources such as minerals, land, forests, and waterways, which provide benefit to the community, as well as environmental assets that provide social, cultural, or recreational value. A summary of the natural capital in the social locality is provided below.

Wentworth LGA is the meeting place of the Darling and Murray Rivers. The Murray River is an important feature in the local community, with both rivers also important when considering landscape and current land use in Wentworth. During both rounds of engagement, the natural beauty of the area, and the Murray River were noted as a key attraction and place for recreational activities. Additionally, the agriculture sector in Wentworth relies heavily on the river systems as well as the Murray Darling Basin, meaning it is more susceptible to periods of drought, as experienced in the Millenium Drought from 2001–2009.

The Wentworth Irrigation Area is an important resource to many agriculturalists in the region as irrigated horticulture accounts for 80% of the gross value of the agriculture sector, making water security an important consideration. Mildura LGA is also a large agriculture producer, supplying a large proportion of Australia's grapes, citrus fruits and olives (Mildura Rural City Council, 2021).

In addition to its agricultural production, Wentworth LGA is home to various National Parks and heritage areas. Mallee Cliffs National Park, located to the east of the Project Area, covers an area of 57,969 ha. The Mallee Cliffs National Park is currently a wildlife conservation area, managed to protect the sand plains and sand dune ecosystem (NSW National Parks Wildlife Service, 2022). The Park also has been part of a broader rewilding project that has contributed to the doubling of bilby numbers in the National Park and has also seen the introduction of the Mitchells Hopping Mouse, presumed extinct in NSW (ABC, 2022). The Mallee Cliffs National Park is not currently accessible to the public.

Mungo National Park is also an important National Park that sits within the Wentworth LGA, approximately 55 km north-east of the Project Area. This National Park is well known for its rich Indigenous cultural heritage being the home of the Mungo Lady and Mungo Man, 42,000-year-old ritual burials, some of the oldest modern human remains found outside of Africa (Mungo National Park, n.d.). In May 2022, the remains of Mungo Lady and Mungo Man were reburied. The main access road to the Mungo National Park is Arumpo Road, which is also the proposed access to the Project Area.

Mungo National Park sits within the Willandra Lakes Regional World Heritage Area. Recognised for its natural (representing major stages in evolutionary history) and cultural value (bearing testimony to past civilisation) (Mungo National Park, n.d.) the area has been jointly managed by the National Parks Wildlife Service and Traditional Tribal Groups Elders Council since 2001. The Willandra Lakes also contains wetlands of international importance (RAMSAR wetlands).

Gol Gol Lake is also an important natural feature within the locality, located approximately a 10-minute drive from the township of Gol Gol, it is an important site for biodiversity, with 40 bird species detected at the Lake, as well as a number of frog species. The Lake has recently undergone infrastructure upgrades to enhance connectivity with Gol Gol Creek and to manage water flows (NSW Environment and Heritage, 2023).

In addition to the natural features, noted above, Wentworth LGA also has one of the State's major mineral sand resources. There are various active mineral sands mines in the LGA, including Gingko Mineral Sands Mine and Arumpo Bentonite, which continue to contribute to the LGA's economy and overall employment (discussed further in **Section 3.3.2**). In addition to existing mines, there are various exploration licenses located throughout the LGA. Whilst Wentworth Shire Council recognise the importance of mineral sand extraction, the Council also has a goal of working to enhance the natural and physical assets of the LGA by planning for, and developing the right assets and infrastructure, as well as adapting to climate change (Wentworth Shire Council, 2017).

3.3.2 Economic Capital

Examining a community's economic capital involves consideration of several indicators, including industry and employment, workforce participation and unemployment rates, income levels and cost of living pressures, such as weekly rent or mortgage repayments. This section provides a summary of the key characteristics of the social locality from an economic capital perspective.

The Wentworth economy generates an estimated $1.45 billion in output, with mining being the largest sector by output, generating approximately $418 million annually, which represents 28.8% of total output. The Agriculture, Forestry and Fishing industry generate the second highest output in the LGA, generating approximately $287 million annually, however, they are the largest sector of employment supporting an estimated 733 jobs, or 23.5% of the labour force compared to 8.1% by the mining sector. In terms of economic output, the Manufacturing industry is also a significant contributor, generating approximately $144 million (REMPLAN, 2022).

The Mildura economy generates an estimated $8.16 billion in output. Mildura LGA represents 84.9% of the approximately $9.61 billion output generated in Mildura and Wentworth, 0.5% of the $1.56 trillion output generated in New South Wales, and 0.7% of the $1.21 trillion output generated in Victoria. The largest contributors to annual economic output in Mildura are Agriculture, Forestry and Fishing, which represents 13.6% of total output or $1.11 billion, and Manufacturing which represents 12.8% of the total output ($1.04 billion). Unlike Wentworth, construction is also a significant contributor to output in Mildura, accounting for $1.04 billion (REMPLAN, 2022).

In 2021, Health Care and Social Assistance, Agriculture, Forestry and Fishing, and Retail Trade were the industries with the highest rates of employment in Mildura. Despite its high economic output, agriculture was second the largest sector, accounting for 11.8% of employment in Mildura. The percentage of people employed in agriculture in Wentworth was significantly higher, accounting for 23.5%. This was also significantly higher than any other industry in Wentworth (REMPLAN, 2022).

Agriculture accounts for the highest number of businesses in Mildura (approximately 28%) and Wentworth (approximately 45%). Mildura also has a significant number of construction businesses (15% of total). A high proportion of these construction businesses are non-employing or have fewer than 19 employees indicating they are small in nature. Similarly, all construction businesses in Wentworth have fewer than 19 employees (ABS, 2021).

In Mildura LGA, the unemployment rate has generally been lower than in Wentworth LGA (**Figure 3.3**). Both LGAs experienced a significant decline in unemployment rates in 2020. Wentworth saw a sharp decrease from a high of around 12.7% in mid-2018 to approximately 5.3% by early 2024. Similarly, Mildura's unemployment rate fell from around 6% in mid-2018 to approximately 3.8% by early 2024.

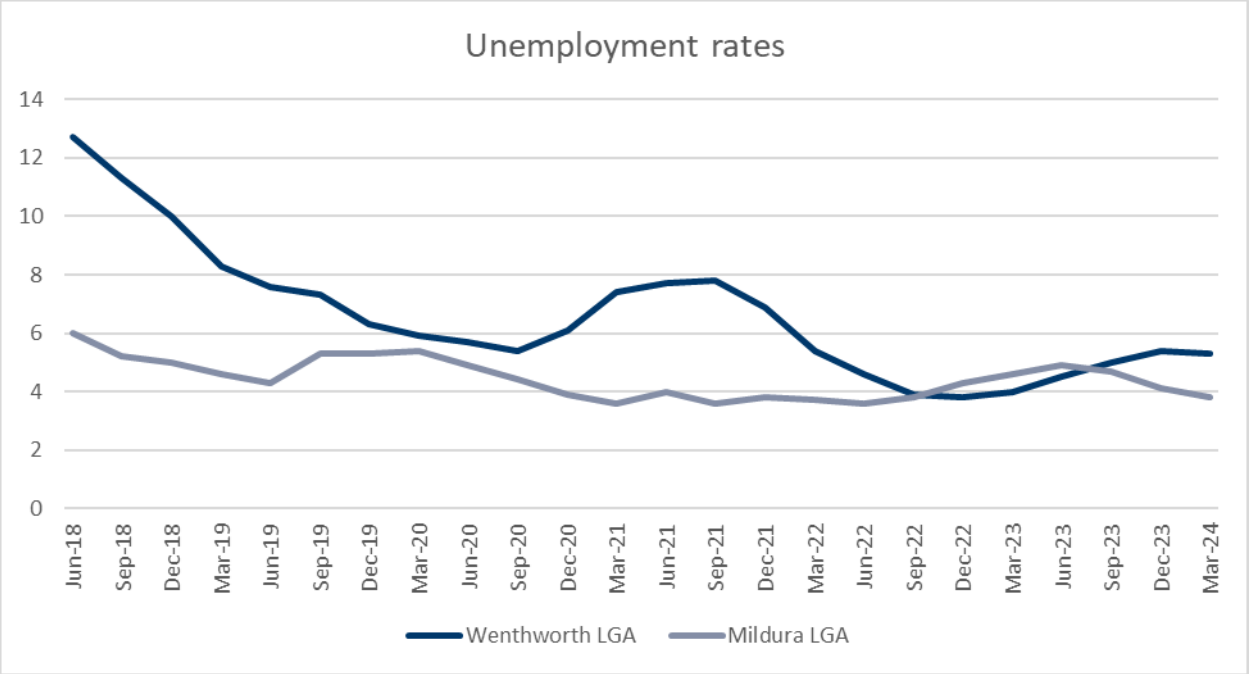


Figure 3.3 Unemployment Rates

Source: SALM, 2024.

Figure 3.4 illustrates the housing data for the social locality. The social locality had lower median household weekly income compared to the State ($1,829) expect in Gol Gol SAL which has a higher household income ($2,104). Monthly mortgage repayments across the social locality were lower when compared to the State at $2,167 though rates of home ownership (with or without a mortgage) were higher than the State average (64%) with Gol Gol having the highest rate at 84.7%.

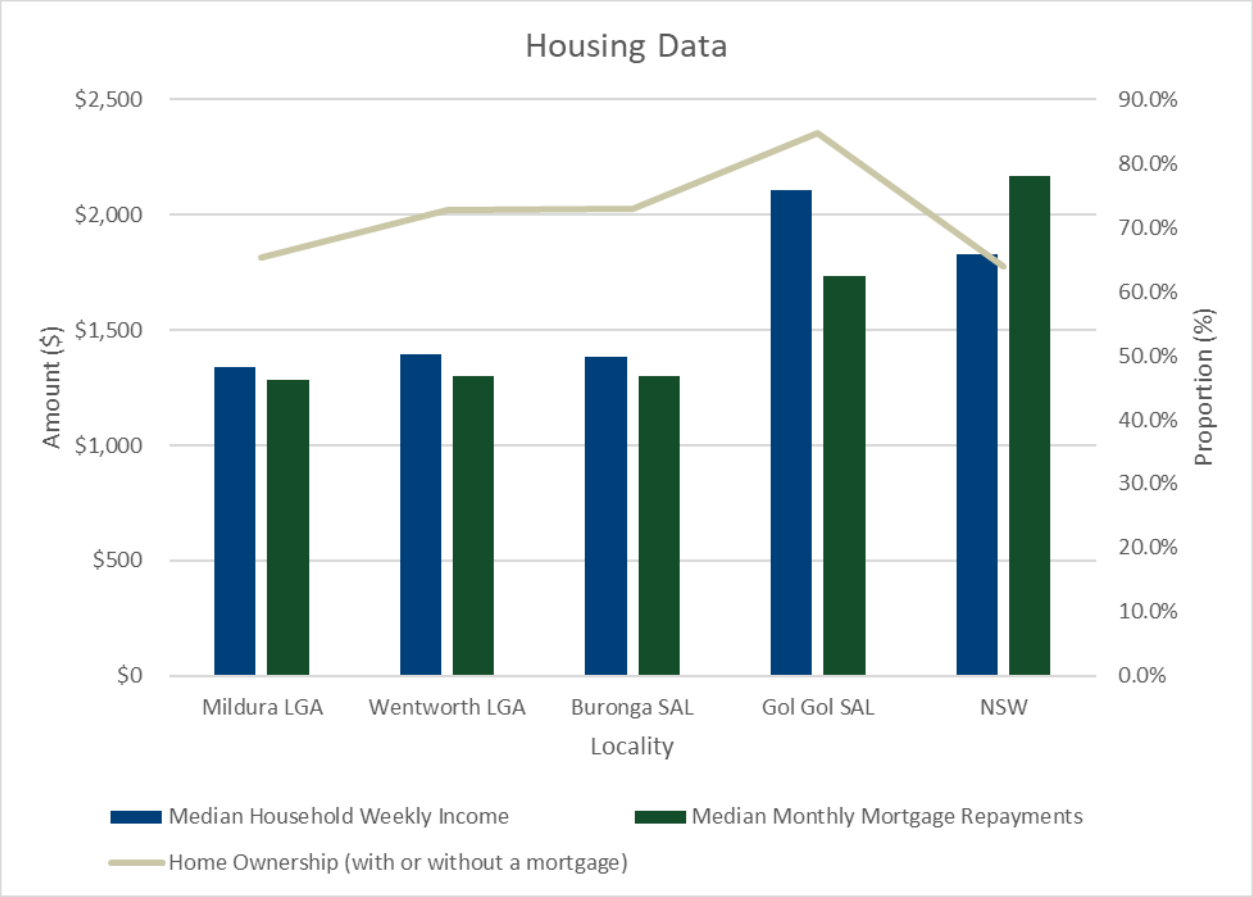


Figure 3.4 Housing Data for the Social Locality

Source: (ABS, 2021).

Figure 3.5 demonstrates the Socio-Economic Indexes of Areas (SEIFA) Index of Economic Resources (IEO). The IEO is a product developed by the ABS to rank relative socio-economic advantage and disadvantage across LGAs which reflects the general level of economic resources available within a LGA and conversely the same within the SAL boundaries. Mildura LGA is within the bottom 10% of LGAs in Victoria and therefore, has a low availability of economic resources. Dareton SAL is similarly within the bottom 10% of SALs in NSW, while Gol Gol sits in the 7th decile, making it the most advantaged community in terms of economic resources.

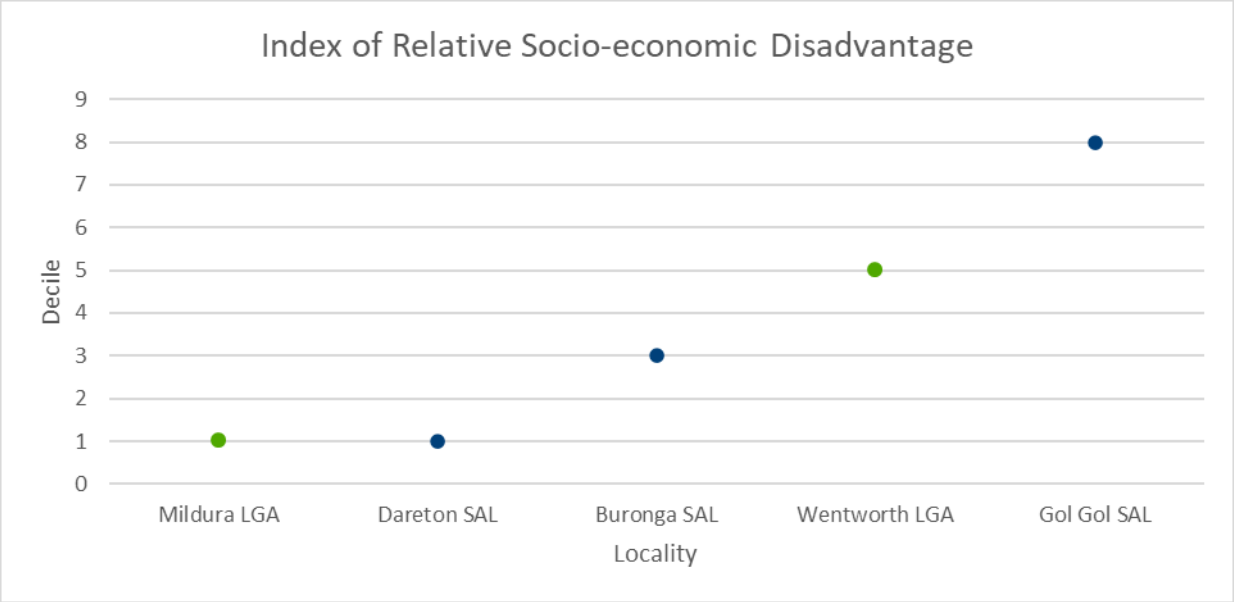


Figure 3.5 Index of Economic Resources

Source: (ABS SIEFA, 2021).

3.3.3 Human Capital

The level of human capital within a community is assessed by considering population size, age distribution, education and skills, general population health, and considers the prevalence of at-risk groups within a community. This section provides a summary of the key characteristics of the social locality from a human capital perspective.

The median age in Buronga is 38 years and Gol Gol is 37 years, slightly lower than the State average of 39. The median age in Mildura LGA is 40 years, and in Wentworth LGA is higher than all other localities, sitting at 43 years. An aging population was identified as a key challenge for the community by Wentworth Shire Council, with a significant, anticipated increase in people aged 75 years and over between 2021 and 2041 (ABS, 2021).

Furthermore, the population in Wentworth LGA is predicted to decline at an annual rate of -0.17% until 2041. This contrasts with the State, which is predicted to see an annual increase of 0.95%, and with Mildura LGA which is projected to grow by 11% between 2021 and 2036 (DPE, 2022). The Wentworth LGA is expected to experience a decline in most age groups, notably those aged between 20 and 39 years, as well as those between the ages of 45 and 74 years indicating a smaller number of people of working age within the community.

Wentworth and Mildura LGAs have significantly lower rate of university qualifications than the State (3.9% and 5.8% compared to 15.3%). Whilst Gol Gol and Buronga have a slightly higher rate when compared to the Wentworth LGA, they are still below the State (5.3% and 5.4% respectively). Mildura does have a slightly higher percentage of people with a vocational (i.e. TAFE) education (8%) when compared to Wentworth (6.1%), however this is still below the NSW average of 8.5%. In 2021, the main field of study in Mildura was Management and Commerce, followed by Engineering and Related Technologies, consistent with the two top fields of study in Wentworth (ABS, 2021).

In line with the field of study, Managers constitute the main occupation (20.7%) in the Wentworth LGA. The LGA also has high rates of professionals (13.9%) technicians and trades workers (13.5%) and labourers (13.3%). Comparatively, Mildura has high rates of professionals (16.4%), labourers (14.5%) and also managers (14.3%).

Wentworth LGA has a lower percentage of people (53.7%) who reported that they don't have a long-term health condition when compared to the State (61%). Of those who did report a health conditions, arthritis, asthma, and mental health conditions were the most frequently reported for the LGA. The low rates of people who reported they did not have a health condition were reflected in Buronga (55.5%) and Mildura (54.7%). Gol Gol however has a higher proportion of people (64.8%) who do not have a long-term health condition (ABS, 2021).

Figure 3.6 illustrates the SEIFA Index of Education and Occupation (IEO) which is a product developed by the ABS that ranks relative socio-economic advantage and disadvantage for the LGA, reflecting the general level of education and occupation-related skills of people within an area, indicative of relative disadvantage compared to other areas in each State (NSW or Victoria). Wentworth sits in the 5th decile, placing it in the top 50% of all LGA's across NSW. Mildura sits within the 2nd decile, placing it within the lowest 20% of all LGA's across Victoria suggesting a lower level of educational and employment skills in the area comparatively (ABS SIEFA, 2021).

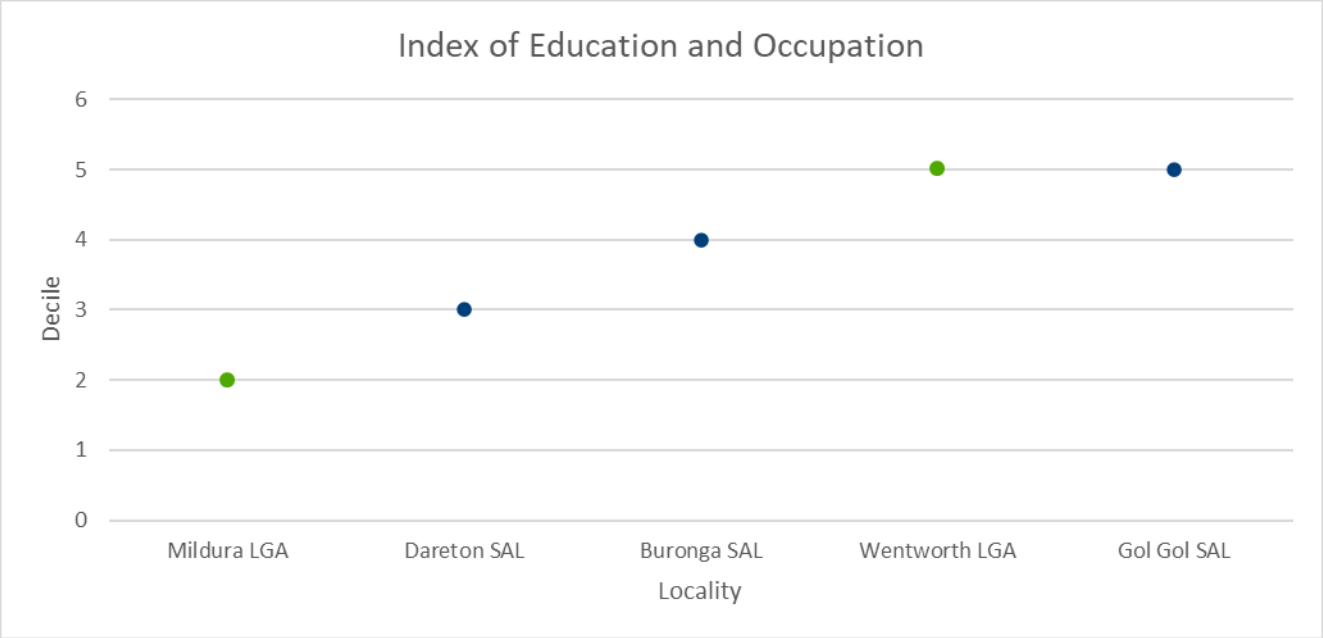


Figure 3.6 Index of Education and Occupation

Source: (ABS SIEFA, 2021).

3.3.4 Cultural Capital

Cultural capital refers to underlying factors that provide human societies with the means to adapt to their environment (Cochrane, 2006). It includes the way people know and understand their place within the world. It may also refer to the extent to which the local culture, traditions, or language, may promote or hinder wellbeing, social inclusion, and development (Vanclay et al., 2015). This section provides a summary of the key characteristics of the social locality from a cultural capital perspective.

Wentworth LGA has a high population of people that identify as being indigenous, accounting for 8.3% of the population compared to 3.4% in NSW. Similarly, Buronga has 7.9% of its population identifying as indigenous whilst Gol Gol has a significantly lower rate (2.8%). Mildura has a lower indigenous population (4.6%) than the other localities, however this is still significantly higher than the Victorian State average of 1%.

The Traditional Owners of the Wentworth Shire area are the Barkindji or Paakantyi peoples, from the Darling River basin in Far West New South Wales, Australia. The name Paakantyi means "River people," derived from "paaka" (river) and the suffix "-ntyi" (belonging to), signifying the importance of waterways in the region. Traditionally, they speak the Paakantyi language, part of the Pama–Nyungan family (Andersen, 2015). Today, however, it's the population consists of many different clan groups from other communities across Australia (MPRA, 2019).

The Paakantyi's territory historically extended along the Darling River from Wilcannia to Avoca, covering approximately 19,425 km^2. The landscape includes red sandhills and grey clay flats. They are linked by various dialects, such as Baarundji, Wilyakali, and Pantjikali, which, due to colonisation, are now collectively recognized as Barkindji (Tindale, 1974).

Barakindji mythology includes the Dreaming story rainbow serpent Ngatji, believed to travel underground from waterhole to waterhole (Fuller, 2016). Wentworth Shire has significant Aboriginal cultural heritage and is home to some of the most important known Aboriginal sites in Australia. The Shire contains over 280 registered Aboriginal cultural sites, including very significant areas like Lake Mungo (part of Mungo National Park), the Lake Nitchie area, the Rufus Creek Massacre burial site, and the Snaggy Bend Aboriginal burial ground (MPRA, 2019). At Lake Mungo, the discovery of Mungo Man and Mungo Lady, two of the oldest human remains in Australia, revealed that they date back approximately 40,000 to 42,000 years. Mungo Lady's remains were discovered in 1968 and are notable for being the earliest known cremation in the world. Mungo Man, discovered in 1974, was also ritually buried, providing significant insights into early human life and spiritual practices. These discoveries have profound cultural significance for the indigenous Barakandji, Ngyiampaa, and Mutthi Mutthi peoples, connecting them to their ancient ancestors. The site of their discovery, now part of Mungo National Park, is recognized as a World Heritage Area, highlighting its importance to both Australian and global heritage (National Museum Australia, 2022).

European contact, beginning with explorer Thomas Mitchell, led to significant population decline due to disease and displacement of Aboriginal peoples. By the mid-20th century, the Barakindji were considered a "vanishing tribe," but their descendants remain, particularly in Wilcannia, where approximately 68% of residents are of Barakindji descent. The community continues to face challenges, including environmental degradation and socio-economic issues, but they strive to preserve their rich cultural heritage (The Conversation, 2016).

The Barkandji Traditional Owners have been actively organised to regain and repossess their traditional lands for at least the last twenty years when a Native Title Claim was t lodged in 1997 (National Native Title Tribunal, 2020). The Barkandji Native Title Claim was determined in two parts (2015 and 2017) and is now the largest determination in NSW covering more than approximately 128,000 km^2 within the Far West Region of NSW (ABC, 2017). It incorporates land within several LGAs including Balranald, Bourke, Broken Hill, Central Darling, Cobar, and Wentworth, and the Unincorporated land of the Far West Region. Parts of Wentworth LGA outside of the Project Area are covered by Native Title determinations from the Barkandji Traditional Owners claim (National Native Title Tribunal, 2015). The Barkandji Native Title Area is important to consider from a socio-economic and cultural impacts perspective, given the strong history and culture associated with the region and the strong representation of the Aboriginal community in the area. Since the claim was determined in 2015, Traditional Owners now have the right to hunt, fish and teach law and customs on the land (ABC, 2017). Furthermore, the NSW Government's *Far West Regional Plan 2036* identifies the Barkandji Traditional Owners determination as enabling opportunities for Aboriginal people to use the land for commercial purposes.

The Wentworth/Dareton Community Working Party (CWP) also plays a pivotal role in preserving and promoting this rich cultural heritage. Established in 1995, the CWP has evolved into a peak Aboriginal governance body, representing the interests of the local Aboriginal communities. The CWP's efforts include developing cultural engagement protocols and providing cultural competence training to ensure that service providers respect and integrate local cultural values into their operations (MPRA, 2019).

The stakeholder meetings with First Nations Peoples in the social locality reveal multiple interconnected issues, including disconnection from traditional culture, intergenerational trauma, high rates of mental health problems and substance abuse, internal divisions, and extremely high unemployment. These factors have led to a loss of cultural identity and purpose, particularly among younger generations. Despite these challenges, there is evidence of a desire to reconnect with culture and tradition. Community members have suggested initiatives such as establishing a healing centre to address trauma and mental health issues, creating spaces like farms to reconnect Aboriginal people with nature and animals, implementing Indigenous Ranger programs to improve culture and heritage preservation while boosting employment, and organising events to bring different Aboriginal groups together. Additionally, consulted stakeholders suggested structured employment programs that prepare individuals for work while maintaining cultural connections and offering grants for small businesses to build capacity within the community. These community-driven initiatives demonstrate a strong desire to revitalize cultural connections and address underlying issues, providing a foundation for potential regeneration of cultural strength and cohesion within the community.

3.3.5 Social Capital

Various indicators can be used to examine and assess social capital. Such indicators include the level of volunteering, population mobility, crime rates and the demographic composition of the community, such as the percentage of people born overseas, language proficiency etc. This section provides a summary of the key characteristics of the social locality from a social capital perspective.

Both Mildura and Wentworth LGA's have a more homogenous society than NSW, with low rates of languages other than English (LOTE) in the home, and high rates of people born in Australia. The percentage of people who speak a LOTE in Buronga is slightly higher (8.7%) than other localities, although still relatively low when compared to NSW (29.5%). Buronga (79%) and Gol Gol (88.3%) also have a higher percentage of people born in Australia than NSW (65.4%).

Wentworth LGA had a slightly lower proportion of people who lived at the same address as 1 year prior than both the LGA of Mildura and the State (76% compared to 79%), however rates were consistent across the LGAs and the State for mobility over the past 5 years. Interestingly, Gol Gol has the lowest proportion of people who lived at the same address five years prior, whereas Buronga had the highest proportion (52% and 59% respectively compared to the State average of 54%).

In Wentworth, 16% of people were engaged in voluntary activities, higher than the State average of 13%. Rates of volunteering within Buronga and Mildura were similar to the State average. Gol Gol had the highest rate of volunteering, at 17.3%. High rates of volunteering are often used as an indicator of connection, cohesion and sense of community in the local area. Despite these rates of volunteerism, youth disengagement has been noted as a challenge within the community, with this particularly salient for Indigenous youth.

Wentworth LGA has a significantly higher rate of assaults and malicious damage to property incidents than the State average (NSW Bureau of Crime Statistics and Research, 2022), however, the LGA has reported no incidents of robbery since 2021 and has a lower rate of drug related offences than the broader State. Mildura has a significantly higher rate of property damage and theft than the Victorian average (Crime Statistics Agency, 2022). Rates of drug offences are also above average in Mildura when compared with Victoria.

Figure 3.7 illustrates the Index of Relative Socio-economic Disadvantage (IRSD) which is a SEIFA score prepared by the ABS which ranks areas in Australia according to relative socio-economic disadvantage. A low score indicates a greater degree of disadvantage. Wentworth LGA sits within the 5th decile within NSW and Mildura LGA sits within the 1st decile in Victoria when ranked within their respective States, indicating an extremely high socio-economic disadvantage in Mildura, whereas Wentworth is average within their respective States (ABS SIEFA, 2021).

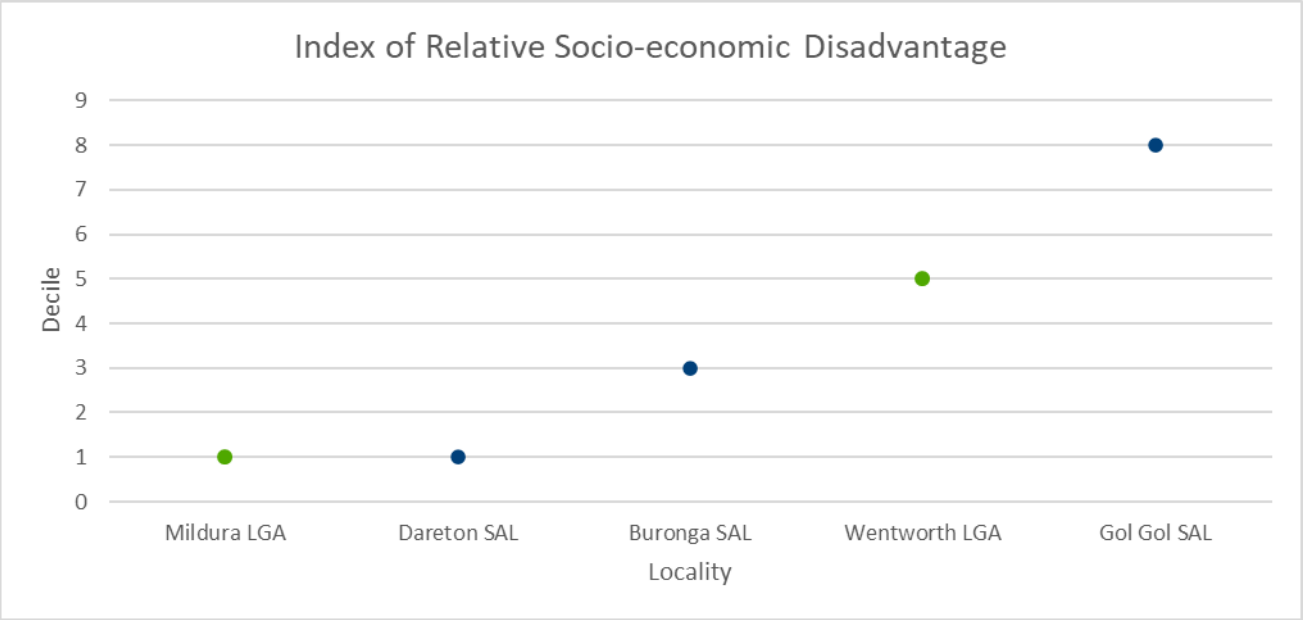


Figure 3.7 Index of Relative Socio-economic Disadvantage

Source: (ABS SIEFA, 2021).

During consultation, various community and special interest groups commented on entrenched disadvantage within the community; and that despite the region having a significant amount of wealth and job opportunities, unemployment is embedded in certain pockets of the community, with individuals struggling to overcome disadvantage.

3.3.6 Political Capital

Political capital refers to the individuals, institutions, and systems that contribute to a community's ability to maintain and uphold a governance structure. Political capital can determine the extent to which people are able to participate in decisions that affect their lives, the level of democratisation within a community, and the resources provided for this purpose. A summary of the political capital relating to the social locality is provided below.

Wentworth LGA is governed by the Wentworth Shire Council which has nine elected councillors. Councillor of Wentworth Shire, Tim Elstone, has spoken favourably of the economic contribution that Project EnergyConnect has already provided to the LGA through the procurement of local services, also recognising the role it will play in integrating renewable energy into the grid and decarbonising the national economy. The 2024 NSW Local Government Elections are scheduled to be held on Saturday 14 September 2024.

In its *Local Strategic Planning Statement (LSPS)*, Wentworth Shire Council recognises the need to manage resources and renewables, however a clear priority within the Statement is to ensure that any renewables projects will not impact on strategic agricultural land, with the intention to avoid any development within pumped irrigation districts (Wentworth Shire Council, 2020). The Soils, Land, and Agricultural Impact Assessment conducted by Minesoils, 2024, determines the Project's impacts on agricultural land to be generally minor, temporary, and limited to the Disturbance Footprint. The Project Area is not located on strategic agricultural land.

The need for adequate accommodation for workers, and the need to manage cumulative impacts of development was also noted within the LSPS (further discussed in **Section 4.4**). A media statement by the Wentworth Shire Council indicates their overall support for the EnergyConnect transmission line, and the direct and indirect economic contribution it will provide to the shire through employment, service procurement and community funding (Wentworth Shire Council, 2022).

The Project Area also lies within the Murray State electoral district. The seat has been held by Independent Helen Dalton since 2019 (formally a member of the Shooters, Fishers and Farmers Party). In the 2023 State election Helen Dalton won by a 50.2% preferential swing. The Murray State electorate has historically been represented by the Nationals since 1981, though between 1999 and 2015 the seat was abolished due to the State electorate of Murray and Broken Hill being merged, though in 2015 the seat was recreated (ABC News, 2023). Dalton is an advocate for "saving family farms" aiming to ensure land and water continues to be owned and managed by rural families (Helen Dalton MP, n.d.). Dalton has shown support for renewable energy projects but also voiced concerns about specific implementations. For example, she has expressed reservations about the HumeLink energy transmission project, advocating for more community consultation and impact studies before proceeding with such large-scale projects (ABC, 2023).

Wentworth is the Federal electorate of Farrer. Susan Ley of the Liberal Party has held the seat since 2001. Ley has almost always voted against increasing investment in renewable energy (They Vote For You, 2024).

The State seat of Mildura District is held by Independent Jade Benham. Mildura is in the federal electorate of Mallee held by Anne Webster, member for the Nationals. Anne Webster has retained the seat since 2019 and won the 2022 election with a 22.6% swing. Furthermore, the Nationals Party has held the Mallee seat since 1983 (ABC News, 2022). Webster has historically advocated for the development of wind and solar infrastructure in the region and is committed to "driving down emissions while protecting [the] economy and jobs" (ABC, 2022).

The Project Area sits within the boundaries of the Dareton Local Aboriginal Land Council (LALC), and the Traditional Owners of the land are the Barkandji People (refer to **Section 3.3.4** for further details).

The Murdi Paaki Regional Assembly (MPRA) is a key governance body representing the Aboriginal communities across the Murdi Paaki region, which includes the Wentworth Shire. The Assembly functions as a collective voice for these communities, advocating for their rights and needs. It plays a crucial role in facilitating local decision-making processes, ensuring that the perspectives and priorities of the Aboriginal populations, including the Barkindji people, are integrated into regional and State-level policy and planning. The MPRA works closely with LALCs, Native Title holders, and claim groups to assert the people's rights to their traditional lands. The Wentworth/Dareton Community Working Party, as a member of the MPRA, collaborates with the Assembly to align local priorities with broader regional strategies, ensuring coherent and unified advocacy for Aboriginal communities' cultural, social, and economic development (MPRA, 2019).

3.3.7 Physical Capital

Physical or built capital includes provision of infrastructure and services to the community. Within this capital area, it is important to consider the type, quality, and degree of access to public, built and community infrastructure (including amenities, services, and utilities), as well as housing. This section provides a summary of the key characteristics of the social locality from a physical capital perspective with **Figure 3.8** visually representing the key physical capital aspects in the social locality.

Wentworth LGA and Mildura are well connected to Broken Hill, the Riverina region and the East Coast of NSW, Adelaide in South Australia, and Victoria via national highways. The Sturt Highway, connecting Adelaide to Canberra through Mildura is an important national freight route, as well as an important contributor to local tourism infrastructure (Wentworth Shire Council, 2017). Similarly, the Calder Highway between Mildura and Melbourne is an important freight route.

Wentworth LGA is serviced by the Mildura Airport, the busiest airport in regional Victoria (Mildura Airport, 2024). The airport has daily flights to and from Melbourne, and Sydney as well as regular flights to Adelaide. The Wentworth Aerodrome, located to the north of the township of Wentworth does not operate commercial flights, only recreational flights for light and ultra-light crafts including emergency services but has undergone a major upgrade to extend and seal the runway in 2021 (Wentworth Shire Council, 2021).

Residents in the social locality also have access to a range of public infrastructure in Mildura. As Mildura is the regional centre, it offers a range of public and private education and health facilities. The Mildura Base Public is the largest hospital in the LGA, providing a range of services including intensive care, an emergency department, as well as a range of speciality services. In May 2022, the hospital declared a 'code yellow', as it was 'completely at capacity' after previously being criticised for not having the capacity to service Mildura and surrounds (ABC, 2022). Additionally, recent news articles highlight a shortage of ambulances and paramedics in Mildura, with these professionals having to be flown in to provide services (ABC, 2022).

Public Health Information Development Unity (PHIDU) data shows that there is low access to medical practitioners in Mildura, with a rate of 85.6 per 100,000, lower than both NSW and Victorian averages (122.6 and 124.6 respectively). Additionally, there were as few as three general health practitioners in the Wentworth LGA in 2022, with no specialist practitioners. The Wentworth Health Service provides nurse led care, and residents in Buronga have also gained access to the Buronga Health Hub that was opened in mid-2022 and offers a range of health services, as well as supporting visiting allied health professionals (NSW Health, 2024).

The Buronga – Gol Gol area currently provides residents with access to the Gol Gol Public School and Buronga Public School. For high school, students are required to travel to Coomealla High School in Dareton, approximately 15 km north-west of Buronga, or into Mildura. Stakeholders consulted for the SIA commented that it is increasingly likely for students to travel into Mildura for educational benefit. Whilst some residents of Gol Gol have commented on the lack of services in the area for the growing population, others recognised the importance of Mildura as a key service centre for residents in Gol Gol and Buronga.

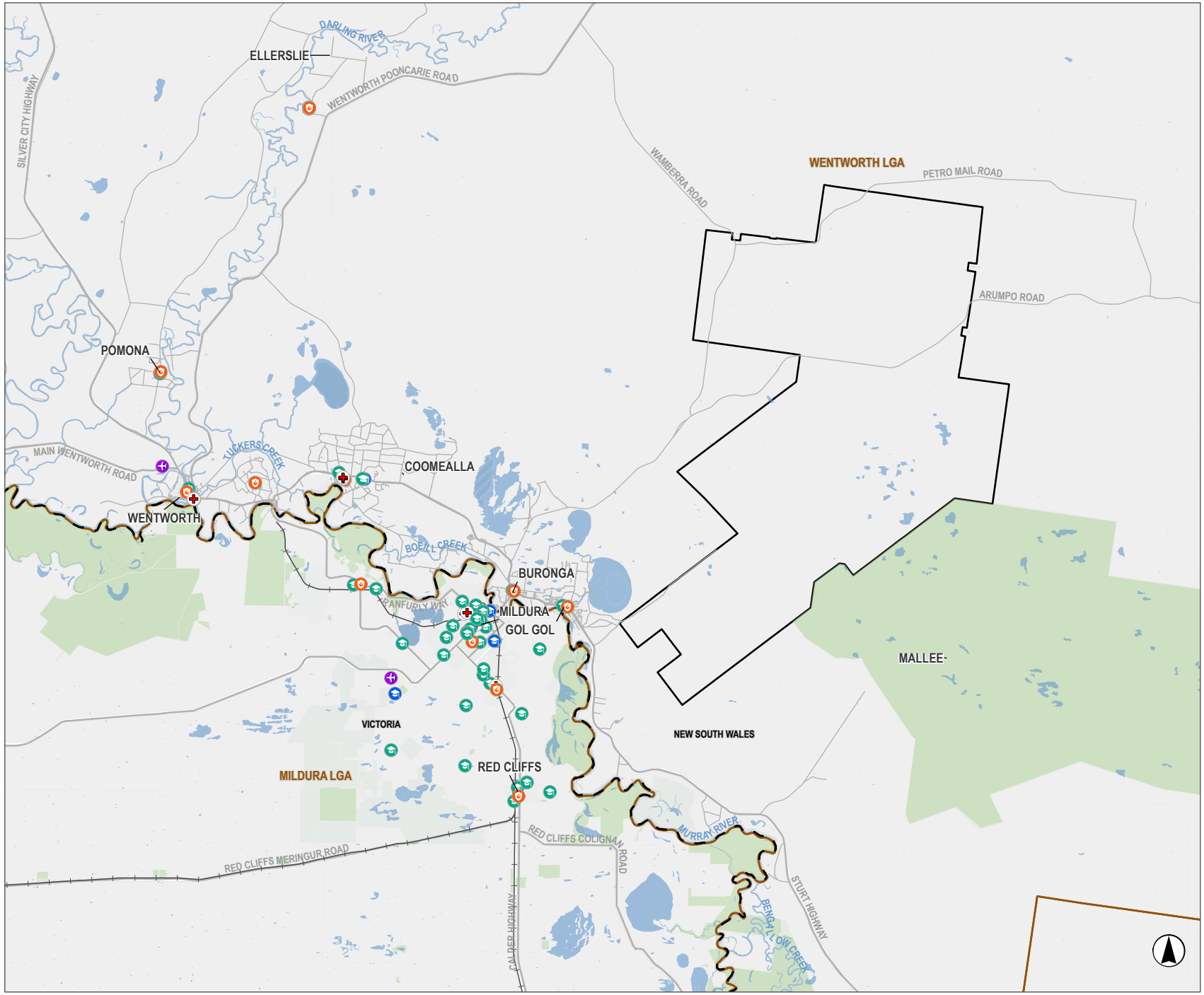
The Buronga – Gol Gol area of Wentworth Shire is the major area of housing and population growth in the Wentworth LGA due to an increase in housing demand associated with the growth of Mildura (Wentworth Shire Council, 2017). Approximately 500 new large residential housing allotments are predicted to be made available following major subdivisions. As of 2022, Stage 1 of the Sustainable Subdivisions Framework was undertaken to assist in the long-term planning of the subdivision of land to assist in the population growth for the next 20–30 years. Stage 2 commenced in 2023 and is currently on going (Mildura Shire Council, 2022). Recent news articles have commented on the fear of homelessness in Mildura and northwest Victoria more broadly due to increased cost of living and a shift in the number of people seeking social housing (ABC, 2022). Local Aboriginal and Torres Strait Islander residents, elderly residents of Wentworth LGA and users of short-stay accommodation and tenants in the private rental market, may be more vulnerable or susceptible to the social or economic changes associated with the Project.

Interestingly, despite commentary around housing demand in Mildura, Gol Gol and Buronga still have a higher-than-average rate of unoccupied dwellings (10.3% and 11.7% respectively) compared to the State (9.4%). Wentworth LGA has a significantly higher percentage of unoccupied dwellings (16%); however, Mildura LGA has a lower rate of unoccupied dwellings when compared with the other localities, at 9.1%.

The Wentworth LGA has an average of 2.1 motor vehicles per dwelling. This is slightly lower in Buronga and Mildura (1.9), and higher in Gol Gol (2.3). These rates are unsurprising given the large distances between regional centres and show a high reliance on the local road networks.

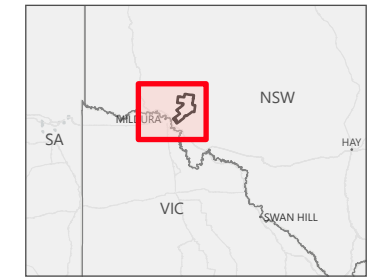
FIGURE 3.8

Physical capital



Legend

- Project Boundary
- State Border
- Local Government Area (LGA)
- NPWS Estate
- Water Body
- Watercourse
- Road
- Railway
- Airports, Aerodromes & Helipads
- Firestations
- Health Facilities
- Tertiary Education
- Schools



0 10 20
Kilometres

Scale 1:400,000 at A4
GDA2020 MGA Zone 54

Image Source: ESRI Basemap (2024) **Data source:** NSW DFSI (2024), VIC DELWP (2023), Spark (2024)

3.4 Local Challenges and Opportunities

Table 3.2 outlines the key challenges and opportunities for the social locality as identified from the review of local, regional, and State government reports, strategies and plans, ABS Census data and other secondary data sources, and as identified through community consultation.

Table 3.2 Local Challenges and Opportunities

Opportunity	Capital	Challenge
• Availability of natural resources for economic generation (i.e., mineral sands and renewable energy generation). • Strong tourism capabilities drawing on natural capital (i.e., National Parks, world heritage listed sites and the Murray and Darling Rivers).	**Natural**	• Susceptible to drought periods due to reliance on Murray Darling Basin for agriculture productivity and the regional climate profile.
• Economic diversity generated by the agriculture, mining and manufacturing industries. • Increasing emphasis on ensuring economic diversity. • High number of construction businesses in Mildura, however research indicates that these are small in nature. • Declining unemployment rates across the two LGAs reflect an engaged workforce. • Low cost of living in the area compared to the State as indicated by lower monthly mortgage repayments.	**Economic**	• Small number of large construction businesses to service a growing need for housing as indicated by number of non-employing businesses. • Mildura has a lower level of economic resources as indicated by SEIFA index.
• Relatively low median age. • High proportion of people trained in engineering and related technologies that may be utilised for the Project.	**Human**	• Predicted population decline within the Wentworth LGA. • Aging population. • High rates of self-reported health conditions within the Wentworth LGA, however lower rates in Gol Gol, perhaps reflective of the lower median age. • Low rates of university and vocational education across the LGA and SALs. • Lack of trained professionals to service the health sector.

Opportunity	Capital	Challenge
• Rich cultural heritage. • Highly engaged Indigenous community. • Existing initiatives such as Aboriginal Rangers Program (and a strong desire to increase programs focusing on improving cultural connection and First Nation's peoples health). • Native Title gives a formal mechanism for protection of cultural values and sites and recognition of Indigenous communities' continued connection to Country.	**Cultural**	• High occurrence of mental health issues, generational trauma, and drug and alcohol addiction. • High unemployment and lack of employment opportunities.
• High rates of volunteering. • Low rates of robberies and drug related offences in Wentworth. • Low mobility and high volunteering rates indicating a connected community.	**Social**	• High rates of assault and malicious damage to property in Wentworth and Mildura. • High rate of socio-economic disadvantage. • Youth disengagement. • Low levels of diversity within the community.
• Support for renewables and new developments in the region by local government. • Political support for renewables from State members in Victoria.	**Political**	• Ongoing focus on agriculture from State and federal members in NSW, potentially reducing acceptance and support of renewable energy projects.
• Access to major road networks, connecting the region with major cities. • Strong regional airport with daily flights to major cities. • Recent upgrades to medical facilities improving service capacity in Wentworth LGA. • Subdivision and construction of housing an area of growth for the Wentworth LGA.	**Physical**	• Strong reliance on local road networks, with high motor vehicle usage. • Recent reports of Mildura Base hospital reaching capacity. • Reports of fears of lack of suitable housing in Mildura, and potential for an increase in homelessness. • Mildura has good access to key services and facilities (i.e., health care and education). • Comparatively, residents of Buronga and Gol Gol reflected a lack of "good services", such as GPs, suggesting that both localities require additional services to support a growing population.

In summary, based on our understanding of the social locality and the characteristics of the community identified, the Project is:

- Located in the Wentworth LGA in NSW but will likely rely heavily on employment and service provision from Mildura in Victoria.
- Consistent with government and community aspirations for renewable energy development in the area.

- Well connected via major road and air networks.
- Positioned to connect to electricity infrastructure that is existing or currently under construction.
- Located in an area with strong connections to the natural features and landscape.
- Located in an area with strong Aboriginal cultural values.
- Located in an area currently lacking affordable housing.
- Located in an LGA with predicted population decline, and an aging population, despite some localities continuing to experience growth (i.e. Gol Gol and Buronga).

4.0 Social Impact Evaluation

This section provides an evaluation of the social impacts identified in relation to the Project, with the aim of assessing the anticipated changes to the current social baseline due to the Project proceeding. Supplementary secondary insights have also been compiled to further contextualise, benchmark and qualify the matters raised to inform the evaluation of each social impact.

The following section expands on the positive and negative impacts raised during consultation and through assessment of the Project, categorising them according to the social impact categories of livelihoods, accessibility, way of life, surroundings, social amenity, engagement and decision making, community, health and well-being and culture, as outlined in the SIA Guideline (DPE, 2023). The technical risk of the impact occurring has also been considered (based on impact likelihood and magnitude) in addition to consideration of perceived stakeholder concern regarding Projects impacts.

The identification of potential positive and negative social impacts is based on a combination of community and stakeholder perspectives; practitioner experience and understanding of likely impacts experienced on similar developments in similar contexts and professional judgement based on the Project context and the social baseline; the reported lived experiences of this community in response to other, nearby projects; a review of community submissions on nearby, similar projects regarding positive and negative impacts and other publicly available literature and research relevant to similar project developments.

4.1 Summary of SIA Survey

As identified in **Section 2.5**, the limited community interest and involvement in the Project has resulted in a small sample size of respondents despite efforts made to engage residents and key stakeholders in relation to the Project. As identified above, these perceptions are one of a number of inputs into the identification and evaluation of impacts in the following sections.

Figure 4.1 provides a summary of community responses to a number of prompted social impacts for the small number of survey respondents, indicating the average frequency of response to each of the social impacts presented. Survey respondents largely recognised the positive impacts the Project may result in within the social locality, particularly in regards to increased economic spend within the social locality and increased employment and training. The largest concern for survey respondents related to decision making processes and rehabilitation and decommissioning processes. Stakeholders interviewed also raised concerns relating to decommissioning, as well as the loss of flora and fauna values.

Each of these impacts are further described in the subsequent sections under each of the key social impact categories.

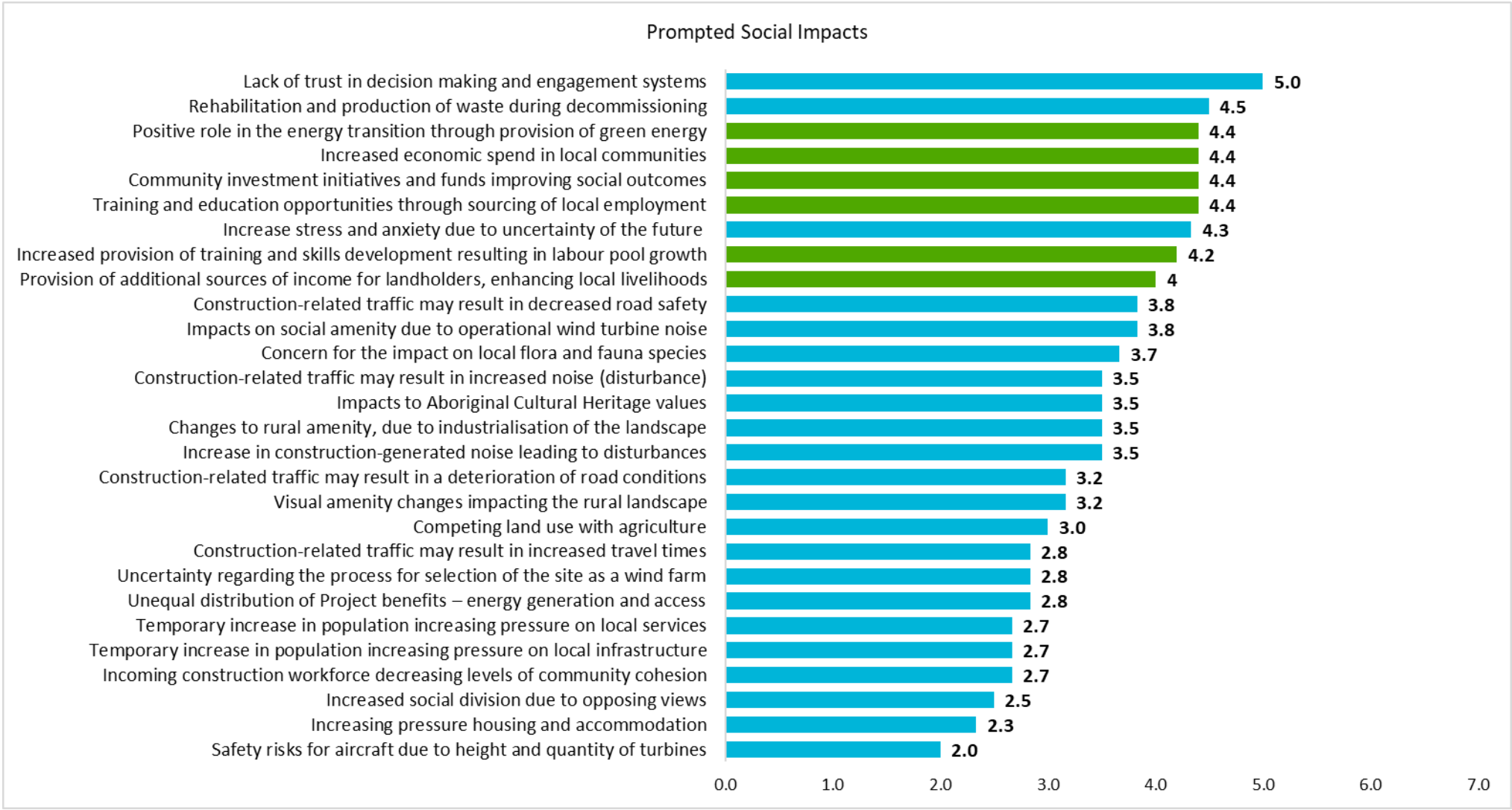


Figure 4.1 Level of Concern of Prompted Social Impacts

N=6, Green represents positive social impacts, Blue represents negative social impacts, Multiple responses allowed.

4.2 Surroundings

As outlined in the SIA Guideline (DPE, 2023), impacts relating to surroundings and social amenity can include changes in ecosystem services such as shade, pollution control, erosion control, public safety and security, access to and use of the natural and built environment and aesthetic value and amenity.

4.2.1 Loss of Flora and Fauna Values

The **loss of valued fauna** is a potential impact of the Project and was a key concern for environmental groups interviewed to inform the SIA. Concerns largely centred around the Gol Gol Lake, with particular concern for the high number of migratory birds flocking to the Lake, and the potential for bird strike associated with the operation of wind turbines in proximity to this area. An attendee at the community pop-up also made specific mention of the Greater Long Eared Bat. Noise impacts on wildlife were also identified given the proximity to the Mallee Cliffs National Park, however other stakeholders outlined the positive outcome that the Project was reducing clearing and avoiding areas of high biodiversity value where possible. As noted in **Section 3.3.1**, such concerns are reflective of the importance of the Gol Gol Lake due to its biodiversity, and the values placed on this area by the local community and environmental groups.

The Project has undergone a comprehensive biodiversity assessment to understand and minimise its impact on local biodiversity values. Between September 2022 and August 2024, extensive surveys were conducted to catalogue the area's flora and fauna; with surveys including vegetation assessments, threatened species searches, and bird and bat utilisation studies.

The assessment identified three main Plant Community Types (PCTs) within the Project Area including PCT 58 - Black Oak - Western Rosewood open woodland, PCT 170 - chenopod sandplain mallee woodland/shrubland and PCT 171 - spinifex linear dune mallee. One Threatened Ecological Community (TEC) was recorded as being present in the Development Footprint, being the Mallee Bird Community listed as an Endangered Ecological Community under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The surveys also observed sixteen threatened ecosystem credit species within the Biodiversity Study Area and wider Project Area, including various bird species such as the Southern Whiteface, Regent Parrot, and Little Eagle, as well as bat species (Little Pied Bat and Inland Forest Bat).

A Biodiversity Development Assessment Report (BDAR) has identified that there are no direct impacts to threatened species-credit species or their habitats, however some indirect impacts have been identified. Indirect impacts include, but are not limited to reduced viability of adjacent habitat due to noise, dust or light spill, loss of breeding habitat for native fauna species including the TEC Mallee Bird Community of the Murray Darling Depression Bioregion with the level of impact on fauna assessed as negligible to medium. The BDAR also assessed the potential for bird and bat strike, concluding that there were three species of birds and two species of bats with a high risk of wind turbine strike. A Bird and Bat Adaptive Management Plan will be developed for the Project to manage this risk.

Changes have been made to the Project design to increase the distance between turbines and native vegetation and to avoid areas, where possible, of high biodiversity value. Further details around design refinement and avoidance of impacts is outlined within the EIS.

Table 4.1 outlines the social impact of Project construction and operation on environmental values. Given the importance of natural values in the Social Locality, the impact on local migratory bird species has been ranked as a Medium social impact (possible to occur and of moderate magnitude), with loss of valued flora species ranked as a low social impact (unlikely to occur and of minor magnitude).

Table 4.1 Social Impact Ranking – Flora and Fauna Values

Social Impact	Affected Parties	Phase	Perceived	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Loss of valued migratory bird species due to potential for bird strikes	Environmental groups Community groups Broader community	Operation	High	Possible	Moderate	**Medium**	**Low**
Loss of valued flora due to land clearing on the Project site	Environmental groups	Construction	Medium	Unlikely	Minor	**Low**	**Low**

4.2.2 Social Amenity and Sense of Place

Changes to the rural landscape and subsequent impacts on visual amenity is a potential impact of the Project and was raised as a concern by some broader community members, particularly those who live in Gol Gol due to concerns that they would be able to see WTGs from their respective properties. The concerns related specifically to the overall enjoyment of their property, and potential impact on property values (discussed further in **Section 4.3.2**).

There are no dwellings within 10 km of a WTG associated with the Project, and WTGs are approximately 12.7 km from properties on the outskirts of Buronga and Gol Gol. While WTGs may be viewed from this distance, the view of WTGs is likely to be distant. Other residents, however, were less concerned about visual impacts, emphasising the elegance of the infrastructure.

> *I see the wind turbines as a blight on our horizon – Broader community*

> *[Wind turbines are] elegant, lovely to look at – Broader community*

A Landscape and Visual Impact Assessment (LVIA) undertaken by Moir Landscape Architecture, 2024 concludes that as there are no non-associated dwellings (properties that are not hosting infrastructure) within 10 km of the Project, no impacts have been considered from dwellings.

Despite the Project being visually prominent in the landscape, the landscape has been assessed as having low scenic quality with no significant landscape features. The LVIA notes that the modification and clearing of the plains for agricultural use, combined with the flat topography of the landscape, is in essence a blank canvas where any contrasting addition, particularly one of the scale of a wind farm, is likely to become a defining character element, without diminishing the existing landscape character.

The cumulative visual impact assessment of proposed renewable energy projects in the area suggests that repeated large-scale developments may alter the perception of the overall landscape character. Given the Project's location in the South West REZ, the region is likely to be developed for wind energy due to its largely uninhabited lands and favourable conditions that allow for the continuation of primary production activities while providing opportunities for renewable energy production.

The most significant visual impact is expected to be experienced by travellers along Arumpo Road, which transects the Project Area. While the road is used to access the Mungo National Park, there are no key public viewpoints and no significant landscape features affected along the road, and consequently, visual impacts are considered to be of low viewer sensitivity within this area. Existing roadside vegetation is also likely to fragment views of the Project. While visual impacts are not considered significant for the Project, the Project will result in a change to the landscape within the locality.

One stakeholder suggested the Project could include a viewing platform and educational signage to allow travellers along Arumpo Road to have a greater understanding of the Project. The stakeholder suggested signage could include how the Project was constructed, size of turbines, what has been done to mitigate impacts to the environment, energy outputs, size of turbines and local climatic conditions to understand why wind farms are beneficial.

Changes to social amenity due to operational noise from the Project was a concern for some broader community members, with some commenting on the 'buzz' that they have heard emanating from other wind farm projects, with the fear that such noise would interrupt the amenity they experience at their house/property.

> *We have put our life savings into building a beautiful house and I don't want to spend the next 20 odd years listening to the buzz and hum of a windfarm – Broader community*

Though a potential impact of the Project, when prompted, stakeholders who completed the online community survey were not particularly concerned about an **increase in construction-generated noise that may cause disturbance and annoyance.**

As identified, there are no (non-associated) dwellings in proximity to the Project, with the nearest non-associated dwelling located more than 10 km from the nearest WTG. The Noise and Vibration Impact Assessment (NVIA), undertaken by Marshall Day (2024) for the Project, has noted that any noise heard at these dwellings during operation of the Project will be below the base (minimum) criterion of 35 dB LAeq[4], and is therefore unlikely to have an impact.

Similarly, the NVIA has determined that no exceedances of noise management levels are predicted to occur during construction due to the distances between work areas and dwellings. To further reduce impacts associated with noise, it is recommended a Construction Noise and Vibration Management Plan is developed prior to construction commencing.

[4] LAeq is the weighted average sound level, tailored to a specific frequency range, as experienced by humans.

As identified in **Section 3.3.1**, the region is a large agricultural producer and consequently may impact on agricultural activities in the area, potentially impacting on sense of place. Whilst some consulted stakeholders sought to understand how the Project would interact with the current agricultural use of the site, there was little concern relating to changes in land use. Notably, the Project design has been altered in consultation with host landholders to minimise the impact on agricultural productivity through appropriate siting of WTGs.

The Soils, Land, and Agricultural Impact Assessment (Minesoils, 2024) has determined that the Project is likely to have a minor, temporary impact on agricultural land, which will be limited to the Disturbance Footprint only. The Project will see the removal of 444.69 ha of land from agricultural use, the temporary removal of potential agricultural primary productivity to the estimated value of up to $154,307 per year for the duration of the Project, and temporary impacts on soil resources and Land and Soil Capability within the Project Area where surface disturbance occurs. Such impacts are considered negligible in the context of the gross commodity values and land use coverage of the agricultural industries operating across the broader Wentworth Shire LGA.

Given the nature and scale of established agricultural industries within the LGA and wider region, there will be no impact to critical mass thresholds of agricultural enterprises needed to attract and maintain investment in agricultural industries and infrastructure. Additionally, the Project will include several measures to prevent, minimise and manage adverse impacts on agricultural resources, incorporating procedural mitigation measures along with a land management process. Management recommendations include the preparation of the following plans: Soil Stripping and Management Plan, Pest and Weed Management Plan, Biosecurity Management Plan and a Decommissioning and Rehabilitation Management Plan.

It is anticipated that by implementing mitigation measures during Project construction and operation, and with effective decommissioning and rehabilitation at the end of Project life, the Project will have only minor impact on the soils and agricultural productivity of the Project Area, and negligible impact on agriculture industries operating within the region.

Table 4.2 outlines the social impact rankings on social amenity and sense of place due to construction and operation of the proposed wind farm.

Table 4.2 Social Impact Ranking – Social Amenity and Sense of Place

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Changes to rural amenity, due to industrialisation of the landscape, impacting people's sense of place	Broader community	Construction and operation	Likely	Minor	**Medium**	**Low**
	Users of Arumpo Road e.g. residents, tourists		Likely	Minor	**Medium**	**Low**
Increase in construction-generated noise that may cause disturbance and annoyance for proximal landholders	Proximal landholders	Construction	Very unlikely	Minimal	**Low**	**Low**
Impacts on social amenity due to operational wind turbine noise	Proximal landholders	Operation	Unlikely	Minimal	**Low**	**Low**
	Townships of Gol Gol and Buronga		Unlikely	Minimal	**Low**	**Low**
Construction-related traffic may result in increased noise disturbance	Townships of Gol Gol and Buronga	Construction	Possible	Minimal	**Low**	**Low**
Change in sense of place due to development of alternate land uses	Broader community	Construction and operation	Possible	Minor	**Low**	**Low**

4.2.3 Water Access and Use

Reduced access to water for agriculture and household purposes due to the level of water needed during the construction period of the Project is a potential impact which was raised by attendees at the community information session. Community members queried how much water the Project would require, and any limitations that may be put on water consumption should the area fall into drought, as has been experienced in the region in the past (refer to **Section 3.3.1**).

The **increased flood risk associated with Project development and potential runoff** is a potential impact of the Project which was questioned by some attendees at the community pop-ups. The Project is not anticipated to exacerbate flood risk in the local area.

The Water Resource Impact Assessment by WRM (2024) undertaken for the Project identified that water required for the construction and decommissioning of the Project will be obtained primarily from Wentworth Shire Council commercial water supply and trucked to site, with no anticipated impacts to surface or groundwater availability in the vicinity. Additionally, the Project Area is predicted to be low flood risk, with minimal changes to land topography that would impact runoff and groundwater expected due to the Project. To further reduce potential impacts, a Construction Environment Management Plan (CEMP) will be developed, which will also include a Construction Soil Water Management Plan and Erosion and Sediment Control Plan. An Operational Environmental Management Plan (OEMP) will also be developed to address potential impacts on surface water quality and flooding during operations.

Table 4.3 demonstrates the social impact ranking of impacts to water access and use as a result of the Project's construction and operation.

Table 4.3 Social Impact Ranking – Water Access and Use

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Reduced access to water for agricultural and household purposes due to construction activities	Broader community	Construction	Very unlikely	Minimal	**Low**	**Low**
Increased flood risk associated with Project development and potential runoff	Broader community	Construction	Very unlikely	Minimal	**Low**	**Low**
	Emergency providers		Very unlikely	Minimal	**Low**	**Low**

4.2.4 Intergenerational Equity and Sustainability

Decommissioning of the Project and associated disposal of infrastructure is a potential impact of the Project. This was concern raised by stakeholders who completed the survey however, stakeholders recognised the positive role the Project would play in the energy transition through the provision of green energy. One environmental group representative questioned the sustainability of the WTGs, particularly if WTG towers and blades cannot be recycled, and the types of materials and energy used in their construction.

Concerns relating to decommissioning and infrastructure disposal of renewable energy projects have been documented in broader national surveys. A study completed by CSIRO on Australian attitudes towards renewable energy transition noted this as the second largest concern associated with onshore windfarms. The study recognises the need to address end of life solutions to prevent materials ending up in land fill, in turn increasing social acceptance of renewable energy (Poruschi, Scovell, McCrea, Walton, & Gardner, 2024).

The construction period of the Project will result in the largest contribution of waste, most of which will be required to be disposed of off-site. Onsite use of waste would be limited to reuse of excavated materials, including topsoil, excavated rock and sediment recovered from erosion and sediment control devices which will be reused onsite as general fill material, or it will be incorporated within landscaping materials, where possible. Waste, recycling and disposal facilities to be utilised for other materials are likely to include the Buronga Landfill and will be confirmed by Spark Renewables in consultation with Wentworth Shire Council during the detailed design and contract development stage of the Project, in consultation with the facility operators. These facilities will be identified in the CEMP, OEMP and Decommissioning and Rehabilitation Plan (DRP).

The decommissioning process would be guided by the initial Project conditions of approval and would be the responsibility of the Project owner to decommission and rehabilitate at the end of the project life. While there are no comparable projects having gone through this stage in Australia, at a high level, Project decommissioning would involve the removal of WTG, and all other above-ground infrastructure on-site being dismantled and removed from the Project Area. This includes all the interconnection and substation infrastructure unless the infrastructure is at the time, owned by a network operator, or is required by the network operator for other purposes.

At the end of the 30-year period, key stakeholders including host landholders would be consulted regarding a decommissioning and rehabilitation plan, under the scenario that it is decided not to repower the Project. Prior to the commencement of decommissioning activities, Spark Renewables would prepare a detailed decommissioning plan in consultation with DPHI and local government to guide the implementation of the decommissioning works.

Table 4.4 demonstrates the social impact ranking of impacts relating to the impact on intergenerational equity and sustainability associated with decommissioning and waste management.

Table 4.4 Social Impact Ranking – Intergenerational Equity and Sustainability

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Impact on future generations relating to wind farm decommissioning and disposal of infrastructure	Environmental group	Decommissioning	Possible	Minor	**Medium**	**Low**
	Broader community		Possible	Minor	**Medium**	**Low**

4.2.5 Increased Traffic Disruption and Decreased Road Safety

Potential impacts of the Project on **local road networks and subsequent disruption to road user travel time and way of life** were not of high concern to stakeholders consulted (average rating of 2.8 out of 7).

Furthermore, an attendee at the Community pop-up noted that there are existing traffic issues in the area associated with the existing EnergyConnect Buronga workers accommodation camp. It is important to note, that it is not expected that the Buronga workers accommodation camp will be operational when the Project commences construction, therefore reducing the likelihood of cumulative traffic impacts along Arumpo Road. The inclusion of a TWA facility to provide accommodation for the Project's construction workforce, would also reduce traffic congestion during construction, with fewer light vehicles travelling to the site daily. To further reduce the number of light vehicles, it is recommended a courtesy bus run from the TWA facility to the townships of Buronga and Gol Gol on a regular basis to reduce the need for workers to utilise their own vehicles.

It is anticipated that construction traffic will travel along the Sturt Highway through the townships of Gol Gol and Buronga, before turning onto Silver City Highway followed by Arumpo Road where the designated site access is proposed. To facilitate these movements, offsite road works are proposed at the Sturt Highway roundabout at the intersection of Carey Street, Euston, at the Sturt Highway roundabout onto Silver City Highway, Buronga and at the intersection of the Silver City Highway and Arumpo Road.

A Traffic and Transport Impact Assessment (TTIA) (Access Traffic Consulting, 2024) has identified that the anticipated increase in traffic associated with the Project will have a manageable impact on the traffic operation of the surrounding network. Furthermore, a high level road safety assessment undertaken has identified that there is a medium/ high risk of the Project leading to an increase in vehicle movements, and therefore, vehicle conflicts, at the intersection of Silver City Highway and Arumpo Road. It was recommended that upgrade works are undertaken on the south-eastern Silver City Highway approach to the intersection to mitigate this risk.

Measures to be implemented to further reduce impacts to local road networks include minor works along the road networks, provision of upgrade works to select road locations along the Local Transport Route (i.e. Silver City Highway / Arumpo Road intersection), pre and post dilapidation inspections to document current road conditions, and ongoing consultation with relevant road authorities.

Table 4.5 demonstrates the social impact ranking of traffic and road impacts as a result of the Project's construction and operation.

Table 4.5 Social Impact Ranking – Way of Life

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Construction-related traffic may result in deterioration of road conditions and increase travel times	Road users including Gol Gol and Buronga (given the Local Transport Route traverses these localities)	Construction	Possible	Moderate	**Medium**	**Low**
	Residents along Local Transport Route		Possible	Moderate	**Medium**	**Low**

4.2.6 Public Safety

There is the perception that the Project has the potential to impact public safety, in relation to road safety, aircraft and aviation movements and access to the site to respond to fires. This was also raised as a concern during engagement.

When prompted, potential decreases in safety of local road users due to an increase in heavy vehicle traffic and deterioration of road networks during the construction period was considered of moderate concern.

Despite a stakeholder raising impacts to aviation in the scoping phase of the Project, potential **risks for aircraft** as a result of the **height and quantity of turbines** were not raised in the second round of engagement, with the small number of stakeholders who completed the online survey having little concern for potential aviation impacts.

The Aviation Impact Assessment (AIA) (Aviation Projects, 2024) has outlined that there will need to be some adjustments to aviation procedures and air routes, but these changes do not pose significant risks to nearby aerodromes, aviation navigation facilities, or radar installations.

Stakeholders involved in engagement expressed concerns that the Project could result in an increased fire risk due to belief that Project infrastructure may reduce access to the site for emergency services to respond to fires. The Project Area is classified as Bushfire Prone Land and in order to mitigate fire risks, Asset Protection Zones (APZs) will be established around key infrastructure. Additionally, the Project will maintain at least one 100,000-litre non-combustible water tank for firefighting purposes. Spark Renewables will also develop and implement a Bush Fire Emergency Management and Operations Plan in consultation with the local Rural Fire Service.

A Preliminary Hazard Assessment for the Project conducted by Riskon Engineering (2024) concludes that the risks associated with fire, explosion and toxicity at the Project Boundary do not exceed acceptable risk criteria. Therefore, the Project is considered only potentially hazardous and is permissible within the current land zoning. The study indicates that the lithium-ion phosphate (LFP) batteries used in the Project are considered to be one of the safest battery chemistries within the industry. Thus, the study concludes that the fire risk associated with the BESS is minimal and manageable with proposed safety measures in place.

A Bush Fire Emergency Management and Operations Plan will be developed and implemented in consultation with the local Rural Fire Service. Additionally, a team of dedicated on-site staff will be present and emergency response procedures will be put in place during operations to respond to any emergencies.

Table 4.6 outlines the social impact ranking associated with public safety during construction and operation of the Project.

Table 4.6 Social Impact Ranking – Public Safety

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Potential decrease in safety of local road users due to increase in heavy vehicle traffic during construction	Road users including Gol Gol and Buronga residents (given Local Transport Route traverses these localities)	Construction	Possible	Moderate	**Medium**	**Low**
Safety risks for aircraft due to height of turbines	Local pilots and aerodrome management	Construction and operation	Likely (to affect particular flight paths)	Minor	**Medium**	**Low**
Concern for public safety due to a perception there will be reduced access for emergency responders to respond to fires	Broader community	Construction and operation	Very unlikely	Minimal	**Low**	**Low**
	RFS and SES		Unlikely	Minor	**Low**	**Low**

4.3 Livelihoods

Livelihood impacts refer to the Project's effect on people's capacity to sustain themselves through employment or business activities, and the economic contribution that a project may make to local communities and the broader region.

4.3.1 Local Employment, Procurement and Training

The potential positive impact the Project would afford in terms of **local employment and procurement** was welcomed by a number of stakeholders interviewed and broader community members at the Community pop up forums. Despite identifying this, some community stakeholders expressed the need to focus on local employment where possible, given concerns regarding expected high rates of Fly-In Fly-Out (FIFO) employees.

> *Employee as many locals as possible – Broader community*
>
> *Little long-term benefits for locals, it will primarily be FIFO model – Broader community*
>
> *A few locals might be hired, just a select few – Broader community*
>
> *Employing local employees/contractors rather than fly in fly out workers such as Secure Energy have done – Broader community*

To enhance opportunities for local contractors, one stakeholder raised the need for advertisement of job opportunities in local media i.e. the Sunraysia Daily, to ensure local contractors and suppliers were aware of opportunities associated with the construction of the Project. Furthermore, the importance of clearly identifying the types of skills and qualifications that are required for the Project's construction and operational phase was also noted, to increase opportunities for local employment and training.

> *Job ads in the Sunraysia Daily newspaper – Broader community*
>
> *Bringing in technical specialist as part of the wind industry, will allow locals to upskill their skills and have the opportunity to have a work career that can take them around the world – Broader community*

Importantly, some stakeholders reflected on experiences associated with Project EnergyConnect, and difficulties faced by local contractors in securing employment at the site due to the nature of rostering that appeared to cater to FIFO employees, rather than local employees (i.e. 7-day rotating rosters). Community stakeholders wanted to see Spark Renewables consider ways this could be avoided for the Project.

It is understood that the Project will have a peak construction workforce of 400 FTE employees. Almost 75% of jobs in renewable energy over the next 15 years are likely to be available for labourers, trades and technicians and professionals; with electricians, electrical trade assistants, mechanical trades and technicians, finance, business, legal and planning professions and administrative staff generating the largest number of jobs (Rutovitz, Briggs, Dominish, & Nagrath, 2020).

Table 4.7 examines the potential for the Project to utilise a locally based workforce, with local employment most likely to be sourced from either:

- currently employed people within the region with relevant skills i.e. those currently employed in the construction industry or those employed as labourers, technicians or trades workers, or
- people who are currently unemployed.

It is apparent that unemployment rates are low in the LGAs of Wentworth and Mildura, at 4.9% and 3.9% respectively, with around 3,282 people across both LGAs looking for work (SALM, 2024). The number of employable persons across the LGAs further decreases when considering occupations of relevance and those that are currently within the labour force working in the construction industry, or related industries. Reference was made by some stakeholders that local employment and procurement, should also be undertaken so as not to adversely impact other industries.

Given the above, there appears a limited capacity to employ people locally for the Project, with a conservative estimate of 10% assumed. Given this lower percentage, there is likely to be a large proportion of construction workers that will be required to temporarily relocate to the area; and it is anticipated that the majority of this workforce would likely be accommodated in a TWA facility on the Project site (explored further in **Section 4.4.1**).

In relation to Aboriginal employment, Spark Renewables will develop an Industry and Aboriginal Participation Plan (IAPP) to maximise Indigenous employment on the Project.

Additionally, a potential positive impact of the Project is **education and training** opportunities. This was also noted by some stakeholders during consultation. In this regard, it was suggested that Spark Renewables should collaborate with local educational institutions e.g. schools, TAFE, around awareness and education of renewable energy and where possible to facilitate training and skill development through student placements and apprenticeships.

Furthermore, it was noted that Spark Renewables should strive to ensure local employment and procurement positive impacts are realised through appropriate upskilling and training of local residents and through transparent and accessible procurement processes. It was also suggested that proponents in the region should seek to work together, with local employment, training and education providers to support skills and capacity development across the social locality, so that genuine community benefits can be realised.

Table 4.7 Potential Project Workforce

Locality	Unemployment rate[5]	Unemployed people	No. of people in construction industry	No. of unemployed people in construction industry[6]	No. of people in relevant occupations[7]	No. of unemployed people in relevant occupation[8]	No. people employed as electricians	Number of unemployed electricians	No. of employed people with relevant skills	No. of unemployed people with relevant skills[9]
Wentworth LGA	4.9%	365	265	12	853	42	54	3	656	32
Mildura LGA	3.9%	2,222	1,949	76	7,004	343	271	11	4,305	168
	Total	**2,587**	**2,214**	**88**	**7,857**	**385**	**325**	**14**	**4,961**	**200**

Source: SALM, 2024, Table builder, 2021.

[5] As at September 2023 (SALM, 2024).
[6] This is an estimate calculated by applying the unemployment rate to the number of people in the construction industry.
[7] Relevant occupations has been defined as labourers, and technicians and trade workers as defined by Clean Energy Council.
[8] This is an estimate calculated by applying the unemployment rate to the number of people with relevant occupations.
[9] Relevant skills have been defined as those with qualifications in the engineering and related technologies, and architecture and building fields of study.

It is anticipated that the Project would have an economic benefit to the area **through increased spending in local communities associated with the presence of the construction workforce**. The Economic Impact Assessment (EIA) has identified that an estimated $4.6 million in wages (2023 dollars) would likely be directed to local and regional businesses and service providers during the construction period, supporting approximately 38 FTE employees in the service sector during this period. Furthermore, it is anticipated that the development of the TWA facility would also provide opportunities for local businesses to service the facility, in turn increasing economic capital for regional businesses and communities.

To further enhance the economic benefit to the region, Spark Renewables could investigate the possibility of a 'buy local' scheme, to foster connections and increase opportunities for small businesses in the locality to service the Project and the TWA facility.

Table 4.8 demonstrates the positive social impact rankings associated with local employment and procurement and economic spend during construction and operation of the Project.

Table 4.8 Social Impact Ranking – Employment and Procurement

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Increased local employment associated with construction phase	Broader community	Construction	Possible	Moderate	**Medium (+ve)**	**High (+ve)**
	Local businesses and service providers		Likely	Moderate	**High (+ve)**	**High (+ve)**
Increased local procurement and economic spend in local communities and townships due to the influx of construction workers	Local Businesses and Service providers	Construction	Likely	Moderate	**High (+ve)**	**High (+ve)**
Increase in human capital for local communities (expertise) due to the provision of training and skills development resulting in labour pool growth	Broader Community	Construction and operation	Possible	Minor	**Medium (+ve)**	**High (+ve)**
	Local Businesses and Service providers		Possible	Minor	**Medium (+ve)**	**High (+ve)**

4.3.2 Decline in Property Value

Broader community members raised concerns relating to the potential for the Project to impact property values due to proximity, in turn potentially impacting on their social amenity and way of life.

It is understood that concerns relating to property value are a concern for neighbouring landholders to renewable energy projects (Office of the Australian Energy and Wind Farm Commissioner, 2020). A recent report by the NSW Agriculture Commissioner however, concluded that there is very little reliable evidence of large-scale renewable energy developments influencing adjacent land values (NSW Agriculture Commissioner, 2022). As there are no non-associated dwellings within 10 km of the closest WTG, it is unlikely that the Project will have a significant impact on property prices within the social locality.

Table 4.9 Social Impact Ranking – Property Value

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Reduced property values due to the proximity of the Project	Broader community	Operation	Very unlikely	Minimal	**Low**	**Low**

4.4 Accessibility

The SIA Guideline (DPE, 2023) defines accessibility as the impacts of the Project on how people access and use infrastructure, services and facilities, and any changes to way of life, including how people live, get around, work, recreate and interact.

4.4.1 Increase Pressure on Housing and Accommodation

The **increase in pressure on housing and accommodation** is a potential impact of the Project though when prompted, respondents to the online survey did not raise this as a significant concern. For the purposes of the SIA, it is assumed that:

- Average construction workforce numbers would total around 225 people.
- Peak construction workforce numbers would total approximately 400 people for one month of the construction period.
- The onsite accommodation facility would have the capacity to house approximately 300 Project workers.

As discussed in **Section 4.3.1**, it is unlikely that a significant proportion of the workforce will be able to be sourced locally given current labour participation constraints. Therefore, it is highly likely that a large proportion of the construction workforce would need to be sourced from outside of the social locality, and therefore require accommodation.

Further to the outcomes of engagement, below is an assessment on baseline housing and accommodation in the region to inform Project workforce planning, noting it does not account for changes in construction workforce capabilities due to the uncertain nature of start and finish times of other concurrent major developments.

This baseline assessment does not consider the TWA and aims to justify the need to include the TWA as a project refinement in response to the assessed capacity of accommodation services in the region. The subsequent assessment that considers the TWA assumes the onsite accommodation facility will house up to 300 employees at any given time.

4.4.1.1 Baseline Assessment

The following workforce scenarios have been assessed:

- **Scenario 1** – assumes 10% of the Project workforce will be sourced locally, and a total of 90% of the workforce would need to migrate to the area for the construction period, and thus require accommodation within the region. This is considered the most likely, and highest impact scenario, with between 25–40 FTE local jobs sourced from the area during construction, and approximately 200–360 workers relocating temporarily to the area.
- **Scenario 2** – assumes 25% of the Project workforce will be sourced locally, and a total of 75% of the workforce will migrate to the area for the construction period. This scenario is the aspirational target for the Project and equates to between 56–100 workers being sourced locally and approximately 170–300 workers relocating temporarily to the area, (for average FTE and peak workforce numbers).

Population change estimates are provided at a LGA level only given there is insufficient data available to accurately model how the incoming workforce (both construction and operational) will be distributed across specific communities within each LGA. It should also be noted that the peak construction workforce number (n=400) has been utilised in calculations in **Table 4.10** to represent the highest/worst case impact scenario. The scenarios outlined below represent both 100% of the workforce residing in each LGA entirely in addition to the workforce being split across the two LGAs. The scenarios whereby the workforce resides in the one LGA is unlikely to occur, with the workforce likely to be distributed across the LGAs.

Table 4.10 Project Construction Workforce Change by LGA

Scenario	Total population increase due to workforce influx	Population of LGAs: Mildura (56,972), Wentworth (7,453)		
		% of workforce into each LGA	% increase in Mildura LGA	% increase in Wentworth LGA
Scenario 1a (90% migration into LGAs)	360	100%	0.6%	4.8%
Scenario 1b (90% migration into LGAs)	360	50%	0.3%	2.4%
Scenario 2a (75% migration into LGAs)	300	100%	0.5%	4.0%
Scenario 2b (75% migration into LGAs)	300	50%	0.3%	2.0%

Burdge (2004) suggests that any increase or decrease in population greater than 5% may be considered a significant population impact. In the highest impact scenario in which there is 90% migration into Wentworth LGA alone, this would result in a population change of 4.8%, though as previously noted, it is unlikely that the whole of incoming construction workforces will be accommodated in existing accommodation in one LGA.

Analysis of Accommodation Options

For the purposes of assessing accommodation availability, we have considered the following accommodation options as relevant for the potential housing of the surplus Project construction workforce not accommodated within the on-site TWA facility:

- Short-term accommodation, including Airbnb, hotel and motel accommodation.
- Rental accommodation.
- Short-term Accommodation options

This assessment considers accommodation availability based on:

1. number of rooms available
2. occupancy rates across the social locality
3. the impact of cumulative project development on short-term accommodation demand.

An analysis of short-term accommodation data in the defined social locality has indicated that there are approximately 53 short term accommodation providers operating in the area, with an estimated 1,389 rooms available throughout the year (refer to **Table 4.11**).

Table 4.11 Short Term Accommodation Data

Locality	Number of providers	Total number of rooms	Cabins	Total supply (rooms)
Mildura	37	1,043	82	1,125
Red Cliffs	2	18	17	35
Wentworth	8	163	0	163
Buronga	4	19	25	44
Gol Gol	2	4	18	22
Total	**53**	**1,247**	**142**	**1,389**

Source: STR; TripAdvisor; Ethos Urban.

Survey responses received by those in the accommodation sector suggested that there is a diverse offering of accommodation services in the region that cater to a broad range of people including:

- Corporate contract workers and FIFO workers.
- Holiday makers and tourists.
- Weekend visitors attending functions and events.
- Families.
- Travelers (e.g., between Sydney and Adelaide).

When asked if they would like to be involved in providing housing/accommodation services for the proposed Project construction workforce, all accommodation providers consulted outlined that they would be interested in providing accommodation for the Project, with large accommodation providers outlining general capacity to deliver if given sufficient notice. For example, one respondent mentioned having 28 cabins in one park and 42 cabins/rooms in another, while another reported managing 30 units in one motel and 37 rooms plus 17 apartments in another.

When asked to specify the ways they would like to be involved in providing housing or services to the proposed Project construction workforce, four accommodation providers indicated they wanted to accommodate the workforce in their existing accommodation. One respondent noted they would consider building, retrofitting, or adapting new accommodation to house this workforce.

Several accommodation providers expressed willingness to allocate a portion of their rooms to the Project workforce while maintaining availability for their regular customers. For instance, two respondents outlined that they would be able to accommodate approximately 40–50% of their current supply, suggesting some softness in capacity.

Occupancy rates varied among providers, with some reporting high occupancy (one respondent mentioned 85–90% in March) and others noting fluctuations (50–100% occupancy). Seasonal trends were observed, with higher demand during warmer months, school holidays, and weekends.

Two providers expressed interest in expanding their businesses or refurbishing facilities to include more amenities like cooking facilities. However, others had no plans for expansion in the next five years. One accommodation provider expressed scepticism about the availability of accommodation in the area, suggesting caravan parks as an alternative option for housing the workforce.

In conclusion, while there is general willingness among local accommodation providers to support the Project workforce, with some existing capacity noted; there is a need to balance workforce demand with existing clientele. The responses suggest that a coordinated approach, with adequate advance planning and potentially some investment in new or upgraded facilities, is achievable to meet the accommodation needs of the project workforce while minimising disruption to the local accommodation market.

Rental Accommodation

As identified in **Table 4.12**, there were approximately 197 rentals available in August 2024, across the LGAs of Wentworth and Mildura. It has been assumed that not all homes may be available to be utilised by the Project, given competition from other projects and existing pressures on the housing market. Consequently, for the purpose of this assessment the Project should aim to take up no more than 2.5% of available properties. It is therefore predicted that 5 rental properties may be available to the Project to house the workforce, suggesting there is limited capacity to house the surplus construction workforce in rental accommodation in the locality.

Table 4.12 Rental Accommodation Availability

Location	Number of private dwellings	Rental stock availability[10]	Stock available to the Project (up to 2.5%[11])	Vacancy rate[12]
Wentworth LGA	3,437	18	0	0.45%
Mildura LGA	15,694	179	4	0.65%
Total	**19,131**	**197**	**4**	**-**

Source: (ABS, 2021; realestateinvestar, 2024).

As identified in **Section 3.2.2**, there are a number of proposed projects within the social locality. Should the construction phases of these projects occur concurrently, impacts associated with the incoming construction workforces, including the need for short term accommodation, could be exacerbated, resulting in a temporary cumulative impact effect.

4.4.1.2 Assessment Including TWA Facility

To reduce demand on accommodation associated with the Project, Spark Renewables is proposing to develop an on-site TWA facility within the Project Area, with the capacity to house up to 300 workforce personnel. This leaves a need for accommodation for approximately 60 workers, given that it has been assumed that around 40 workers (10%) are assumed to currently live locally. It has also been assumed that staff required to operate and service the TWA facility will also reside within the social locality.

The establishment of a TWA for non-resident workers addresses a number of potential negative social impacts such as:

- removing competition for existing housing in the region
- increasing worker safety by reducing commute times and potential for worker fatigue
- reducing impacts on social cohesion and social amenity across existing communities
- reducing strain on other local services / facilities.

To further reduce impacts of the Project on service delivery, the TWA facility will include a mess area (including stored, kitchen and dining areas), laundry facilities, recreation areas and a medical centre or first aid room staffed by personnel with suitable first aid/medical training.

Table 4.13 outlines the impact rankings related to the temporary increase in population and subsequent impact on access to housing and accommodation. With the introduction of the TWA as a mitigation strategy, the high social impact ranking will be significantly reduced; while at the same time providing some positive impacts for local accommodation providers (refer to **Table 5.1** for residual social impact ranking).

[10] Rental stock available in August 2024.
[11] Assuming for the purpose of this assessment that the Project should aim to take up no more than 2.5% of available properties.
[12] Rental vacancy rate as of August 2024.

Table 4.13 Social Impact Ranking – Access to Housing and Accommodation

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Temporary increase in population, increasing pressure on housing and accommodation	Broader community	Construction	Almost certain	Moderate	**High**	**Low**
	Tourism industry		Almost certain	Moderate	**High**	**Medium**

4.4.2 Increased Pressure on Health Services

The impact on **health services** is a potential impact of the Project and was also noted by several community stakeholders, given the current lack of provision of these services.

Very limited services at all for the Gol Gol/Buronga area – Broader community

As identified in **Section 3.3.7**, health service provision across the locality is varied, however such services demonstrate limited capacity to service further population increase, and that should health services be required that the incoming workforce may rely on health service facilities within Mildura, rather than those in Wentworth.

Approximately 5.5% of labourers and technicians experience a workplace related injury each year in Australia (Safe Work Australia, 2023). In applying this statistic to the Project, in a worst-case scenario (where all of the reported injuries required medical attention), approximately 12 people per annum (based on an average workforce of 225) over the 3-year construction period may need to access a local GP service and/or attend a hospital Emergency Department or 22 people in the case of peak construction numbers. While a small proportion of this workforce may be local and thus already have an established GP relationship in place, it does not consider the potential cumulative effects to allied health services that may be required to provide rehabilitation support post injury.

Constraints on health services are more likely to be experienced at the GP level. On average 79.2% of Australian adults between the ages of 25 to 54 years attended a GP in 2022–2023 (ABS, 2023). Utilising this average, this would equate to approximately 178 worker visits (for the average workforce) or 317 worker visits (peak workforce) per year. As many of the conditions requiring presentation to a GP are preventable and/or can be assisted with active health promotion, such as hypertension, mental health, and asthma (NPS Medicine Wise, 2022), consideration of a having a visiting GP/nurse or medic at the TWA facility would further mitigate impacts on the demand for GP services. This approach has been adopted in TWA facilities developed to house construction workforces in other States, with additional services also provided.

Existing research suggests that non-resident workforces tend to access GPs at a similar rate to the general population, with access to emergency departments experienced at a higher rate than the general population. Furthermore, this may also result in more complex caseloads, as local GPs are less familiar with non-residents and often experience limited sharing of patient records (Australian Healthcare and Hospitals Association, 2019).

As the locality currently has limited capacity in health service provision (as outlined in **Section 3.3.7**), particularly in relation to GP access, it is recommended Spark Renewables include the provision of medical services, including telehealth services, within the TWA to reduce demand on these services within the social locality.

Table 4.14 outlines the social impact rankings related to the impact of the Project's construction workforce on access to health services.

Table 4.14 Social Impact Ranking – Access to Health Services

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Increased strain on local health and emergency services due to temporary population change associated with construction workforce	Broader community	Construction	Possible	Moderate	**Medium**	**Low**
	Emergency service		Possible	Moderate	**Medium**	**Low**

4.4.3 Increased Pressure on Existing Utilities

The development of the TWA facility may also **increase pressure on existing utilities**. This could include usage of power, water and waste services and may result in a cumulative impact should multiple projects be developed concurrently.

To manage this impact, the TWA facility will incorporate an onsite sewerage treatment plant to be utilised on site during construction and operation, with any wastes associated with sewerage treatment not suitable for reuse on-site will be disposed of off-site to a suitably licensed facility (refer to **Section 1.1.1**). Electricity for the TWA facility may be sourced from the local distribution network (where available), on site using solar panels/batteries and diesel generation where access to the grid is unavailable. As identified in **Section 4.2.3**, water supply for the Project is proposed to be sourced via Wentworth Shire Council commercial water supply and from commercial suppliers in the region and transported to the Project Area via tanker truck. It is therefore important for Spark Renewables to continue to engage with Wentworth Shire Council regarding sewerage and water needs relating to the Project, to ensure that cumulative needs do not exceed the capacity of local systems and that local water security is maintained.

A small number of stakeholders recognised cheaper electricity prices as a key positive impact of the Project. Surveys of local communities in other parts of Australia have identified the need for greater information provision in relation to how renewable energy, including wind farm projects, are able to contribute to energy cost reductions at a local and regional level.

Table 4.15 outlines the social impact rankings related to the impact of the Project's construction workforce on access to existing utilities.

Table 4.15 Social Impact Ranking – Access to Existing Utilities

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Increased strain on community utilities, including water supply, waste management services and electricity associated with the development of the TWA facility	Broader Community	Construction	Possible	Minor	**Medium**	**Low**
	Local council		Possible	Minor	**Medium**	**Low**

4.5 Community

Large-scale transitions, the introduction of new projects in a social locality, changes to the built and natural environment, and the subsequent influx of transient construction workforces, can influence levels of social cohesion within a community as well as alter a community's composition and stability (NSW DPE, 2023). This is particularly relevant when considering the cumulative impact of population influx, albeit temporary, because of incoming workforces from multiple project development in an area.

As previously noted, there is expected to be a temporary population increase of 360 due to the influx of construction workers associated with the Project over 36 months, based on the scenarios assessed. This influx has the potential to **decrease community cohesion** and **result in a change in the composition of the community**. Furthermore, the cumulative impact of multiple concurrent renewable energy projects in the region may further contribute to reduced levels of social cohesion given the large proportion of workforce temporarily coming into the area. Spark Renewables have committed to consultation with proximal project proponents to coordinate workforces where possible and minimise community cohesion impacts.

Recent research has demonstrated that the strongest predictor of acceptance of wind farms were affective responses, with how a person felt about a project highly influencing all other aspects of social licence (Cousse, 2021; Scovell, McCrea, Walton & Poruschi, 2024). Feelings such as dislike, anxiety, and frustration, can produce protective approaches in which people and things that aren't part of the 'familiar' are excluded based on their difference (Pretty, Bishop, Fisher & Sonn, 2007). Communities may then reinforce who is 'part' of the 'real' community and who 'doesn't belong' leading to a sense of exclusion for those depicted as the 'others' (Pretty, Bishop, Fisher & Sonn, 2007; Fisher & Sonn, 2007). This can include project proponents who are not considered to be part of the local community.

Conversely, there is the potential for more permanent migration into the region if construction timeframes are consecutive rather than concurrent.

The likelihood of the workforce to be predominantly male also has gendered implications for communities, and temporary changes to the composition of the community. The influx of a new largely male population may have negative impacts on the safety or perceived safety of female, or older, community members. The largely male (and young) workforce may also be likely to demonstrate higher rates of alcohol consumption and therefore increase the likelihood of alcohol-fuelled violence and a decrease in public safety (Ruddell & Ortiz, 2015). Other issues in relation to diversity of workforce and social inclusion were also noted during consultation by one stakeholder.

There are a number of mechanisms that may be implemented to better address social impacts relating to sense of place and community, thus lessening the perception of the Project as an external 'other'.
This includes providing transparent and timely information about the Project that acknowledges the stages of psychological response to place change, focusing on place-based community benefits to be generated as a result of the Project, and facilitating space for communities and Project representatives to come together e.g. participation in local sporting competitions and community events.

Further, one stakeholder raised concerns around the distributive inequity of Project benefits and impacts, highlighting the limited benefits for the local community, outside of the positive benefits experienced by host landholders.

> *Benefits to select landowners, short term benefits for community and no positive impact for local community with electricity cost – Broader community*

A **community benefit fund** was recognised as a benefit of having the Project in the local area by some stakeholders consulted, with some suggesting that the fund could lead to improved community facilities for the local community. Some stakeholders reflected that the Gol Gol Immersion Centre may benefit from increased funding to further enhance the educational opportunities it affords to school aged children, particularly in relation to environmental education and rehabilitation. However, others suggested that benefit sharing was tokenistic and did not negate the negative impacts of the Project.

> *Local sponsorship to community clubs would help win community over – Broader community*

> *A local swimming pool in Buronga or Gol Gol – Broader community*

> *We don't need token benefit sharing programs to negate the negative impact on our lives – Broader community*

Spark Renewables are currently in the process of developing a Community Benefit Sharing Fund (CBSF). Whilst specific initiatives to be funded are not yet identified, it is understood that the total value of the fund would be $1,050 per MW per annum ($422,100 p/a) for the Project life, indexed to CPI.
The implementation of the CBSF is further discussed in **Section 6.2.2**.

Table 4.16 Social Impact Ranking – Community Cohesion and Composition

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Decrease in community cohesion and change to composition of the community due to temporary influx of the construction workforce	Broader community	Construction	Possible	Minor	**Medium**	**Low**

4.6 Health and Wellbeing

Health and wellbeing impacts include impacts to both physical and mental health and may include psychological stress resulting from uncertainty, financial and/or other pressures, as well as anticipated changes to individual and public health.

While access to health services has been discussed in **Section 4.4.2**, impacts to health and wellbeing, particularly increases in stress and anxiety associated with the uncertainty of the Project, are a common social impact experienced by communities about to experience change, and which can be exacerbated for those likely to be most impacted by a Project. Impacts on mental health and wellbeing for nearby residents is also linked to disruption or threat to place, and this can lead to adverse health and wellbeing, psychological trauma, and reduced social cohesion (Devine-Wright, 2009; Breth-Peterson, Garay, Clancy, Dickson & Angelo, 2023). Research also suggests that such experience, is compounded in agricultural, rural and regional landscapes, and given the culture and emotional attachment that manifests around the natural environment, threats of altering this landscape may result in greater anxiety among nearby residents or those who enjoy the landscape (Marshall, Adger, Benham et al., 2019; Benham, 2016; McManus, Albrecht & Graham, 2014).

It has been noted that the closest non-associated dwelling is located approximately 10 km from the nearest WTG; and consequently such impacts may be less significant in the context of the Project.
Effective communication and information provision relating to the Project may further reduce the extent to which such impacts may be felt.

Health and wellbeing of the workforce residing within the TWA facility should also be considered.
Given that the facility will be relatively isolated on-site, it is recommended that such issues be addressed in facility design and the provision of key services to meet workforce needs; including appropriate access to health services and provision of recreational facilities such as a gymnasium and BBQ areas. Furthermore, opportunities should be explored as to how the workforce may be encouraged to interact positively with the local community through participation in key community groups, organisations and events, during their time in the locality.

Table 4.17 Social Impact Ranking – Health and Wellbeing

Social Impact	Affected Parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation)
Anxiety/ stress associated with the uncertainty of the assessment process, construction, operation and decommissioning.	Broader community	Construction	Unlikely	Minor	**Low**	**Low**
Reduced workforce health and wellbeing due to potential isolation at the on-site TWA facility and associated lifestyle impacts.	Project workforce	Construction	Possible	Minor	**Medium**	**Low**

4.7 Culture

Impacts to Aboriginal Cultural Heritage values, including artefacts, cultural sites, and connection to Country is a potential impact of the Project and was raised by a small number of community members who attended the Community pop ups, with particular interest in understanding the outcomes of cultural heritage surveys and the extent of First Nations engagement that has been undertaken as a part of the assessment process.

Austral Archaeology has prepared a Historic Heritage Impact Assessment (HHIA) and undertaken an Aboriginal Cultural Heritage Assessment (ACHA) for the Project. The ACHA, which has involved extensive background research and two field surveys, identified a total of 29 Aboriginal cultural heritage sites, including scarred trees, artefact sites, and artefacts within the study area. Of these, 21 sites have been avoided through design and eight assessed as being of low cultural significance are located within the Disturbance Footprint and would be impacted by construction activities. Community collection of four artefacts is proposed to preserve these items and minimise impacts.

In consultation with Registered Aboriginal Parties (RAPs) significant efforts have been made to avoid 21 culturally significant sites. Where impacts cannot be avoided, Spark Renewables will develop an Aboriginal Cultural Heritage Management Plan (ACHMP) to manage and mitigate impacts on sites of significance. Key measures include avoiding specific sites through the design of the Project, conducting archaeological surface salvage for affected artefact sites, and reburial of collected Aboriginal objects at a designated location. In the case of unexpected finds during construction, work must cease immediately, with protocols in place for notifying Heritage NSW and the NSW Police if human remains are found. Continuous consultation with Aboriginal stakeholders is mandated to ensure ongoing involvement and compliance. Finally, the report has been distributed as a part of the ACHA process.

In relation to historic heritage, a Historic Heritage Impact Assessment (HHIA) prepared for the Project stated that the site is not listed on any NSW heritage registers and is not considered to have any built or archaeological heritage value. The site has historically been used primarily for pastoral grazing since the early 1800s, and lacks significant European historical or archaeological materials. Any artefacts uncovered during construction are expected to be minor, such as discarded farming implements and landfill, which hold little historical value. Consequently, the proposed works do not pose any heritage concerns. However, should any unexpected archaeological relics be discovered, construction should halt immediately, and Heritage NSW would be notified for further assessment. Additionally, if the development plans change substantially, a reassessment of the heritage impact is recommended.

Table 4.18 Social Impact Ranking – Cultural and Historic Heritage

Social Impact	Affected parties	Phase	Likelihood	Magnitude	Social Impact Ranking (pre-mitigation)	Social Impact Ranking (post-mitigation
Impacts to Aboriginal Cultural Heritage values, including artefacts, cultural sites, and connection to Country	Aboriginal Stakeholders	Construction Operation	Almost certain (for 8 identified sites)	Moderate	High	Medium
Impacts to Historic Cultural Heritage values	Broader community	Construction Operation	Unlikely	Minimal	Low	Low

4.8 Decision-making Systems

Impacts on decision-making systems includes the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy, and grievance mechanisms (IAIA, 2015). It also refers to the degree to which people feel they have access to sufficient information and opportunity to make informed decisions about changes to their properties and communities.

During engagement, a number of stakeholders sought to better understand the **justification for proposed Project development**, particularly the choice of wind rather than solar technology for the project; with some community members commenting on the higher level of acceptance of solar energy projects, compared to wind. The overall benefit to the planet, was also noted.

> *It will mitigate the effects of global warming everywhere, including where my relatives live – Broader community*

A potential impact of the Project is the distributive equity as a result of the Project location, which some consulted community members raised as a concern, commenting that population in the cities benefit the most from such Project, whilst those residing in the region experience the impacts.

> *Would a solar farm be established in Sydney, I don't think so, so why should we have to have a windfarm near our houses – Broader community*

One stakeholder recognised the importance of ongoing engagement as the Project progresses to ensure continued awareness and knowledge of Project progress. Consequently, it is suggested that Spark Renewables continue to engage with the community and interested stakeholders throughout the assessment and, should the Project be approved, into the construction phase in order to reduce uncertainty. However, the potential for consultation fatigue associated with the high number of proposed projects in the region, must be recognised and considered in future engagement planning.

Table 4.19 Social Impact Ranking – Decision Making Systems

Social Impact	Affected parties	Phase	Likelihood	Magnitude	Social Impact ranking (pre-mitigation)	Social Impact ranking (post-mitigation)
Uncertainty regarding the Project site selection	Broader Community	Planning	Possible	Minimal	**Low**	**Low**
Lack of trust in decision making and engagement systems	All stakeholders	Construction and operation	Possible	Minimal	**Low**	**Low**

5.0 Social Impact Evaluation

The evaluation has been undertaken in line with the Social Impact Significance Matrix and likelihood and magnitude definitions in the SIA Guideline (DPE, 2023) and as outlined in **Section 2.5**, with social impact rankings summarised in **Table 5.1**.

It is important to note that the social impact evaluation process considers a number of factors in addition to the outcomes of technical assessments to reflect the scale of the impact on people (social impacts) as a result of the project; and where relevant considers the extent to which such impacts are perceived as of concern to those consulted.

The social impact evaluation includes project refinements that have been made by Spark Renewables as a result of ongoing discussions with stakeholders and outcomes of technical assessments, and presents a residual social risk ranking that reflects these design changes, mitigation and enhancement measures to be put in place to address social impact identified through the assessment.

Table 5.1 Social Impact Evaluation

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[13]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Suggested Mitigation Measures[14]	Residual Significance
Surroundings	Concern for the loss of valued migratory bird species due to potential for bird strikes	Operations	O	Environmental groups	High	Possible	Moderate	**Medium**	Project design changes have increased distance between WTGs and native vegetation and exclusion zones will be used to avoid known areas of threatened flora and fauna habitat. Continue to proactively engage with relevant community groups to support and protect local environmental values and development of relevant environmental plans. Development of a biodiversity management plan and a Bird and Bat Adaptive Management Plan to protect the local wildlife, particularly migratory birds. Ecosystem credits will be acquired in line with the Biodiversity Assessment Method as part of a biodiversity offset plan to offset the loss of biodiversity from the project. *Ongoing communication around the implementation of mitigation measures to protect biodiversity.*	**Low**
Surroundings	Concern for the loss of valued flora due to land clearing on the Project site	Construction	C	Environmental groups	Medium	Unlikely	Minor	**Low**	Project design changes have increased distance between WTGs and native vegetation and exclusion zones will be used to avoid known areas of threatened flora and fauna habitat. Ecosystem credits will be acquired in line with the Biodiversity Assessment Method as part of a biodiversity offset plan to offset the loss of biodiversity from the project. *Ongoing communication around the implementation of mitigation measures to protect biodiversity.*	**Low**
Surroundings **Way of life**	Changes to rural amenity, due to industrialisation of the landscape, impacting people's sense of place	Project construction and establishment of infrastructure	C&O	Broader community (Gol Gol and Buronga)	Medium	Likely	Minor	**Medium**	Use of a matte white, non-reflective finish for WTGs to minimise glint, use of existing or underground transmission lines where possible, use of a recessive colour palette for ancillary infrastructure to blend into the existing landscape, use of boundary screening. *Inclusion of viewing platform and educational signage along Arumpo Road.*	**Low**
				Users of Arumpo Road e.g. residents, tourists	Medium	Likely	Minor	**Medium**		**Low**
Surroundings **Way of life**	Increase in construction-generated noise that may cause disturbance and annoyance for proximal landholders	Project construction and establishment of infrastructure	C	Proximal landholders	Unknown	Very unlikely	Minimal	**Low**	Implementation of Construction Noise and Vibration Management Plan. *Ongoing communication and transparency of Project information, including construction timing and works required.*	**Low**
Surroundings **Way of life**	Impacts on social amenity due to operational wind turbine noise	Operation	O	Proximal landholders Townships of Gol Gol and Buronga	Medium	Very Unlikely	Minimal	**Low**	Implementation of Operational Noise Management Plan.	**Low**

[13] C= Construction, O= Operation and D= Decommissioning.
[14] This column refers to mitigation measures outlined in technical studies, italicized measures are additional and have been developed to address specific social impacts.

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[13]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Suggested Mitigation Measures[14]	Residual Significance
Surroundings	Construction-related traffic may result in increased noise disturbance	Project construction	C	Broader Community Residents along the Local Transport Route	Medium	Possible	Minimal	**Low**	Implementation of a Traffic Management Plan (TMP), Construction Traffic Management Plan (CTMP), and Driver Code of Conduct for workers. Use of a shuttle bus services for off-site workers where possible. Consultation and notification to residents along the Local Transport Route and other road users. Scheduling heavy vehicle movements and road closures to avoid school peaks. Implementation of a community information and awareness program regarding traffic impacts.	**Low**
Surroundings Community	Change in sense of place due to development of alternate land uses	Project establishment	C & O	Broader community	Unknown	Possible	Minor	**Low**	-	**Low**
Surroundings	Reduced access to water for agricultural and household purposes due to construction activities	Project construction	C	Broader community	Low	Very unlikely	Minimal	**Low**	Implementation of CEMP and OEMP. Implementation of a water sourcing and monitoring strategy to manage potential availability impacts on downstream water users and ensure compliance with legislation relating to water extraction. *Communication of water needs for the Project during the construction phase.*	**Low**
Surroundings	Increased flood risk associated with Project development and potential runoff	Project construction and establishment of infrastructure	C&O	Broader community Emergency providers	Low	Very unlikely	Minimal	**Low**	Implementation of CEMP and OEMP. Implementation of Flood emergency management measures as per Appendix 5 of the EIS.	**Low**
Surroundings	Impact on future generations relating to wind farm decommissioning and disposal of infrastructure	Decommissioning	D	Environmental groups Broader Community Local Council	Medium	Possible	Minor	**Medium**	Preparation and implementation of a DRP in consultation with Wentworth Shire Council.	**Low**

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[13]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Suggested Mitigation Measures[14]	Residual Significance
Surroundings Accessibility	Construction-related traffic may result in deterioration of road conditions and increase travel times	On-site TWA facility Project construction	C	Road users including GoI Gol and Buronga (given the Local Transport Route traverses these localities) Residents along the Local Transport Route (i.e. Euston to Project site) Local Council TfNSW	Low	Possible	Moderate	**Medium**	Implementation of a TMP, CTMP, and Driver Code of Conduct for workers. Use of a shuttle bus services for off-site workers where possible. Consultation and notification to residents along the Local Transport Route and other road users. Scheduling heavy vehicle movements and road closures to avoid school peaks. Implementation of a community information and awareness program regarding traffic impacts. *Implementation of a community complaints hotline to allow community members to directly report dangerous driver behaviour.* *Collaboration with Wentworth Shire Council to investigate how community benefit sharing fund could be utilised for improvements to local road networks.*	**Low**
Surroundings	Potential decrease in safety of local road users due to increase in heavy vehicle traffic during construction	Construction	C	Road users including GoI Gol and Buronga residents (given Local Transport Route traverses these localities)	Low	Possible	Moderate	**Medium**	Implementation of a TMP, CTMP, and Driver Code of Conduct for workers. Use of a shuttle bus services for off-site workers where possible. Consultation and notification to residents along the Local Transport Route and other road users. Scheduling heavy vehicle movements and road closures to avoid school peaks. Implementation of a community information and awareness program regarding traffic impacts. *Implementation of a community complaints hotline to allow community members to directly report dangerous driver behaviour.*	**Low**
Surroundings Safety, Health & Wellbeing	Safety risks for aircraft due to height of turbines	Construction of turbines	C & O	Local pilots and aerodrome management	Low	Likely (to affect particular flight paths)	Minor	**Medium**	Notification of the WTG coordinates and elevation to the relevant stakeholders. Consultation with regional aircraft operators, private aircraft users, and emergency services. Painting of WTGs white.	**Low**
Surroundings	Concern for public safety due to a perception there will be reduced access for emergency responders to respond to fires	Project establishment	C & O	Broader community	Low	Very unlikely	Minimal	**Low**	Development of a Bush Fire Emergency Management and Operations Plan in consultation with the local Rural Fire Service.	**Low**
				RFS and SES	Unknown	Unlikely	Minor	**Low**	Staff training on emergency response procedures and provision of firefighting equipment for personnel.	**Low**
Livelihoods	Reduced property values due to the proximity of the Project	Project establishment	O	Broader community	Medium	Very unlikely	Minimal	**Low**	*Active community engagement throughout the lifecycle of the Project, providing clear information of next steps of Project development.*	**Low**
Community			C	Tourism industry	High	Almost certain	Moderate	**High**		**Medium**

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[13]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Suggested Mitigation Measures[14]	Residual Significance
Way of life **Accessibility**	Temporary increase in population, increasing pressure on housing and accommodation	Construction workforce influx		Broader Community	High	Almost certain	Moderate	**High**	Project design changes included the incorporation of an on-site TWA facility to reduce demand on local housing and accommodation. *Develop an Accommodation and Employment Strategy prior to construction (refer to **Section 6.2.1**).* *Implement the Accommodation and Employment Strategy during construction and operation.*	**Low**
Accessibility	Increased strain on local health and emergency services due to temporary population change associated with construction workforce	Construction workforce influx	C	Broader Community Emergency services	Unknown[15]	Possible	Moderate	**Medium**	Implement an onsite first aid post and ensure it is appropriately stocked and staffed. CEMP and BFEMOP to detail onsite emergency response protocols. *Liaise with local service providers to develop a strategy for addressing increasing demand on services e.g., health, recreation etc.* *Facilitate and enable GP services via telehealth to cater for the workforce's health requirements on an as needs basis.* *Ensure access to local emergency department and collaborate with local hospital to ensure there is no additional strain placed.*	**Low**
Surroundings and accessibility	Increased strain on community utilities including, water supply, waste management services and electricity associated with the TWA facility	On-site TWA facility Project construction	C	Broader Community Local Council	Unknown	Possible	Minor	**Medium**	Implement Water Sourcing Strategy and Waste Management Plan. *Improved information sharing and public communications on operational arrangements of the on-site TWA facility.*	**Low**
Community	Decrease in community cohesion and change to composition of the community due to temporary influx of the construction workforce	Construction workforce influx	C	Broader community	Unknown	Possible	Minor	**Medium**	*Workers residing in TWA facility to adhere to a Code of Conduct that specifies minimum acceptable behaviour, including policies relating to respectful behaviour in surrounding town and discouragement of workers wearing hi-vis or other workwear when visiting townships. Disciplinary action will apply to breaches of the Code of Conduct.* *On-going liaison with local councils and police to ensure open communication and identification of emerging issues.* *Demonstrate proactive, thorough and transparent community engagement, throughout the lifespan of the Project.* *Encouragement of workforce to interact positively with local community through participation in community groups, events and organisations.* *Targeting Community Benefit Fund to initiatives that focus on community wellbeing and participation, in consultation with local stakeholders.*	**Low**

[15] Perceived significance is unknown due to low engagement sample size and low frequency of impacts raised

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[13]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Suggested Mitigation Measures[14]	Residual Significance
Health and wellbeing	Anxiety/ stress associated with the uncertainty of the assessment process, construction, operation and decommissioning.	Project establishment	C & O	Broader Community	Unknown	Unlikely	Minor	**Low**	*Active community engagement throughout the lifecycle of the Project, providing clear information of next steps of Project development.*	**Low**
Health and Wellbeing	Reduced workforce health and wellbeing due to potential isolation at the on-site TWA facility and associated lifestyle.	On-site TWA facility Project construction	C	Project workforce	Unknown	Possible	Minor	**Medium**	*Facilitate and enable GP services via telehealth to cater for the workforce's health requirements on an as needs basis.* *Development of a workforce wellbeing strategy.* *Encouragement of workforce to participate in local volunteering and community events where appropriate.* *Include recreational facilities on site to promote health and wellbeing.*	**Low**
Culture	Impacts to Aboriginal Cultural Heritage values, including artefacts, cultural sites, and connection to Country	Project establishment	C	Aboriginal Stakeholders	Medium	Almost certain (for 8 number of identified sites)	Moderate	**High**	Delivery of an Aboriginal Cultural Heritage Management Plan. Archaeological surface salvage conducted on the site prior to construction commencing. Implementation of unexpected finds protocol. Ongoing consultation with Indigenous groups and RAPs, providing clear information on next steps of Project construction and commissioning, and management of Aboriginal cultural heritage.	**Medium**
Culture	Impacts to European Cultural Heritage values	Project establishment	C	Broader community	Low	Unlikely	Minimal	**Low**	Implementation of unexpected finds protocol.	**Low**
Decision making	Uncertainty regarding the Project site selection	Project design and justification	P	Broader Community	High	Possible	Minimal	**Low**	*Ongoing communication and transparency of Project information.*	**Low**
	Lack of trust in decision making and engagement systems	Project establishment and operations	C & O	All stakeholders	High	Possible	Minimal	**Low**	*Active community engagement throughout the lifecycle of the Project, providing clear information of next steps of Project development.*	**Low**

Table 5.2 Summary of Positive Social Impacts

Social Impact Category	Potential Social Impact on People	Project Aspect/ Activity	Timing/ Duration[16]	Affected Stakeholder Group	Perceived Significance	Likelihood	Magnitude	Impact Significance	Existing and Potential Mitigation Measures	Residual Significance
Livelihoods	Increased local employment associated with construction phase			Local Businesses and Service providers		Possible	Moderate	**Medium**	Implementation of the AES (refer to **Section 6.2.1**). Implementation of IAPP. Implementation of strategies and actions to maximise local employment and sourcing from local communities such as through supporting training, up-skilling and capacity building, in collaboration with local stakeholders and training providers, to improve job-readiness in the pre-construction phase of the Project. Ensure procurement and employment opportunities for women, Indigenous people and people with disabilities.	**High**
Community Livelihoods	Increased local procurement and economic spend in local communities and townships due to the influx of construction workers	Construction workforce influx	C	Local Businesses and Service providers Broader Community	Medium	Likely	Moderate	**High**	Implementation of the AES (refer to **Section 6.2.1**). Implementation of strategies and actions to maximise local procurement opportunities such as through maintaining a business register, communicating regularly with local businesses, and attending and hosting industry forums. Openly communicating procurement opportunities for both the on-site TWA facility and the wider Project Consideration of a buy local initiative to support local small businesses.	**High**
Community	Increase in human capital for local communities (expertise) due to the provision of training and skills development resulting labour pool growth	Construction workforce influx	C & O	Broader Community Local Businesses and Service Providers	Medium	Possible	Minor	**Medium**	Proactive support for the establishment of programs that encourage and incentivise re-skilling and upskilling of local workers to remain in the region.	**High**

[16] C= Construction, O= Operation and D= Decommissioning

6.0 Social Impact Management

This section provides further detail on the Project refinements that have occurred in response to stakeholder feedback and outcomes of technical studies undertaken during the assessment process. **Section 6.2** outlines a number of management plans designed to address specific impacts, these plans include:

- Accommodation and employment strategy.
- Community benefit sharing fund.
- Industry and Aboriginal participation plan.
- Community and stakeholder engagement plan.

Social impact management planning is a key consideration of SIA and ensures that the moderate to high social impacts identified via the SIA process and through community consultation activities, are managed effectively across the life cycle of the development (Franks & Vanclay, 2013).

Community-identified opportunities to mitigate and enhance impacts, and the proposed measures to be implemented to reduce impact as identified from assessor experience and industry benchmarking are also presented; including an assessment of residual social impact once such strategies are taken into consideration.

6.1 Design Refinements

The Project design presented in **Section 3.1** of the EIS has been developed and refined through an iterative process, in response to investigations into key site constraints, feedback from key stakeholders and as a result of the outcomes of technical assessment studies.

The following components describe the key design refinements and changes that have occurred as a result of the above:

A reduction in the maximum number of wind turbines from 150 to 76 based on transmission capacity, landholder consultation, avoidance of native vegetation and avoidance of Aboriginal sites.

- Avoidance of culturally significant sites, in consultation with Registered Aboriginal Parties.
- Increased distance and separation distances between WTGs and native vegetation.
- Placement of turbines to minimise impacts on agricultural productivity in consultation with host landholders.
- Minimising interaction with the Euston Mineral Sands Project, proposed within the southern extent of the Project Area.

6.2 Preliminary Social Impact Management Framework

A framework to guide social impact management for the Project is presented in **Figure 6.1**. Guiding principles and key components of these strategies to be developed are outlined in the following sections.

Figure 6.1 Social Impact Management Framework

Source: Umwelt, 2024.

6.2.1 Accommodation and Employment Strategy

The main objective of the Accommodation and Employment Strategy (AES) for the Project is to outline the measures to ensure that there is sufficient accommodation available for the construction and operational workforces associated with the Project, while managing the potential effects of workforce influx on the local community and also maximising local participation. The following sections outline the objectives and commitments for the Project in relation to local participation and accommodation of the Project's workforce and mechanisms for monitoring and responding to the Project's accommodation and employment needs.

6.2.1.1 Accommodation

The AES has been developed to achieve the following objectives:

- Reduce or avoid upward pressure on housing prices, rental costs and demand that may result from development activities.
- Prioritise procurement and employment of local businesses and workers to reduce impact on housing demand.
- Monitor and adjust the accommodation strategy throughout development planning and construction in response to workforce needs, impacts on the community and ongoing stakeholder feedback.

Where local accommodation is required for non-local workers, Spark Renewables and the EPC Contractor will adopt some or all of the measures listed in **Table 6.1**, as appropriate, to ensure sufficient accommodation is available for the Project workforce, to maximise the benefits to the local community and minimise any adverse effects to the local community. It is noted that the majority of the construction workforce will be accommodated in the TWA facility, with measures outlined below included to accommodate peak construction workforces wherein there may be a surplus of workers.

Table 6.1 Accommodation Measures

Measure	Timing	Responsibility	Documented
Continue to plan for the delivery and management of a TWA facility in the Wentworth LGA that manages cumulative social impacts and provides opportunities for legacy benefits for the area.	Pre-construction	Spark Renewables	Assessed as a part of the SSD approval process for the Project
Encourage the EPC Contractor to prioritise the employment of locals who already reside in the area and who will not require accommodation. Mechanisms to achieve this are included in **Section 6.2.1.2**.	Ongoing	Spark Renewables EPC Contractor	**Section 6.2.1.2**
Consult with stakeholders and advise of the Project and to identify potential opportunities for accommodation operators within the Wentworth and Mildura LGAs.	Pre-construction	Spark Renewables	Consultation records
Investigate and document accommodation options in the local region – provide this list to the EPC Contractor.	Pre-construction	Spark Renewables	**Section 4.4.1**
Operate a Housing and Accommodation Expression of Interest Register to enable local landowners, businesses and individuals to register their interest in providing accommodation services to the Project.	Register is established on Project website. Maintain the register throughout pre-construction and construction.	Spark Renewables The EOI list will be provided to the EPC Contractor prior to commencement of construction.	Expression of Interest Register
Maintain a list of property owners and property managers who have expressed an interest in renting out dwellings in the local area throughout Project consultation.	Pre-construction Construction	Spark Renewables	Accommodation and Housing Register
Contact local accommodation providers directly to disseminate details such as construction timing, workforce scheduling (once available) and accommodation requirements to allow them to be prepared.	Pre-construction Construction	Spark Renewables	Monthly construction reporting
Review workforce requirements regularly (e.g. monthly) during construction to ensure the objectives of the AES are being met.	Construction	EPC Contractor	Monthly construction reporting
Provide regular Project updates to the community via Project Newsletters, posts on the Project website and social media channels.	Pre-construction Construction	Spark Renewables	Monthly construction reporting

6.2.1.2 Employment

The AES also identifies measures to prioritise the employment of local businesses and workers, where feasible. The key objectives of the employment strategy for the development are:

- Implement strategies to achieve a minimum of 10% of the construction workforce sourced locally (and greater if possible).
- Generate lasting training and skills development opportunities for the region.
- Pro-actively generate opportunities for under-represented communities, including Aboriginal people and women.
- Transparently communicate employment and procurement opportunities to the local community and provide updates on whether objectives are achieved.
- Spark Renewables and the EPC Contractor will adopt some or all of the measures listed in **Table 6.2**, as appropriate, to prioritise the employment of local workers, to maximise the benefits to the local community.

Table 6.2 Employment Measures

Measure	Timing	Responsibility	Documented
Operate an EOI Register for contractors and service providers. Maintain an EOI register to allow contractors and service providers (individuals and companies) to register their interest for supplying goods and services. The EOI list will be provided to the EPC Contractor prior to commencement of construction.	Pre-construction Construction	Spark Renewables	Register established on the Project website
Early engagement with potential EPC Contractors to highlight the importance of local employment on the Project, and inclusion of local content requirements in the contract.	Pre-construction	Spark Renewables	Consultation records
Spark Renewables to recruit Project roles from the local area. **Spark Renewables will recruit local based roles to service the Project and will use a local recruitment company to recruit these roles.**	Pre-construction	Spark Renewables	This strategy
Inform local community and local business of Project related opportunities. Engage with the community to promote employment/ contracting opportunities. Methods could include hosting community information sessions, advertising on the Project website, social media channels, radio, newsletters, newspapers, and procurement platforms.	Pre-construction Construction	Spark Renewables EPC Contractor	Published materials Consultation records
Consult a local employment agency to facilitate employment of local personnel. Appoint an agency to handle pre-screening of workers for the site.	Pre-construction Construction	EPC Contractor	EPC records
First Nations employment. Engage with First Nations agencies to jointly identify opportunities for delivery of work packages for the project.	Pre-construction Construction	Spark Renewables	Consultation records

Measure	Timing	Responsibility	Documented
Workforce readiness. Training needs identified and programs made available for potential workers. This is anticipated to include a program for employing 'learning workers' and Apprentices.	Pre-construction Construction	Spark Renewables EPC Contractor	Spark Renewable records EPC records
Local procurement preferences. Incorporate additional weighting in tenders and EOIs to prioritise procurement from local companies.	Pre-construction Construction	Spark Renewables EPC Contractor	Spark Renewables EPC records Tender documents
Provide transport to the site. Establish a shuttle bus service from site to the townships of Buronga and Gol Gol during the construction phase from the TWA facility to increase accessibility to the site for workers without cars and to reduce traffic impacts. Prioritise the use of a local bus company for the service.	Construction	EPC Contractor	EPC records
Establish and use local networks to promote employment opportunities. Provide information to Wentworth Shire Council, Mildura City Council and RDA Murray to promote both work and subcontracting opportunities; as well as to discuss and resolve ongoing outcomes.	Pre-construction Construction	Spark Renewables	Consultation records
Provide local training opportunities. Spark Renewables will investigate partnerships with local TAFE NSWs and TAFE Vic campuses to sponsor course costs for relevant courses that will upskill the local community. Spark Renewables will investigate continued education and training opportunities, such as through sponsoring positions at TAFE and working with Training NSW, EnergyCo, NSW Skills Board, Regional NSW Council to identify and maximise training opportunities..	Pre-construction	Spark Renewables	This strategy
Aboriginal Engagement Officer Spark Renewables has appointed a dedicated Aboriginal Engagement Coordinator as the contact for community stakeholders, Traditional Owners and knowledge holders. Our Aboriginal Engagement Officer is embedded in the community, meeting with stakeholders in person and adapting to the local and cultural needs of stakeholders. These meetings provide a strong foundation for Spark Renewables' consultation and research on community opportunities and issues that impact First Nations peoples. This information allows us to best understand the local issues as described by the community themselves.	Pre-construction	Spark Renewables	Spark Renewables records

6.2.2 Investigation of Buy Local Initiatives to Support the Community Benefit Sharing Fund

Spark Renewables are currently in the process of developing a Community Benefit Sharing Fund (CBSF). Whilst the details of the fund are still in development, Spark Renewables are committed to providing benefit sharing funds with total values that are consistent with the Draft Benefit Sharing Guideline (DPIE, 2023). It is therefore understood that the total value of the fund would be $1,050 per MW per annum (up to $422,100 p/a) for the Project life, indexed to CPI. Spark Renewables have proposed the funding to be distributed across three key areas, as outlined below:

- Funding provided to Wentworth Council for projects identified in their Development Contributions Plan.
- Funding to go towards a community benefit fund to be administered either by Spark Renewables or by a committee of council (such as a s355 committee under the NSW L*ocal Government Act 1993*), which will provide grant funding to initiatives that collectively benefit proposals put forward by the local community subject to the guidelines in the fund charter.
- Funding to be administered by Spark Renewables to be directed to initiatives to share positive project impacts with the neighbouring community and local First Nations groups.

To further enhance the effectiveness of the CBSF and to ensure that place based, and meaningful positive impacts are realised across the community, it is recommended Spark Renewables considers the following in the development of the fund:

- Continue to consult the community, and community service providers within the social locality, to understand evolving needs and priorities and facilitate tailoring the Community Benefit Fund initiatives to those most impacted throughout the life of the Project.
- Collaborate with other proximal renewable energy developers to ensure coordination in the administration of funds across the communities most impacted by development within the social locality, and to avoid overlap and duplication.
- Establishment of a Pilot Grant Program for surrounding communities, to be developed into an annual community benefits program for the life of the Project once construction commences, with the future amount of the community benefits program to be based on the final size of the project.
- Facilitate community benefit sharing workshops to exchange ideas with community members around community benefits, providing a presentation of ideas put forward to date and experience from other projects to ensure community voice and feedback is incorporated in CBSF development.

6.2.3 Industry and Aboriginal Participation Plan

Spark Renewables are in the process of developing and implementing an IAPP which is being undertaken in consultation and collaboration with local groups, Traditional Owners, Aboriginal representative organisations, industry and Council. Some measures currently being considered and developed include:

- Ongoing collaboration with relevant Aboriginal stakeholders, including RAPs, LALCs and Aboriginal community to identify effective measures to promote / communicate opportunities for jobseekers.

- Identification of supply chain opportunities: register of local First Nations businesses to be established through early consultation and as part of a local supply study.
- Facilitate ongoing education and training opportunities for First Nations students with fees to pursue education or training (apprenticeship, TAFE, or university) and First Nations specific internships.
- Assist local residents seeking to apply for Project roles through the employment application process.
- Proactively engage with Indigenous-owned businesses to ensure awareness of opportunities in the supply chain.
- Use Supply Nation and Indigenous Chamber of Commerce business directories to facilitate procurement, and require contractors to do the same when subcontracting.
- Undertake cultural competency training for all staff, including requirement for contractors to include First Nations-run cultural competency and heritage training in worker induction processes.
- Consider the establishment of a First Nations Advisory Group to select and develop initiatives that can access the CBSF.

6.2.4 Community and Stakeholder Engagement Plan

Spark Renewables has developed a CSEP in the early stages of the EIS process.

Should the Project be approved, consistent and consultative engagement with communities throughout the Project's planning, pre-construction, construction, and operations is critical in increasing social acceptance, developing strong local partnerships and achieving successful, and sustainable Project outcomes. Fairness in the Project's development process requires the establishment and management of processes to ensure that people have meaningful opportunities to influence the design, plans, and outcomes of a development as well as in realising the positive impacts of the Project.

Spark Renewables will continue to prioritise the implementation of the community engagement plan / CSEP in the remaining development phase of the Project and throughout the pre-construction and construction phases should the project be approved.

The approach for community engagement and public participation continues to be guided by the following industry and government standards and frameworks:

- The International Association for Public Participation (IAP2)'s Spectrum of Public Participation (2018).
- NSW Government's Undertaking Engagement Guidelines for State Significant Projects (2021).
- In addition to guidance from the Draft NSW Government Draft Benefit Sharing Guideline (2023).

7.0 Conclusion

This SIA has documented the social baseline, social impacts and social impact management and enhancement measures associated with the Mallee Wind Farm and forms part of the EIS for the Project.

This SIA has included the compilation of a social baseline profile for the Project, consolidation of community consultation outcomes to inform the assessment and evaluation of Project-related social impacts and opportunities, and preliminary social impact management planning.

The impact evaluation has been undertaken to inform and support the refinement of Project design to reduce negative project impacts and achieve greater positive project impacts and social/community outcomes.

8.0 References

NSW Government. (2024). *Energy policy framework*. Retrieved from NSW Government Planning: https://www.planning.nsw.gov.au/policy-and-legislation/renewable-energy/energy-policy-framework

ABC. (2023). *Inquiry deems Transgrid's HumeLink energy transmission project will remain above ground*. Retrieved from https://www.abc.net.au/news/2023-08-31/transgrid-humelink-energy-transmission-inquiry-finding-overland/102795606

ABC. (2022, July 18). *Homelessness could rise in Victoria's north-west due to cost-of-living pressures, social service providers warn*. Retrieved from https://www.abc.net.au/news/2022-07-18/victorian-mallee-social-services-warn-inflation-homelessness/101238280

ABC. (2022, June 17). *Mildura ambulance shortage at crisis point, union says*. Retrieved from https://www.abc.net.au/news/2022-06-17/mildura-ambulance-at-crisis-point/101162702

ABC. (2022, May 19). *Mildura Base Public Hospital calls code yellow for 'critical capacity issue'*. Retrieved from https://www.abc.net.au/news/2022-05-19/mildura-hospital-calls-code-yellow/101079738

ABC. (2022, July 13). *Mitchell's Hopping Mouse the newest resident of the Mallee Cliffs National Park*. Retrieved from https://www.abc.net.au/milduraswanhill/programs/breakfast/hopping-mouse/13971006

ABC. (2022, May 20). *What are the Mallee candidates promising on the environment, water, and climate change?* Retrieved from https://www.abc.net.au/news/2022-05-20/mallee-candidates-the-environment-climate-change-water/101051296

ABC News. (2022). *Mallee - Federal Election 2022*. Retrieved from ABC News: https://www.abc.net.au/news/elections/federal/2022/guide/mall

ABC News. (2023). *Murray (*) (Key Seat) - NSW Election 2023*. Retrieved from ABC News: https://www.abc.net.au/news/elections/nsw/2023/guide/murr

ABS. (2021). *ABS Quickstats*. Retrieved from https://www.abs.gov.au/census/find-census-data/quickstats/2021/

ABS. (2021). Census Community Profiles.

ABS. (2021). *Counts of Australian Businesses, including Entries and Exits*. Retrieved from https://www.abs.gov.au/statistics/economy/business-indicators/counts-australian-businesses-including-entries-and-exits/latest-release

ABS. (2021). *Regional Population.* Retrieved from https://www.abs.gov.au/statistics/people/population/regional-population/latest-release

ABS. (2023). Patient experiences. ABS.

ABS SIEFA. (2021). Socio-Economic Indexes for Australia.

Andersen, E. (2015). Development of a Learner's Grammar for Paakantyi. *University of Sydney Master of Arts Thesis*.

Aussie Towns. (2021). *Mildura*. Retrieved from https://www.aussietowns.com.au/town/mildura-vic

Australian Healthcare and Hospitals Association. (2019). *General Practice in Western New South Wales.* Retrieved from https://www.wnswphn.org.au/uploads/documents/GENERAL%20PRACTICE%20IN%20WESTERN%20NEW%20SOUTH%20WALES%20FINAL.pdf

Australian Insitute of Aboriginal and Torres Strait Islander Studies. (2020). *Native title, rights and interests.* Retrieved from https://nativetitle.org.au/learn/native-title-and-pbcs/native-title-rights-and-interests

Burdge, R. J. (2004). The concepts, process and methods of SIA. *The Social Ecology Press*.

Coakes, S., & Sadler, A. (2011). Utilizing a Sustainable Livelihoods Approach to Inform Social Impact Assessment Practice. In &. A. F. Vanclay, *New directions in social impact assessment* (pp. 323–340). Cheltenham, U.K.: Edward Elgar Publishing Limited.

Cochrane, P. (2006). Exploring cultural capital and its importance in sustainable development. *Ecological Economics*, 318–330.

Cousse. (2021). Still in love with solar energy? Installation size, affect, and the social acceptance of renewable energy technologies. *Renewable and Sustainable Energy Reviews*, https://doi.org/10.1016/j.rser.2021.111107.

Crime Statistics Agency. (2022). *Redorded Offences.* Retrieved from https://www.crimestatistics.vic.gov.au/crime-statistics/latest-victorian-crime-data/download-data

Darling Basin Authority. (n.d.). *Sunraysia Region*. Retrieved from Murray-Darling Basin Authority regional fact sheet for Sunraysia region

DFID. (1999). Key Sheets for Sustainable Development: Overview.

DFID. (2001). *Sustainable livelihoods guidance sheets.* London: The Department for International Development.

DPE. (2018). NSW Transmission Infrastructure Strategy.

DPE. (2019). NSW Electricity Strategy.

DPE. (2020). NSW Electricity Infrastructure Roadmap.

DPE. (2021). Social Impact Assessment Guideline.

DPE. (2022). *Projections Explorer*. Retrieved from https://pp.planningportal.nsw.gov.au/populations

DPE. (2023). *Social Impact Assessment Guideline.* Department of Planning and Environment.

DPE. (2023). *Social Impact Assessment Guideline.* Department of Planning and Environment.

DTP. (n.d.). *Renewable Energy Projects Victor*. Retrieved from Department of Transport and Planning: https://mapshare.vic.gov.au/planningwebmaps/RenewablesSummary.html

Elecnor Australia. (2024). Project EnergyConnect Construction Notification. Elecnor Australia.

EnergyCo NSW. (2022). *South-West Renewable Energy Zone*. Retrieved from https://www.energyco.nsw.gov.au/renewable-energy-zones/southwest-renewable-energy-zone

Fisher & Sonn. (2007). Sense of Community and the dynamics of inclusion-exclusion by receiving communities. *Australian Community Psychologist*.

Fuller, S. (2016). Wellbeing and Place. Taylor and Francis 9781134758890, 1134758898.

Gaur, V., & Lang, C. (2020). Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island. University of Rhode Island Cooperative Extension.

Helen Dalton MP. (n.d.). *About Helen*. Retrieved from https://www.helendalton.com.au/about_helen

IAIA. (2015). Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment.

Mallee Conservation. (2022, 10 31). *Mallee Conservation - Restoring Private Land Habitat*. Retrieved from Mallee Conservation: https://www.malleeconservation.com.au/

Mildura Airport. (2024). *Mildura Airport*. Retrieved from https://milduraairport.com.au/

Mildura Rural City Council. (2021). *Our economy*. Retrieved from https://yoursay.mildura.vic.gov.au/imagine/our-economy

Mildura Shire Council. (2022). *Sustainable Subdivisions Framework Trial - Stage 1*. Retrieved from Mildura Shire Council: https://www.mildura.vic.gov.au/Services/Planning-and-Building/Strategic-Planning/Strategic-Planning-Projects-Strategies/Current-Recent-Strategic-Planning-Projects/Sustainable-Subdivisions-Framework-Trial-Stage-1#:~:text=Mildura%20Rural%20City%20Council%2C

MPRA. (2019). Wentworth/Dareton Community Working Party: Community Acion Plan.

Mungo National Park. (n.d.). *Mungo Lady and Mungo Man*. Retrieved from http://www.visitmungo.com.au/mungo-lady-mungo-man

Mungo National Park. (n.d.). http://www.visitmungo.com.au/world-heritage.

National Museum Australia. (2022). *Mungo Lady*. Retrieved from https://www.nma.gov.au/defining-moments/resources/mungo-lady

NPS Medicine Wise. (2022). *General Practice Insights Report.* https://www.safetyandquality.gov.au/sites/default/files/2024-01/mi_general_practice_insights_report_2020-21.pdf.

NSW Agriculture Commissioner. (2022). Renewable energy generation and agriculture in NSW's rural landscape and economy - growth sectors on a complementary path. https://www.dpi.nsw.gov.au/.

NSW Bureau of Crime Statistics and Research. (2022). *NSW Crime Tool*. Retrieved from http://crimetool.bocsar.nsw.gov.au/bocsar/

NSW Climate and Energy Action. (2023). Retrieved from Net Zero Plan: https://www.energy.nsw.gov.au/nsw-plans-and-progress/government-strategies-and-frameworks/reaching-net-zero-emissions/net-zero

NSW DPE. (2023). Social Impact Assessment Guideline for State Significant Projects. New South Wales Government.

NSW Environment and Heritage. (2023, December 22). *Birds flock to Gol Gol*. Retrieved from https://www.environment.nsw.gov.au/news/birds-flock-to-gol-gol

NSW Government. (2024). *Project EnergyConnect (NSW - Eastern Section)*. Retrieved from NSW Government : https://www.planningportal.nsw.gov.au/major-projects/projects/project-energyconnect-nsw-eastern-section

NSW Health. (2022). *Buronga HealthOne*. Retrieved from https://www.nsw.gov.au/health/fwlhd/facilities/buronga-healthone

NSW LALC. (2022). *Broken Hill LALC*. Retrieved from https://alc.org.au/land_council/broken-hill/

NSW National Parks and Wildlife Service. (2022). Retrieved from Mutawintji National Park: https://www.nationalparks.nsw.gov.au/visit-a-park/parks/mutawintji-national-park

NSW National Parks Wildlife Service. (2022). *Mallee Cliffs National Park*. Retrieved from https://www.nationalparks.nsw.gov.au/visit-a-park/parks/mallee-cliffs-national-park

NSW Trade & Investment. (2013). *NSW Renewable Energy Action Plan.*

Office of Environment and Heritage. (2015). Community Attitudes to Renewable Energy in NSW.

Parliament of New South Wales. (n.d.). *Mr (Roy) Royal Francis BUTLER, MP*. Retrieved from https://www.parliament.nsw.gov.au/members/Pages/profiles/butler-roy-rf.aspx

Pretty, Bishop, Fisher & Sonn. (2007). Psychologcial Sense of Community and its relevance to well-being and everyday life in Australia. *The Australian Community Psychologist*, 6–24.

RDV. (2020). *Regional City of Mildura*. Retrieved from Regional Development Victoria: https://www.rdv.vic.gov.au/victorias-regions/mildura

Regional Development Victoria. (2021). *Regional City of Mildura*. Retrieved from https://www.rdv.vic.gov.au/victorias-regions/mildura

REMPLAN. (2022). Retrieved from https://app.remplan.com.au/wentworth/community/summary

Renew Economy. (2024). *"Blindsided:" Developers reel from shock renewable hydrogen decision*. Retrieved from https://reneweconomy.com.au/blindsided-says-ley-as-developers-reel-from-ministers-shock-renewable-hydrogen-decision/

Ruddell, R., & Ortiz, N. (2015). Boomtown Blues: Long-Term Community Perceptions of Crime and Disorder. *American Journal of Criminal Justice*.

Safe Work Australia. (2023). *Key work health and saefty statistics Australia.* https://data.safeworkaustralia.gov.au/insights/key-whs-stats-2023.

Sandman, P. (2003). Responding to community outrage: Strategies for effective risk communication. American Industrial Hygiene Association: Fairfax, VA.

Scovell, McCrea, Walton & Poruschi. (2024). Local acceptance of solar farms. *Renewable and Sustainable Energy Reviews*, https://doi.org/10.1016/j.rser.2023.114029.

The Conversation. (2022). *Today's disappointing federal court decision undoes 20 years of climate litigation progress in Australia*. Retrieved from https://theconversation.com/todays-disappointing-federal-court-decision-undoes-20-years-of-climate-litigation-progress-in-australia-179291

The Conversation. (2016). *The Barkindji people are losing their 'mother', the drying Darling River.* Retrieved from https://theconversation.com/the-barkindji-people-are-losing-their-mother-the-drying-darling-river-57884

They Vote For You. (2024). Retrieved from https://theyvoteforyou.org.au/people/representatives/farrer/sussan_ley/policies/20

Tindale, N. B. (1974). Aboriginal Tribes of Australia: Their Terrain, Environmental Controls, Distribution, Limits, and Proper Names. *Australian National University Press*.

Transgrid. (2022). *$1.8 billion EnergyConnect project powers on at Buronga*. Retrieved from https://www.transgrid.com.au/media-publications/news-articles/1-8-billion-energyconnect-project-powers-on-at-buronga

Vanclay et al. (2015). Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. *International Association for Impact Assessment*.

Victorian Government. (2023). *Renewable Energy Projects Victoria*. Retrieved from Department of Transport and Planning: https://mapshare.vic.gov.au/planningwebmaps/RenewablesSummary.html

Wentworth Shire Council. (2017). 2017–2027 Community Strategic Plan.

Wentworth Shire Council. (2017). 2017–2027 COMMUNITY STRATEGIC PLAN.

Wentworth Shire Council. (2020). Local Strategic Planning Statement.

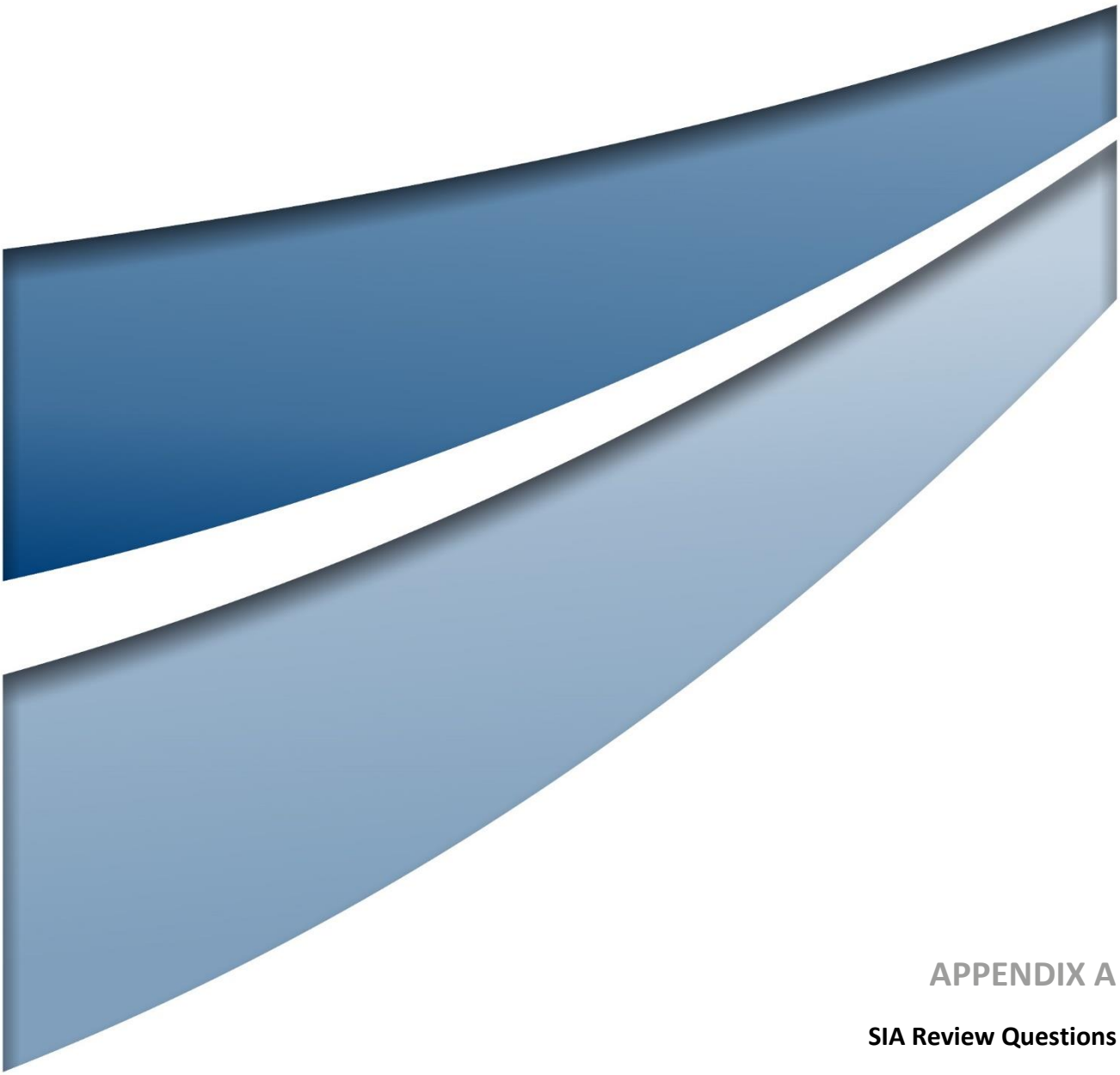
Wentworth Shire Council. (2020). *Local Strategic Planning Statement.* Retrieved from https://www.wentworth.nsw.gov.au/wp-content/uploads/2020/05/3FINAL-WSC-Local-Strategic-Planning-Statement-Adopted-by-Council-18-March-2020.pdf

Wentworth Shire Council. (2021). *Aerodromes*. Retrieved from Wentworth Shire Council: https://www.wentworth.nsw.gov.au/infrastructure/aerodromes/

Wentworth Shire Council. (2021). *Wentworth Aerodrome Upgrade*. Retrieved from https://www.wentworth.nsw.gov.au/infrastructure/aerodromes/wentworth-aerodrome-upgrade/

Wentworth Shire Council. (2022, May 31). *EnergyConnect project to deliver economic benefit to Wentworth Shire*. Retrieved from https://www.wentworth.nsw.gov.au/energyconnect-project-to-deliver-economic-benefit-to-wentworth-shire/

Wentworth Shire Council. (2024). Retrieved from Councillors: https://www.wentworth.nsw.gov.au/council/about-the-shire/councillors/



APPENDIX A

SIA Review Questions

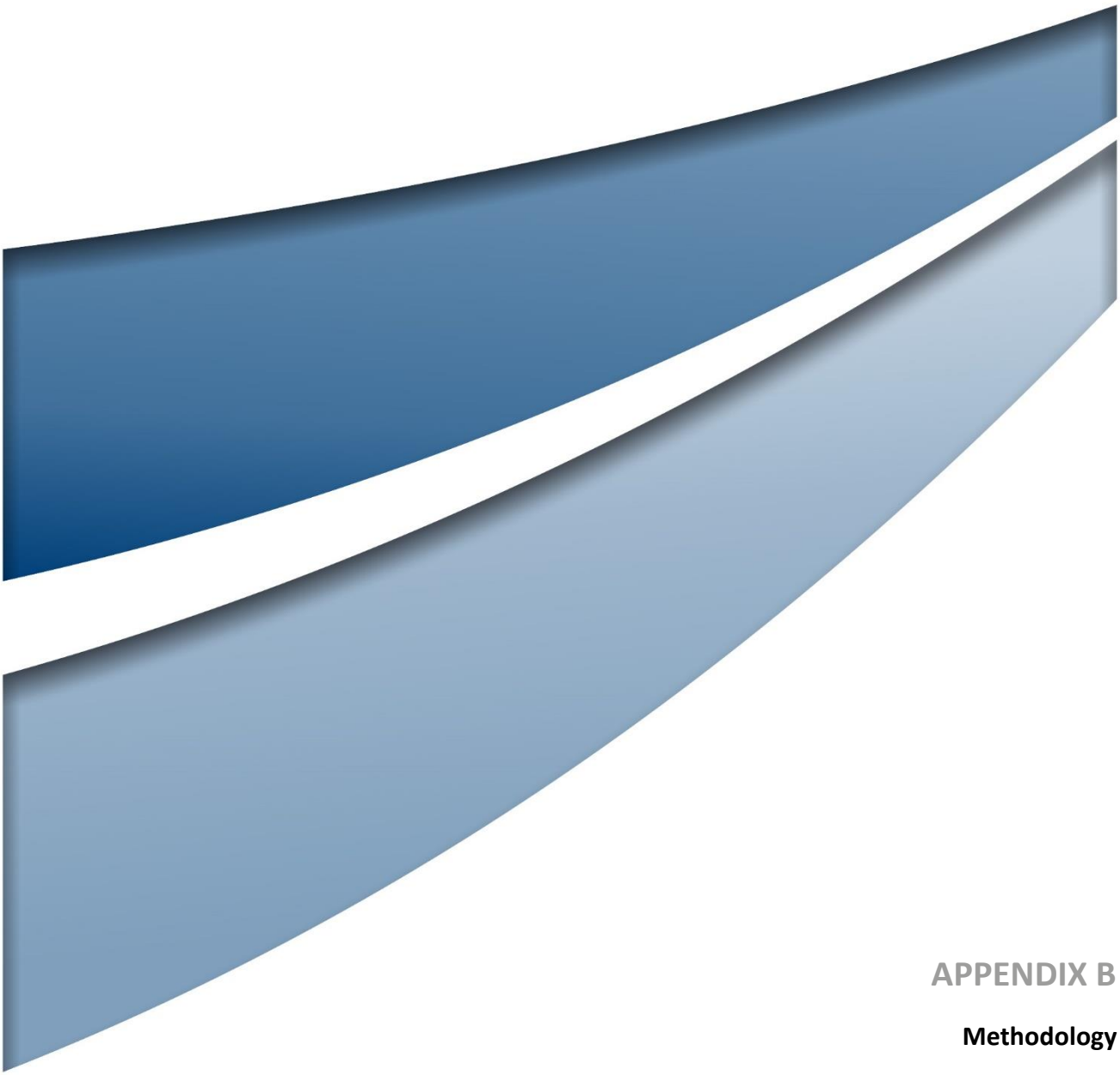
Appendix A SIA Review Questions

Table 1 outlines the responses to the review questions in Appendix C of the SIA Guideline, used to confirm the requirements of the SIA Guideline have been addressed.

Table 1 Review Questions

Review questions	Addressed in SIA (yes/no), relevant sections
General	
1. Does the lead author meet the qualification and experience requirements?	Yes
2. Has the lead author provided a signed declaration?	Yes, refer to **Author Declaration**
3. Would a reasonable person judge the SIA report to be impartial, transparent and suitably rigorous given the nature of the project?	Yes
Project's social locality and social baseline	
4. Does the SIA report identify and describe all the different social groups that may be affected by the project?	Yes, refer to Section 2.4.1
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?	Yes, refer to Section 3.3.1 and 3.3.7
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?	Yes, refer to Section 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?	Yes
8. Does the social baseline study demonstrate social-science research methods and explain any significant methodological or data limitations?	Yes, refer to Section 2
Identification and description of social impacts	
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?	Yes, refer to Section 4
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?	Yes, refer to Section 4
11. Does the SIA report describe how the preliminary analysis influenced project design and EIS engagement strategy?	Yes, throughout Section 4 where relevant Section 6.1
Community engagement	
12. Were the extent and nature of engagement activities appropriate and sufficient to canvass all relevant views, including those of vulnerable or marginalised groups?	Yes. Refer to Section 2.6 for Assessment limitations
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?	Yes, refer to Section 4

Review questions	Addressed in SIA (yes/no), relevant sections
Predicting and analysing social impacts	
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?	Yes, refer to Section 4 and Table 5.1
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?	Yes, refer to Section 4 and Table 5.1
16. Does the SIA report identify its assumptions, and include sensitivity analysis and alternative scenarios? (including 'worst case' and 'no project' scenarios where relevant)	Yes, refer to Section 2.6 and Section 4
Evaluating significance	
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?	Yes, refer to Section 4 and Table 5.1
18. Are the evaluations of significance disaggregated to consider the likely different experiences for different people or groups, especially vulnerable groups?	Yes, refer to Section 4 and Table 5.1
Responses, monitoring and management	
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?	Yes, refer to Table 5.1 and Section 6
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	Yes, refer to Table 5.1 and Section 6
21. Does the SIA report demonstrate how the proponent will adaptively manage social impacts and respond to unanticipated events, breaches, grievances and non-compliance?	Yes, refer to Table 5.1 and Section 6



APPENDIX B

Methodology

1.0 Methodology

1.1 Social Locality and Baseline Development

The development of a baseline social profile gathers knowledge from both primary and secondary data sources to increase understanding of the existing social environment in which a project is proposed, and of potentially affected individuals and communities. The social baseline profile is a foundational component of SIA, as it provides the basis from which social impacts associated with the Project may be identified and predicted. The social baseline has been developed in accordance with the requirements of the SIA Guideline as detailed in **Section 2.1**.

To understand the communities of interest to the Project and to evaluate their resilience and adaptive capacity to change, a Sustainable Livelihoods or Community Capitals Approach (The Department for International Development (DFID), 2001) has been adopted.

According to this framework, people seek to maintain their livelihood within a context of vulnerability (Coakes & Sadler, 2011). Specifically, threats to their livelihood include shocks (such as sudden onsets of natural disasters, health problems, conflicts, and economic crises), trends (for instance, those relating to the economy, health, resources, and governance) and seasonality (such as cyclical fluctuations in prices or employment). People draw upon these assets to build and maintain their livelihood. A livelihood is considered sustainable '*…when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'*.

1.1.1 Data Sources

The social baseline has made use of a range of data sources to understand the socio-economic, cultural and demographic characteristics of the communities within the Project's social locality, and has included analysis of publicly available secondary datasets, including the most recent Australian Census (2021), as well as a thorough review of local media, government plans and strategies and other literature and data sets.

Statistical and comparative analysis using ABS data has been undertaken at the LGA level to capture key characteristics and trends across local communities. Suburb and Localities (SAL) and Urban Centres and Localities (UCL) level data has also been utilised, with key indicators compiled and data sources outlined by key contextual components.

Table 1.1 outlines the social indicators and datasets that have been used to inform the social baseline as well as additional detail on the community capitals analysis.

Table 1.1 Assessment Questions, Indicators and Data Sources

Questions	Relevant Indicators	Data Sources
Natural Capital		
• What are the key landscape features of value to the community in proximity to the Project? • How does weather and climate change conditions impact communities? • Have there been notable changes in land use overtime? • What natural resources are present that determine land uses? • Are there key environmental strengths that support economic, community, or environmental activities that may be impacted by the Project? • Are there any environmental indicators that are a key focus for preserving or improving? Are there any endangered or critically endangered species or ecosystems within the Project boundary?	• Key landscape features • National Parks • Biodiversity • Natural resources • Cumulative impacts.	Government strategic plans Engagement outcomes REMPLAN- economic and demographic specialist CSIRO Major Projects Website National Parks and Wildlife Media
Economic Capital		
• How diverse is the economy? • How many people are employed in different industries of employment? • What is the cost of living? • What is the level of economic resources available to the community? • What are the key drivers of the economy and how have they changed over time?	• Index of Economic Resource • Median household income • Existing land use • Business count • Rates of unemployment • Median mortgage repayments • Median rental repayments • Median house prices • Rental vacancy rates • Rates of rent and mortgage stress.	ABS Census ABS Labour force ABS Labour market Government strategic plans Small Area Labour Markets Small Business Count REMPLAN Socio-Economic Indexes for Areas (SEIFA) Economic Impact Assessment (EIA)

Questions	Relevant Indicators	Data Sources
Human Capital		
• What are the key demographic characteristics of the community? • What are the projected demographic characteristics of the community and will this impact the Project? • What is the level of formal education in the community? What are people's qualifications? • Are these qualifications transferrable to the Project? • Who is in the workforce and what is their capacity to work on the Project? • What is the health status of the community? Are there any key health concerns.	• Educational Attainment • Labour force status, including unemployment • Age profile • Industry of employment and occupation. • Index of Education and Occupation • Rates of long term health conditions.	ABS Census ABS Labour force ABS Labour market Government strategic plans SALM SEIFA Small Business Count Tourism NSW REMPLAN Engagement outcomes EIA
Cultural Capital		
• Who are the Traditional Owners and how are they represented? • What other groups exist that represent First Nations people? • What are the values, histories and aspirations of First Nations peoples within the social locality? What is their ongoing connection to Country and language? • Are there tangible and intangible sites of cultural significance within the study area? How will the Project impact these?	• Indigenous population • First Nations community • First Nations engagement outcomes.	ABS Census ACHAR HHIA Engagement outcomes Government Strategic Plans State heritage inventory Media
Social Capital		
• How diverse is the community? • How connected and involved are the community? • How socio-economically advantaged or disadvantaged is the community? • Is the area culturally diverse? Is there a high proportion of people born overseas? • How safe is the community?	• Community values and aspirations • History of community and area • Rate of volunteerism • Community and special interest groups, including industry associations	Government strategic plans Engagement outcomes ABS Census BOCSAR SEIFA

Questions	Relevant Indicators	Data Sources
• What does the community value in the area? • How does the Project align with peoples' aspirations for their land, the locality and their community?	• Index of relative socio-economic disadvantage • Proportion of people born overseas. • Rates of crime.	
Political Capital		
• What is the degree to which communities are represented by individuals and groups, including levels of government? • What local governance structures are in place? • What is the socio-political context of the communities of interest? • What level of influence / involvement in decision-making have communities had in other projects of a similar nature? • What are the political views of the elected representatives?	• Levels of government support • LALCs and Traditional Owners • State election, political views • Political figures and relation to project.	ABC Elections NSW LALC
Physical Capital		
• What are the key social infrastructure and services that would support a construction workforce? • Are there any service gaps that may be further exacerbated by an incoming construction workforce? • What is the level of accessibility to key social infrastructure? • How competitive is the local housing market? Is access to adequate housing a local issue? Is there capacity for an influx of workforce associated with the Project and others? • Are there any focus areas for social infrastructure delivery and how can the Project support this? • How connected is the community to other regions? • What is the level of accessibility to housing and accommodation?	• Government housing availability • Housing tenure type • Future housing and land zoning • Homelessness data • Temporary housing • Commercial buildings • Availability of health care services • Rates of access to health care practitioners • Availability of education institutions.	ABS Census Government strategic plans SQM Research Media Government strategic plans Public Health Information Development Unit (PHIDU) Media ABS Census Engagement outcomes

Source: (ABS, 2021; .idcommunity, 2021; ABS Table Builder, 2021; ATDW, 2023; AirDNA, 2024; BOSCAR, 2024; PHIDU, 2021; realestate.com.au, 2023; CSIRO, 2022).

1.2 Consultation Mechanisms

Table 1.2 provides a summary of all consultation undertaken during the SIA engagement program.

Table 1.2 Communication and Engagement Mechanisms

Mechanism	Targeted stakeholder	Engagement Objective	Description	First Round of Consultation	Second Round of Consultation
Website	Host landholders Neighbouring/proximal landholders Community groups Broader community Traditional Owners Local Government Local businesses and service providers Local media	Inform	A website dedicated to the Project including a description and overview of the Project, development application process, company information, responses to key concerns, risk management plans, maps, media releases and contact information.	A website and email established in August 2022.	The website and email address monitored and updated with additional project information and latest community newsletters. A link to the website was also included in Community Newsletters to enable access to further Project information.
Media release	Local media Local Government Community groups Broader community Host landholders Neighbouring/proximal landholders Traditional Owners Local businesses and service providers	Inform	To introduce the project to the broader community through local and regional media channels.	Advertising in local newspapers and radio stations in August 2022 to advise of upcoming consultation opportunities and provide Project updates.	-

Mechanism	Targeted stakeholder	Engagement Objective	Description	First Round of Consultation	Second Round of Consultation
Community Newsletters	Neighbouring/proximal landholders Broader community	Inform	Project information sheets to distribute information about the Project to the broader community and targeted stakeholders.	No. 1 – Project overview and invitation to drop-in session was distributed in August 2022.	No. 2 – providing a Project update and sharing notes and feedback received from the community during the scoping phase. Also included an invitation to the drop-in session and was distributed in May 2024. No. 3 – providing a Project update and presenting the draft findings of the EIS & SIA. Also provided information around ways to be involved in the exhibition process.
Drop-in sessions	Broader community Community groups Neighbouring/proximal landholders Traditional Owners Local businesses and service providers	Consult	Multi-hour time periods when stakeholders can drop in to speak to the Project team and experts, view documents and plans and ask questions of the Project team.	One session held at Buronga Midway Centre on Tuesday 22 August 2022 between 3 pm and 6 pm.	A session to gain feedback for the SIA and provide and opportunity for stakeholders to gain additional project information. The session was held at the Buronga Midway Centre on Wednesday 10 May 2024 between 3 pm and 6 pm.
Pop ups	Broader community	Inform	Pop up stalls at Mildura Field Day and Wentworth Show to capture the broader community.	NA	Spark Renewables attended the Mildura Field Days on Friday 19–Saturday 20 May 2023 and Friday 17–Saturday 18 May 2024. Additionally Spark Renewables attended the Wentworth Show on Saturday 24 and Sunday 25 August 2024.

Mechanism	Targeted stakeholder	Engagement Objective	Description	First Round of Consultation	Second Round of Consultation
Community Survey	Broader community	Consult	Online or offline surveys to obtain input and feedback on Project decision-making, as well as specific information about the needs, desires and impacts on stakeholders related to the Project.	Established in August 2022, and distributed via the community newsletter, and published on Sparks website. All feedback received until 9 September 2023 was considered in the Social Impact Scoping Report, and additional received after this date has informed the SIA.	The survey was updated and distributed via the community newsletter to provide opportunity for the community to provide further feedback and validate impacts from the scoping phase. Also used to understand potential mitigation and enhancement measures.
SIA Interviews	Local Government Community groups Traditional Owners Service providers	Involve	Introductions to the Project, semi-structured interview discussions to listen to individual concerns, interests, and issues related to the Project. Interviews also utilised to gather feedback, including community sensitivities, understanding of information needs and future engagement preferences, and ways in which impacts could be managed.	One on one meetings held throughout the month of August and September 2022.	One on one meetings held throughout the months of April and May 2024.

1.3 Social Impact Evaluation and Management

Each Project activity is assessed by its potential impacts on people, through consideration of whether previous investigation of the impact has been undertaken, the potential for cumulative impacts, and the consideration of possible mitigation or enhancement measures to reduce negative impacts and enhance positive impacts.

To prioritise the identified social impacts, a risk-based framework has been adopted. In this regard, stakeholder perception of impact is considered an independent and no less valid component of risk; with stakeholder perceptions often varying between individuals and groups. For assessment, the most common, or what is judged to be the general perception/sentiment of a stakeholder group has been used as a measure of perceived stakeholder risk or impact, as determined through consultation.

The integration of the outcomes of technical ranking (severity/scale) with stakeholder perceived ranking of impacts (intensity or importance), thus affords a true integration of expert and local knowledge in SIA and enables both types of risk to be addressed in the development of impact mitigation, amelioration, and enhancement strategies. This approach is reflected in the new SIA Guideline, where level of concern/interest and intensity or importance are considered (refer to **Figure 2.15**).

Prioritising impacts in this integrated manner ensures that appropriate assessment and mitigation strategies can be developed that not only address impacts that may require more technical management, but also those impacts that are perceived by stakeholders as of high importance/concern. These perceived concerns are just as important to manage as they have the potential to result in elevated levels of community concerns, complaints and grievances if not addressed appropriately.

The social significance matrix used to evaluate social impacts considers both the magnitude of the potential social impact (minimal, minor, moderate, major and transformational) and the likelihood of the impact occurring (very unlikely, unlikely, possible, likely and almost certain) to determine an overall evaluation of impact as 'low', 'medium', 'high' or 'very high'. **Figure 1.1** and **Figure 1.2** contain further details regarding magnitude and likelihood classifications, and **Figure 1.5** outlines the dimensions considered in determining the magnitude of the impact. Proposed mitigation and enhancement strategies are also considered in determining the residual social impact.

	Magnitude level				
	1	2	3	4	5
Likelihood level	Minimal	Minor	Moderate	Major	Transformational
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

Figure 1.1 Social Impact Matrix

Source: (DPE, 2023).

Magnitude level	Meaning
Transformational	Substantial change experienced in community wellbeing, livelihood, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% 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.

Figure 1.2 Defining Magnitude Levels for Social Impact

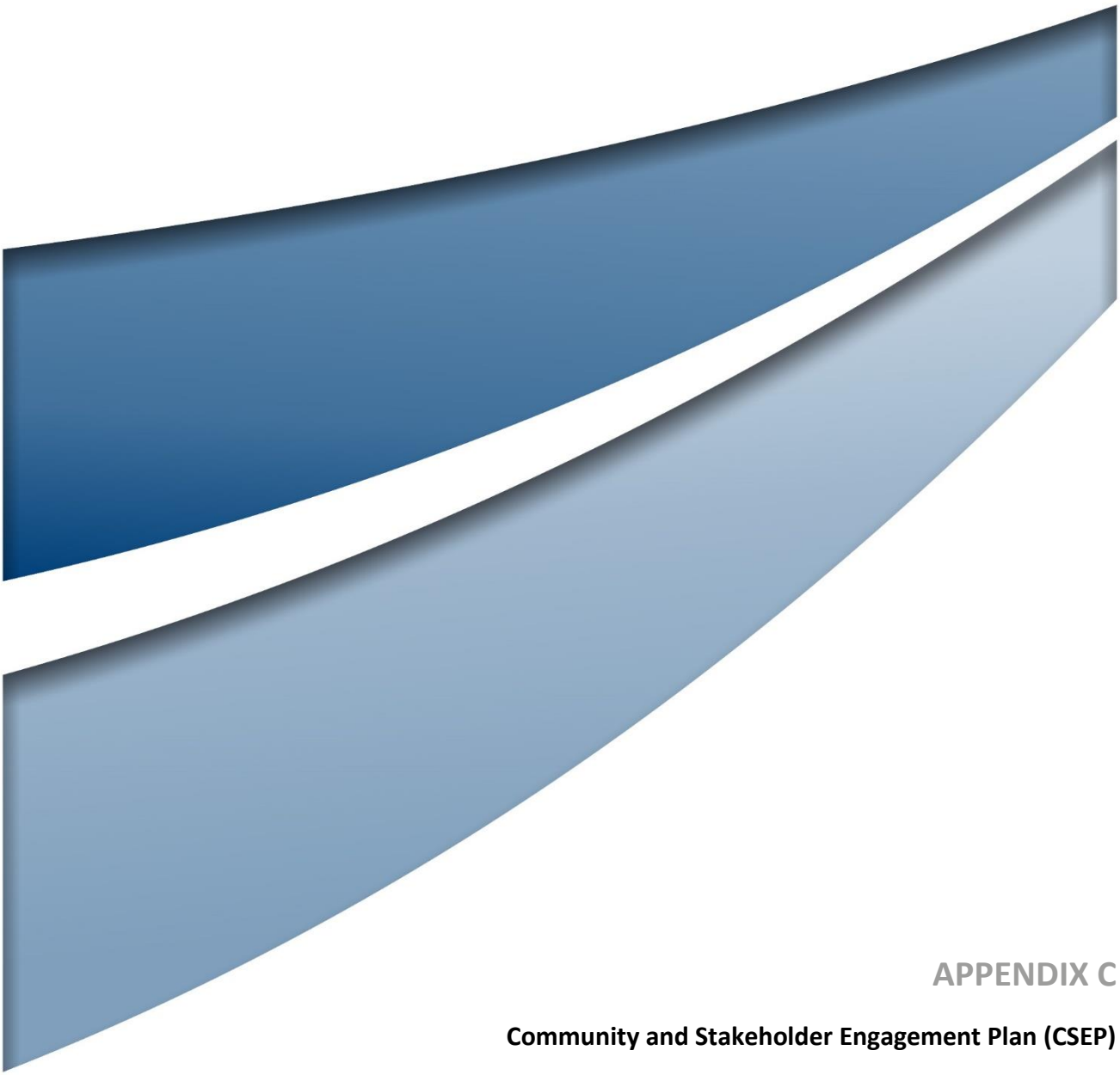
Source: (DPE, 2023).

Likelihood level	Meaning
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

Figure 1.3 Defining Likelihood Levels for Social Impacts

Source: (DPE, 2023).

In impact evaluation, both positive and negative impacts are considered, with slight adjustments made to the approach to reflect positive impacts e.g., level of concern becomes level of interest, severity becomes scale of improvement or benefit, sensitivity becomes importance of the improvement or benefit and the equity of its distribution, etc.



APPENDIX C

Community and Stakeholder Engagement Plan (CSEP)

Mallee Wind Farm
Community and Stakeholder Engagement Plan

WE ACKNOWLEDGE THE TRADITIONAL CUSTODIANS OF THE LAND ON WHICH THIS PROJECT IS LOCATED, THE BARKANDJI PEOPLE, AND RECOGNISE THEIR CONTINUING CONNECTION TO LAND, WATER AND COMMUNITY.

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Document control

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Abbreviations

Abbreviation	Definition
ABS	Australian Bureau of Statistics
AEMO	Australian Energy Market Operator
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
BESS	Battery Energy Storage System
CEC	Clean Energy Council
CER	Clean Energy Regulator
CO_2	Carbon dioxide
CSEP	Community and Stakeholder Engagement Plan
CPI	Consumer price index
DPE, Department	NSW Department of Planning & Environment
EIS	Environmental impact statement
EMFs	Electric and Magnetic Fields
EPA	NSW Environmental Protection Authority
FAQs	Frequently Asked Questions
FTE	Full Time Equivalent
GW	Giga Watt
IAP2	International Association for Public Participation
IPC	Independent Planning Commission
km	Kilometre(s)
kV	Kilovolt
LALC	Local Aboriginal Land Council
LGA	Local Government Area
MP	Member of Parliament
MW	Megawatt
NBN	National Broadband Network
NEM	National Electricity Market
NSW	New South Wales
PCU	Power conditioning unit
REZ	Renewable Energy Zone
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
SIA	Social Impact Assessment
SSD	State Significant Development
SW REZ	South-West Renewable Energy Zone
VIC	Victoria
WTG	Wind turbine generator

Introduction

Purpose

This document entails a Community and Stakeholder Engagement Plan (CSEP) that outlines the methods and tools for effective engagement with stakeholders throughout the planning, development, construction, operation and decommissioning of the proposed Mallee Wind Farm (or "the **Project**"). This is a live document which is to be updated and revised throughout the life of the Project. Spark Renewables Pty Limited ("**Spark Renewables**" or "the **Proponent**") is the proponent for the Project.

Engagement Objectives

Spark Renewables aims to obtain and maintaining community acceptance (the social licence to operate) of the Project by ongoing community engagement and achieving objectives of this CSEP:

- Identify effective methods to inform the community of Project information and updates, which foster trust and build positive long-term relationships with community stakeholders.
- Ensure delivery of an honest, innovative, flexible and transparent community engagement process.
- Identify ways to facilitate engagement and collaborate with relevant community organisations, including for input into the social and environmental assessment of the Project and ongoing project design and planning including the development of community benefit sharing programs.
- Ensure the broader community and stakeholders are kept informed about benefits, potential impacts, and activities of the Project.
- Identify effective avenues for community members to communicate any concerns and provide valuable feedback with Project personnel.
- Ensure means of community involvement are known and distributed consistently.
- Ensure the commitments made to the community during the Project development stage are being met.

These objectives are in line with the NSW Department's *Undertaking Engagement – Guidance for State Significant Projects (2021)* community participation objectives for engaging on State Significant Development projects (refer to Figure 1).

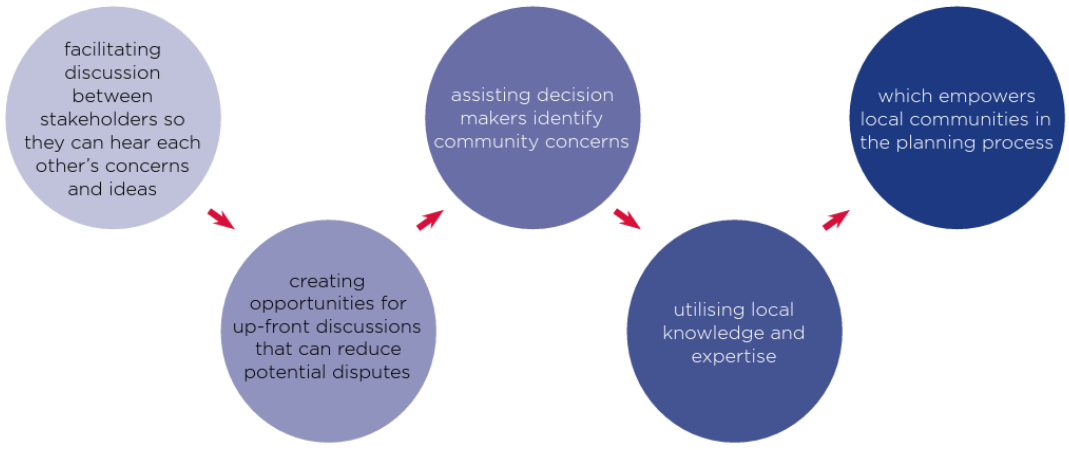


Figure 1 Community Participation Objectives (Community Participation Plan (DPE, 2019)

Governance

The Project is considered a State Significant Development and will require development consent under the NSW Environmental Planning and Assessment Act (EP&A Act). The development application is to be accompanied by a detailed

Environmental Impact Statement (EIS), which will include comprehensive assessments identifying the impacts of the Project and how to best manage these impacts.

A detailed Social Impact Assessment (SIA) will also be prepared as part of the EIS. The SIA will include a comprehensive community engagement program, which is incorporated within this CSEP, and be prepared following the NSW Department of Planning and Environment (DPE or 'the Department') *Social Impact Assessment Guideline for State Significant Projects (2023)* and 'Undertaking Engagement – Guidance for State Significant Projects' (2022). This guideline notes that respectful, inclusive, and meaningful engagement is a fundamental part of project planning and development. Engagement with affected communities and stakeholders provides first-hand insight into what people value and how they expect a project to affect them.

The Project may also require approval under the federal Environment Protection Biodiversity Conservation Act 1999 (EPBC Act).

The community will also have formal opportunities to be engaged on the project in line with the Department's Community Participation Plan (2019).

Conduct

Spark Renewables is committed to engaging respectfully and transparently with the community and stakeholders throughout the lifetime of the Project. Spark Renewables is committed to being sensitive to environmental, social and cultural values and to make a positive benefit-sharing contribution to the regions in which it operates.

As a member of the industry peak body, Clean Energy Council (CEC), Spark Renewables is signatory to the voluntary set of commitments outlined in the Community Engagement Best Practice Charter for Renewable Energy Developments (CEC, 2018). When developing, constructing and operating projects, Spark Renewables shall:

1. Engage respectfully with the local community, including Traditional Owners of the land, to seek their views and input before submitting a development application and finalising the design of the project.
2. Provide timely information and be accessible and responsive in addressing the local community's feedback and concerns throughout the life of the project.
3. Be sensitive to areas of high biodiversity, cultural and landscape value in the design and operation of projects.
4. Minimise the impacts on highly productive agricultural land and explore opportunities to integrate agricultural production.
5. Consult the community on the potential visual, noise, traffic and other impacts of the project, and on the mitigation options.
6. Support the local economy by providing local employment, training and procurement opportunities.
7. Offer communities the opportunity to share in the benefits of the Project, and consult them on the options available, including the relevant governance arrangements.
8. Commit to using the Project to support educational and tourism opportunities where appropriate.
9. Demonstrate responsible land stewardship over the life of the project and welcome opportunities to enhance the ecological, cultural and/or agricultural value of the land.
10. During the life of the project recycle waste materials where feasible, and commit to responsible decommissioning or refurbishment/repowering of the site at the end of the Project's life.

Industry practice

The document follows the Clean Energy Council's *Community Engagement Guideline (2018)*, which includes the engagement framework based on the public participation spectrum of the International Association for Public Participation (IAP2).

The spectrum outlines activities beyond informing and consultation that assist with achieving community support. The spectrum is used to communicate performance of community engagement, and shall inform the level of participation that stakeholders can have in the Project. The greater the impact of the Project on a stakeholder, the greater their input into the decision-making participation should be. There are five levels of participation that vary based on the stakeholder's involvement in the Project, where individuals or representatives of organisations can:

Be informed – they have access to the information about the Project and potential impacts on them.

Be consulted – they can provide suggestions and feedback about the Project.

Be involved – their material concerns relating to the Project are directly addressed in risk mitigation plan.

Collaborate – their advice and suggested alternatives are incorporated in the Project to the maximum extent possible.

Be empowered – they make the final decision that will be implemented in the Project.

Spark Renewables will strive to implement a diverse range of engagement activities that involve multiple levels of community and stakeholder participation.

Planning Process

There are eight phases within the planning process. Community consultation outcomes during this process will inform the ongoing project design. Specifically, during preparation of the Scoping Report and Social Impact Assessment, the preparation and exhibition of the EIS and, if approved, during construction and operation of the Project.

Figure 2 Planning and assessment process for state significant development in NSW

Roles and responsibilities

Spark Renewables has ultimate responsibility and accountability to ensure that the Project is developed, designed, built, operated, upgraded and decommissioned in accordance with the Project's Development Consent. Spark Renewables has engaged Umwelt Environmental and Social Consultants (or "**Umwelt**") to develop the EIS and SIA for the project, and thus, Umwelt also have responsibilities related to the implementation of the stakeholder engagement program in line with this CSEP.

Table 1 Key roles related to communication and stakeholder engagement

Organisation	Role	Responsibilities and authorities
Spark Renewables	Senior Development Manager	• Overall management of community engagement and public relations during development. • Face-to-face consultation, meetings, phone calls and correspondence with community members and stakeholders. • Lead public information drop-in sessions. • Ensuring that community raised issues are responded to quickly and mitigated where possible. • Local media interviews.
	Development Manager	• Assistance with research and management of stakeholder database.
	Senior Development Engineer	• Provide figures and maps to assist with stakeholder communication.
	Communications Manager	• Maintenance and updating of the Project website. • Prepare and distribute public information materials (e.g. newsletters/information sheet and media releases).
	Head of Development	• Provide oversight to community engagement activities.
	Head of Legal and Community	• Provide community engagement support and compliance oversight on engagement activities.
	Head of Renewables	• Overall accountability for obtaining and maintaining the social licence to operate, and reputation. • High profile/national media interviews.
Environmental Consultants (Umwelt)	Environmental assessment	• Provide technical information to assist Spark Renewables to prepare communication collateral, project updates, respond to stakeholder enquiries and review key messages as appropriate to ensure technical requirements are met. • Assistance with figures and maps to assist with stakeholder communication and engagement.
Social Impact Consultants (Umwelt)	Social impact assessment and associated engagement	• Assist Spark Renewables with the preparation and delivery of engagement materials • Collaborate with Spark Renewables to deliver targeted engagement to support the development and delivery of a social impact assessment and associated inputs.

Project overview

Key facts

Key facts of the Project as at July 2023 are provided below (Table 2).

Table 2 Project key facts summary (July 2023)

Proponent	Spark Renewables is a developer, and long-term owner and operator of renewable energy assets. Our operational portfolio includes the 100 MW Bomen Solar Farm near Wagga Wagga, which commenced operations in 2020, alongside a diversified portfolio of wind, solar and storage developments, in excess of 3 gigawatts (GW). Spark Renewables is owned by the Spark Infrastructure Group, an owner of critical energy assets, including generation, transmission, and distribution infrastructure across Australia.
Project generation capacity	Up to 1,000 megawatts (MW) with battery storage to provide firming.
Annual power	Up to 450,000 houses powered annually[1] and offsetting up to 2 million tonnes of CO_2 emissions annually[2].
Grid connection	The Project will connect to the National Electricity Market via transmission infrastructure upgraded as part of the recently approved development 'Project Energy Connect', i.e. the 330 kilovolt (kV) Buronga Substation (going through an expansion and upgrade as part of EnergyConnect) connecting into the EnergyConnect transmission line.
Community	Establishment of a community benefit sharing program to support the local community.
Contact & receiving information	Project website www.malleewindfarm.com Project email info@malleewindfarm.com Phone 1300 271 419

The Mallee Wind Farm is a proposed renewable energy project, located approximately 16 km to the north-east of Buronga in the Wentworth Shire Local Government Area of NSW (refer to Figure 3). The project site is within the South-West Renewable Energy Zone (REZ) in New South Wales.

The proposed Project site has been chosen as it has a number of highly favourable factors, including a strong wind resource, good location within the South-West REZ, and the very low density of housing within 10 km.

The proposed site features a flat terrain, meaning that complex earthworks would be avoided during construction, and the site can continue to be used for cropping purposes, with turbines taking up less than two percent of the proposed project site.

The Project is expected to offer one of the lowest build costs per megawatt in NSW, which is vital to the provision of abundant, reliable and affordable renewable energy.

[1] Based on household consumption of 6700kWh/year.
[2] National Greenhouse Accounts Factors (DCCEEW, 2021).

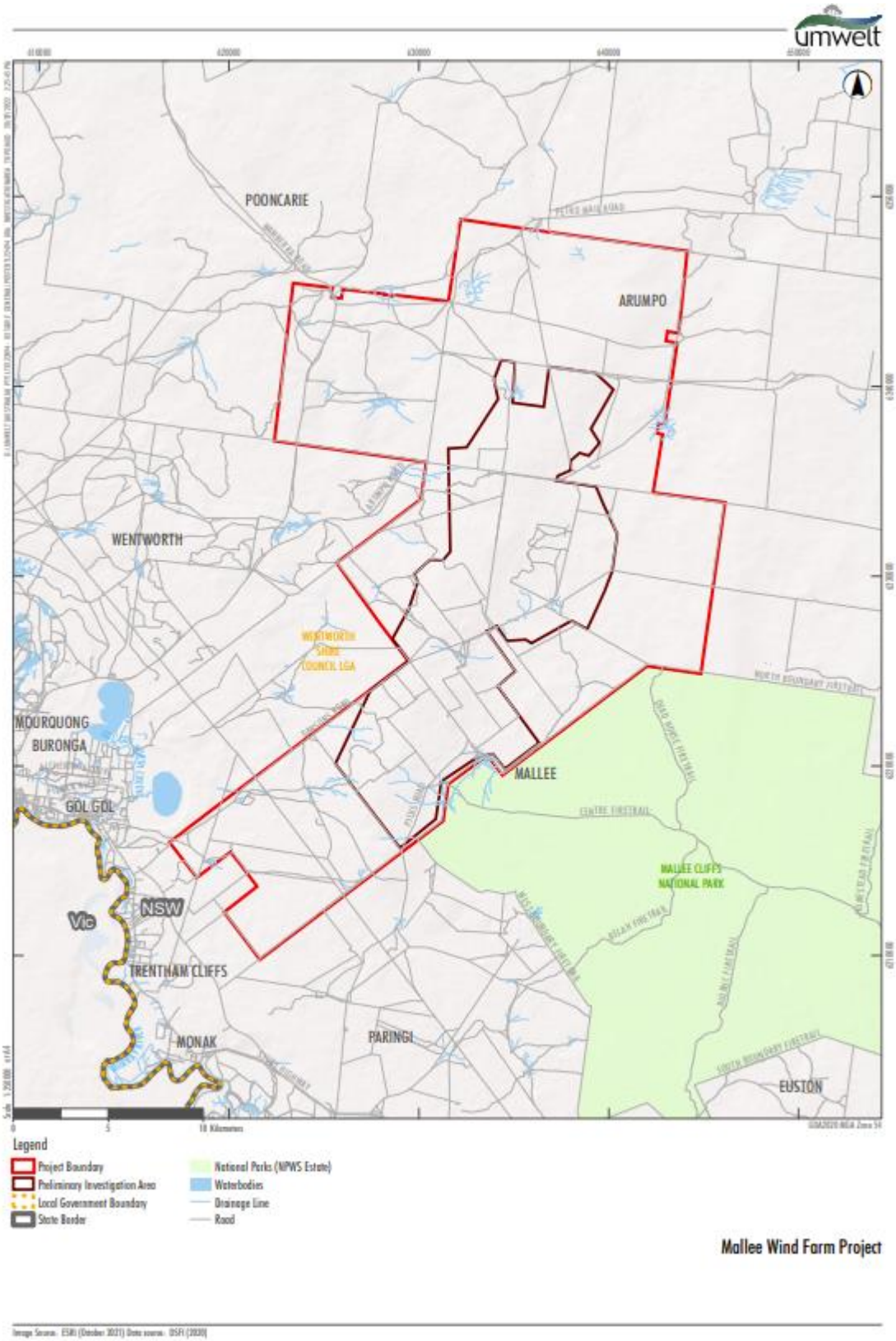


Figure 3 The Project site

The Project is strategically located within the SW REZ (shown below in Figure 4) to take advantage of the planned upgrades as part of 'EnergyConnect Project' to the electricity transmission network. The Project would be well-positioned to provide additional network services within the SW REZ using two batteries, if Spark Renewables' Dinawan Energy Hub located at the other side of the SW REZ commences operations.

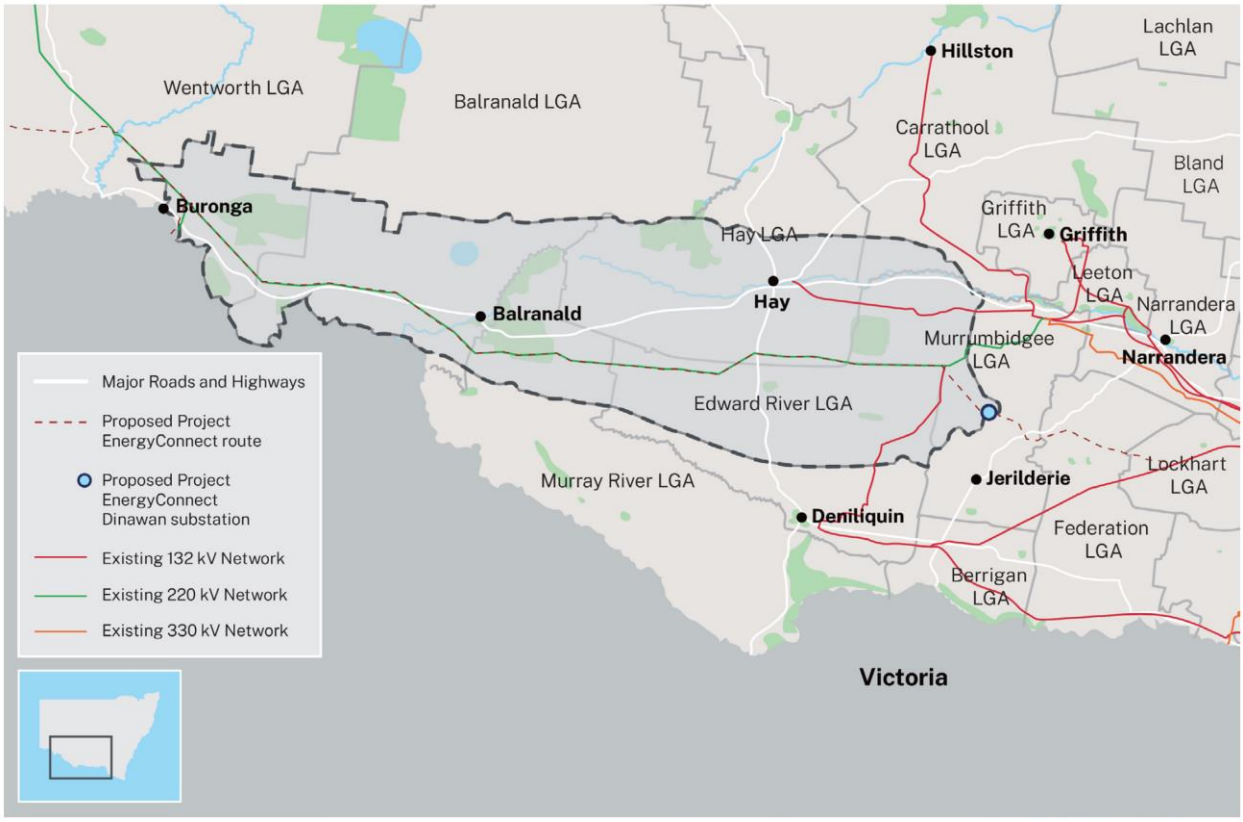


Figure 4 Indicative location of South-West Renewable Energy Zone (EnergyCo, November 2022)

Community Context

The site sits within the boundaries of the Dareton Local Aboriginal Land Council (LALC), and the Traditional Owners of the land are the Barkindji People and is on land that is subject to a Native Title Determination by the Barkandji Traditional Owners (Tribunal No. NCD2015/001) that extinguished Native Title.

The Project site and proximal area is predominantly rural with the nearest town being Buronga, NSW, which borders the state of Victoria within Wentworth Shire. The proposal site is located off Arumpo Road approximately 25 km north-east of the city of Mildura. The proposed Project site borders the Mallee Cliffs National Park and is in proximity to the Murray River.

Wentworth Shire LGA is situated within the Riverina region of NSW. The LGA has a population of 7,453 and covers an area of 26,269km^2 (ABS, 2021). The population density of the LGA is 2 residents per km^2 (Office of Local Government, 2022), and has a higher-than-average median age (43). The southern boundary of the LGA has the greatest population density in the townships of Buronga, Wentworth, Dareton and Gol Gol (Wentworth Shire Council, 2017).

At the 2021 Census, Buronga's population was 1,252 people, with the community largely based on viticulture, horticulture and light industry (Wentworth Shire Council, n.d.). Wentworth Shire Council has a goal of working to enhance the natural and physical assets of the LGA by planning for, and developing the right assets and infrastructure, as well climate change (Wentworth Shire Council, 2017).

Bordering Buronga to the south of the Murray River is Mildura. Located in Victoria, and with a population of 34,565, Mildura is the closest regional city to the Project site, approximately 20 minutes to the south. Mildura is a major regional and agricultural service centre of the Murray River catchment, with the LGA supplying a large proportion of Australia's grapes, citrus fruits and olives (Aussie Towns, 2021). Mildura is an important hub for the region, providing delivery transport, warehousing, health, education and professional services to NSW and South Australia (Regional Development Victoria, 2021).

To inform community engagement planning, a number of key community characteristics and subsequent considerations relevant to the Mildura and Wentworth LGAs have been identified in Table 3.

Table 3 List of stakeholders and their issue, interest or concerns

Characteristics Wentworth LGA (NSW)	Characteristics Mildura LGA (VIC)	Consideration for engagement
Median age 43	Median age 40	A higher than state average median age suggests more personal face-to-face mechanisms may be more suitable to facilitate engagement e.g., telephone surveys, personal meetings. Likely to have an interest in the Project.
Lower rates of internet access than State average (ABS, 2016)[3]	Lower rates of internet access than State average (ABS, 2016)	Communities with low rates of internet access require a diverse range of offline engagement methods, including media releases, radio, newspapers, over the phone, and in person engagement. Phone calls are more suitable than emails for engagement.
72.7% of housing owned outright/with mortgage compared to 64.0% in NSW	65.4% of housing owned outright/with mortgage	Landholders are likely to be more invested in outcomes of the Project/concerned about the impacts on their property and livelihoods
5.2% of households speak a language other than English in Wentworth, compared to 29.5% across NSW	13.7% of households speak a language other than English in Mildura	Low proportion of Culturally and Linguistically Diverse communities suggests it is unlikely to require translation of materials into other languages.
The site is located near or within the newly identified South-West REZ		Given the significant increase in proposed projects in the REZ, there is a chance of consultation fatigue, as well as high levels of interest in renewable energy development projects.
Higher rates of volunteering than the State average	Slightly higher rates of volunteering than the State average	Volunteering rates are used as an indicator of how well connected and cohesive a community is. High rates suggest that there may be a fast spread of information throughout the community and investment in the sense of community in the local area.
58.6% of residents in Wentworth lived in the same residential address for the last 5 years	54.1% of residents in Mildura lived in the same residential address for the last 5 years	Low household mobility rates are indicators of how established and invested people are in their local community.
Wentworth has high unemployment, 5.7% in March 2022 (compared to the State average of 4.1%). In 2021, the largest industries of employment in	Mildura has low unemployment, 3.6% in March 2022 (compared to the State average of 4.3%).	Opportunities for the Project to provide employment and/or contractor/supplier opportunities may be limited due to the existing skills profile and a limited labour pool.

[3] Data for internet access was not collected in the 2021 census

Wentworth were Sheep Farming (specialised) (3.3%), Primary Education (3.0%) and Hospitals (2.9%).	In 2021, the largest industries of employment in Mildura were Hospitals (3.8%%), Supermarket and Grocery Stores (3.2%) and Grape Growing (3.1%)	Collaboration with local Council, employment services and business groups will be key to maximise opportunities.

Potential concerns

In recent times, proposed renewable energy projects across NSW have had diverse responses from local communities in relation to their perceived environmental and social impacts. Following a preliminary review of submission reports and other publicly available documentation on nearby renewable energy projects within the region, and through the Phase 1 consultation program to inform the Social Impact Scoping Report, we understand the following key local issues to be of importance in the planning and potential development of the Project:

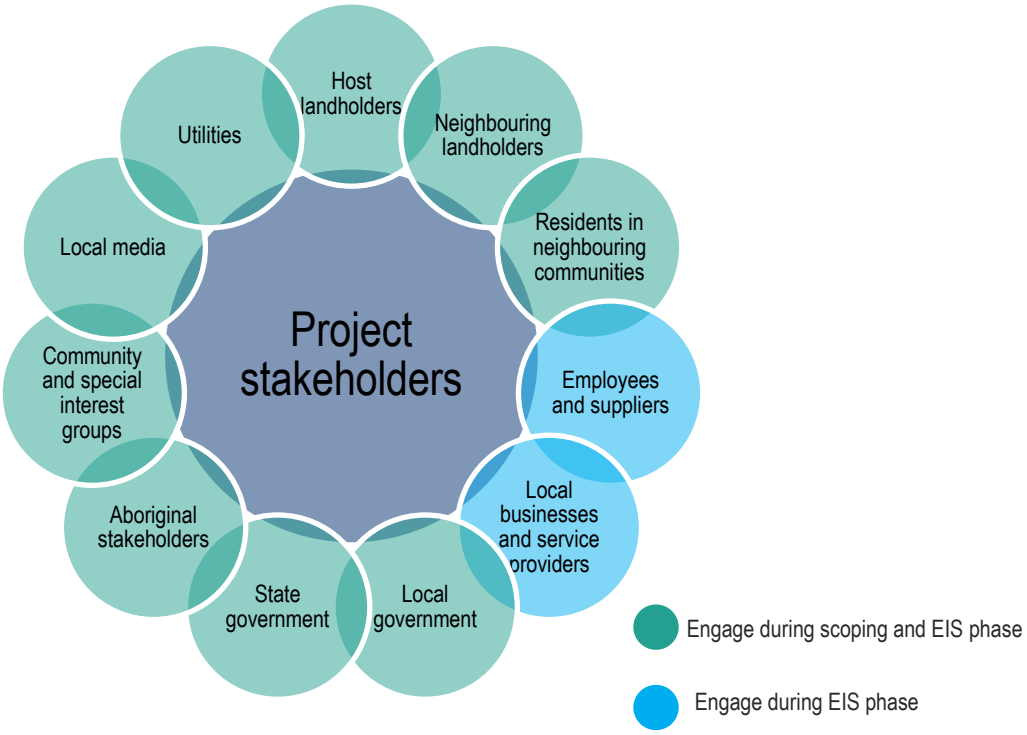
- Concern relating to the number of concurrent proposed projects in response to the designation of the SW REZ and resulting cumulative impacts on service provision and township infrastructure, and sense of community from incoming construction workforces.
- Turbine noise generated during operation affecting social amenity
- Interaction with the Mallee Cliffs National Park and impacts on access, visual amenity, ecosystems, and wildlife.
- Visual impact on social amenity due to view lines.
- Concern regarding fire risk associated with the operation of the turbines
- Impact on accessibility and use of water
- Land use conflict due to renewables development in productive agricultural areas, with land primarily used for grazing.
- A perception that the economic benefit of the project won't be experienced locally.
- Perceived public health and safety concerns of neighbouring residents associated with Electric and Magnetic Fields (EMFs), radiation, hazardous materials, sleep disturbance from noise impacts and heat generation and flow on effects on livestock e.g., cattle and sheep.
- Concern regarding the management of project land and the potential spread of noxious weeds to surrounding properties.

There are a number of key aspects of the Project that would benefit from the input from community members and key stakeholders, namely:

- Preferred methods and tools for ongoing engagement with the community and key stakeholders
- Identification of potential Project impacts to inform investigations for the EIS and SIA
- Suggestions for mitigation and enhancement measures to manage the Project's potential impacts
- Design of the wind farm and BESS
- Community and stakeholder benefit-sharing programs and initiatives.

Stakeholders

Spark Renewables will consult widely as part of the planning and EIS/SIA for the Project, and ongoing throughout the construction, operation and decommissioning of the Project. Stakeholder groups include but are not limited to:



The contact details of individual stakeholders and organisations will be kept securely by Spark Renewables in a database (Simply Stakeholders).

Engagement tools and methods

A range of online, in-person and offline tools and methods may be used to communicate with and engage the community and other stakeholders during the Project. Face-to-face activities will be subject to any public health orders in effect at the scheduled time for delivery. Tools and methods are open to suggestion by the community and other stakeholders and may be modified in response to stakeholder feedback.

All engagement undertaken will be stored in Simply Stakeholders, an online secure platform to record engagement with Project stakeholders and keep track of commitments made to or suggestions or concerns raised.

Table 4 Tools for engagement and indicative participation level

Tool/Method	Detail	Participation level
Advertising	Advertising in local newspapers and radio stations to advise of upcoming consultation opportunities and provide Project updates.	Inform
Briefings	Formal letters, phone calls, and face-to-face or virtual meetings with key stakeholders including MPs, councillors and council staff to provide updates on the Project.	Inform
Community contact cards	Business card with project contact details provided to specialists and contractors to give to community stakeholders if approached.	Inform
Community Newsletters	Project information distributed by email or in hard copy to registered stakeholders.	Inform
Drop-in sessions	Multi-hour time periods when stakeholders can drop in to speak to the Project team and experts, view documents and plans and ask questions.	Inform Consult

Tool/Method	Detail	Participation level
Email inbox	A dedicated Project email address (info@malleewindfarm.com) for managing community and stakeholder correspondence.	Inform
Frequently Asked Questions (FAQs)	A generalised brochure (both online, sent to emails, and handed out at information sessions) responding to common questions from the community regarding project impacts, benefits, mitigation efforts, and technology.	Inform
Letterbox drops or unaddressed mail	Unaddressed collateral containing information about the Project delivered by the Project team or Australia Post.	Inform
Letters	Addressed mail containing information, clarification, response or request to a particular household, business or individual.	Inform
Media releases/statements	Proactive or responsive media announcements distributed to the media outlets and other key stakeholders to provide updates on the development application process, reaching Project milestones, address concerns, and clarify information.	Inform
Meetings	One-on-one or small group meetings to discuss Project issues and concerns in more detail. Meetings and discussions will be recorded in Simply Stakeholders.	Inform Consult Involve Collaborate
Phone line	A dedicated number for stakeholders to contact Spark Renewables. The number is 1300 271 419.	Inform Consult
Photography	Photos, composites, concept and artist imagery can help illustrate processes and make technical information more accessible.	Inform
Pop-up stalls	An engagement booth/stall set up at community events and centres to engage and consult with stakeholders.	Inform Consult
Posters	Printed material visualising Project information such as location of the proposed site, background information of the proponent, technology overview, approximate timeline, steps in the planning process, milestones, potential studies required to address impacts to the environment, construction activities, benefit-sharing options and mitigation of impacts on the community.	Inform
Presentation	A presentation about the Project delivered to a group of interested persons, club or committee on request or by invitation, provided in digital and written form.	Inform
Project overview	A high-level summary of the Project that includes the Project scope, location (including regional and locality maps), the strategic context and rationale for the Project, the Project's potential impacts and benefits, contact information for the Project team and information on the consultation process.	Inform
Signage	Identification, directional, informational, and regulatory signs, boards and banners used to inform and direct people around the Project site.	Inform
Surveys	Online or offline surveys to obtain input and feedback on Project decision-making.	Consult
Website	A website (www.malleewindfarm.com) dedicated to the Project including a description and overview of the Project, development application process, company information, responses to key concerns, risk management plans, maps, media releases and contact information.	Inform
Workshops	A structured method working with groups of stakeholders or key stakeholders to identify and suggest solutions for Project issues and concerns.	Inform Consult Involve

Delivery plans

Spark Renewables has a high-level framework for the delivery of communication and engagement throughout the planning and assessment process for each stage of the Project in line with the SIA Guideline (the Department, 2023) and Community Engagement guideline (the Department, 2022). However, as the Project evolves, and based on stakeholder and community feedback, the delivery plans for the Project and/or stages may be updated. Therefore, all dates in the delivery plans are indicative and subject to change.

Table 5 Delivery plans during phases of the planning process

Phase	Approach
Scoping phase: *Delivery plan for community engagement during the scoping phase*	Spark Renewables understands the vital role the Department plays in the SSD planning and approvals process and understands, that as part of the Application for SEARs it will: • consult with relevant government agencies and councils when preparing projects • publish the SEARs on the major projects website and notify the relevant councils • publish the SEARs on the major projects website (once issued).
EIS development phase: *Delivery plan from receipt of SEARs to lodgement of the EIS*	Engagement activities during the development of the EIS have been designed in line with the requirements in the SIA Guideline (the Department, 2023) and Community Engagement Guideline (the Department, 2022). Issues raised during engagement will inform the social and environmental assessment and the preparation of the EIS. Spark Renewables will continue with engagement with the community, through various methods and collection of feedback, to understand people's perceived impacts, to appropriately manage identified social impacts, and to develop an appropriate community benefit-sharing program suitable to the local community.
EIS exhibition phase: *Delivery plan from receipt of SEARs to lodgement of the EIS*	This engagement would build on the communication and stakeholder relationships formed during the Scoping and EIS development phases and would continue to provide information about the Project and seek feedback from the community and stakeholders on the impacts and proposed mitigation measures in the EIS. The EIS will be placed on public exhibition for a period of at least 28 days, or as per any requirements outlined in the SEARs, and may be extended on request and with the agreement of Spark Renewables. During the exhibition period, any stakeholder may make a written submission on the EIS and lodge this with the Department through the NSW Government Major Projects website. The formal feedback process in this phase will be managed by the Department in line with their Community Participation Plan (2019).
Engagement following exhibition of the EIS	Following the exhibition period, Spark Renewables will respond to submissions received during exhibition of the EIS. Once the EIS has been assessed and a decision determined for the Project, Spark Renewables will seek clarification from the Department about any aspects of the approval that are unclear. Post approval, Spark will continue to engage with the community, relevant council and government agencies during the pre-construction, construction, operation and decommissioning of the Project (and/or rehabilitation of the site) in line with the conditions of approval. Spark Renewables would develop and lead a detailed construction community engagement program that would ensure it responds to community and stakeholder expectations on ongoing involvement. Once the Project is operational, Spark Renewables will continue to maintain a high level of engagement with the community, and regular updates to the Project website and in local media. Spark Renewables will continue to be the single point of contact for the Project through all stages of the Project's development.

Timeline

It is anticipated that the EIS and SIA for the project will be lodged in 2023 and, pending project approval, construction would commence in 2024 (refer to Figure 3).

Figure 3 Indicative milestones for the Project

Communication management protocols

Communication management system

Spark Renewables will use Simply Stakeholders to securely record details of all contact and correspondence with stakeholders and the community. Simply Stakeholders will be updated to:

- Record all contacts with stakeholders and the community, and the actions resulting from these contacts.
- Track the progress and closeout of enquiries and complaints.
- Identify trending issues and opportunities.
- Enable the implementation of mitigation strategies.
- Maintain accurate contact details of stakeholders.
- Prepare regular reports for Spark Renewables on communication and engagement activities.

Complaints and enquiries

An enquiry is defined as a question or request for information. A complaint is defined as a statement that something is unsatisfactory or unacceptable. Complaints and enquiries may be received via phone, email, dedicated social media channels, post or in person.

Spark Renewables will acknowledge and/or respond to complaints about the Project:

- Within a reasonable timeframe from the time of a complaint, aiming for no later than end of the following business day.
- Record the complaint, all contact with the complainant and its resolution in Simply Stakeholders.

Spark Renewables will acknowledge and/or respond to enquiries about the Project:

- Within a reasonable timeframe from the time of an enquiry, aiming for no later than withing three business days.
- Provide a response to the enquiry, depending on the input required, within 5 business days for emails and phone calls or ten business days for letters.
- Record the enquiry, all contact with the enquirer and its resolution in Simply Stakeholders.

Reporting, evaluation and monitoring

Reporting

Progress against this CSEP will be reported to Spark Renewables, the Department and the community and other stakeholders via the Spark Renewables website, regular electronic and postal Project updates (newsletters and notifications), in the Scoping Report, in the SIA and EIS and by request.

Monitoring

Regular monitoring of engagement and communication activities ensures the delivery plan is helping to deliver on the engagement outcomes.

Monitoring can take many forms and includes pulse checks and environmental scanning to track community and stakeholder sentiment. This can be by way of media and social media monitoring, feedback received through formal and informal channels, feedback received through the establishment of a Community Consultative Committee (CCC) and regular analysis of complaints and enquiries received.

Evaluation

Community and other stakeholder engagement will be evaluated against the engagement outcomes identified during Scoping stage and referenced in the SEARs. Spark Renewables shall identify measures and evidence of engagement success, through implementation of techniques to meet the engagement outcomes. The evaluation shall be reported similar to the example table below.

Table 12 Example of evaluation methodology

Engagement outcome	Method used to achieve the outcome	Results to measure the outcome	Evaluating the success of the outcome
Work with the community and other stakeholders to understand their values and opinions of the Project and the opportunities to reflect these values and opinions in decision-making.	Community drop-in sessions to identify the values and opinions of the community and other stakeholders and the perceived impacts of the Project on these. Phone or online surveys to establish a baseline for awareness, sentiment and levels of acceptance towards the Project and renewables in general.	Number of people attending drop-in sessions. Number of people surveyed. People who attended or surveyed the drop-in sessions identified their values and opinions about the Project.	Responses to address the Project's impact on the values and opinions of the community can be determined (e.g. the community has concerns about visual amenity). Mitigation measures to address the Project's impact on the values and opinions of the community and other stakeholders can be finalised (e.g. landscaping options are negotiated with the community). Future engagement to address issues identified can be planned (e.g. complaints protocol established). Ongoing engagement to provide updates on decision-making can be established (e.g. regular project updates and photography to show change over time).

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Appendix A: Engagement throughout the Planning Process

Scoping Phase: Record of delivery from Project announcement to lodgement of Scoping Report

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Meeting	the Department	Pre-scoping meeting with the Department to present the Project timeline	Dec 2021	Organise and attend meeting with the Department	Spark Renewables
Briefing letters	Council State MP Federal MP NSW Energy Minister AEMO CEO	To provide a Project overview, process and timeline.	Aug 2022	Develop and distribute briefing letters	Spark Renewables
Meetings, emails, phone calls	Host Landholders	To negotiate land access agreements for the Project site and gain feedback to inform the SIA.	Ongoing	Identify, undertake and record landholder engagement	Spark Renewables
Project website	All	To provide a comprehensive online portal for Spark Renewables and its projects. The website will include information and channels to interact with community stakeholders. The website will include FAQs, maps, plans, documents, CCC minutes, videos, photos and schematics, consultation events and announcements, a Project timeline and information about Spark Renewables.	Aug 2022	Review website materials and content	Umwelt
			Aug 2022	Develop and update website	Spark Renewables
Briefing meetings	Wentworth Shire Council staff Mildura Council staff Councillors State MP Federal MP Councillors	To seek input into the Scoping Report, specifically the identification of perceived Project impacts.	Aug 2022	Send invitation to stakeholders regarding a briefing meeting	Spark Renewables
			Aug and Sept 2022	Organise and attend briefing meeting	Umwelt/Spark Renewables
Information sheet/ newsletter	Broader community	To provide high level project and proponent information, introducing the broader community to Spark Renewables and the Project. The information	Aug 2022	Develop information sheet/newsletter	Umwelt/Spark Renewables

		sheet/newsletter will also outline upcoming engagement and communication channels.	Aug 2022	Organise printing and distribution	Umwelt
Community survey	Broader community	To provide opportunity for the community to provide feedback, for Umwelt to understand project acceptance and scope social impacts.	July 2022	Review draft community survey	Umwelt
			Aug 2022	Finalise and upload community survey	Spark Renewables
Key Stakeholder interviews	Community groups Environmental groups Service providers Business representatives Aboriginal groups Council	Gather information to inform the scoping and assessment of social impacts. It will also provide the SIA team with detailed and specific information about the needs, desires and impacts on stakeholders related to the Project.	July 2022	Develop interview guides	Umwelt
			Aug 2022	Review interview guides	Spark Renewables
			Aug & Sept 2022	Set up key stakeholder interviews and conduct	Umwelt/Spark Renewables
Newspaper/ Radio advertising/ Media interviews	Broader community	To inform the community about the Project and upcoming community events	Aug 2022	Develop and organise newspaper and radio advertising Organise and prepare for media interview	Umwelt/Spark Renewables
Information session	Broader community	Face-to-face engagement with the community, providing opportunity for community members to meet the project team and ask questions relating to the Project and/or how they may be impacted or benefited. Opportunity for Umwelt to take detailed notes to better inform the team's understanding of social impacts and benefits.	Aug 2022	Organise and advertise info session	Umwelt
			Aug 2022	Attend information session	Umwelt/Spark Renewables
Scoping Meeting and site tour, if requested	the Department Referral agencies	To provide an opportunity for agencies to tour the site and speak to the Project team to help them provide input into the SEARs.	If requested	Organise and attend scoping meeting	Spark Renewables

Development of the EIS: delivery plan from receipt of SEARs to lodgement of the EIS

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Community newsletter / information sheet #3	Broader Community	To provide a Project update and share notes and feedback received from community received during the scoping phase. To advise the any material changes to the project or any other project-related news To provide the status of studies to be undertaken for preparation of the EIS Advise details of community workshop and the information stall	August 2023	Develop information sheet/newsletter Organise printing and distribution	Umwelt/Spark Renewables
Briefing letters	Wentworth Shire Council Mildura Council State MP Federal MP Community and interest groups	To advise key stakeholders about the SEARs, upcoming consultation opportunities and offer a meeting To discuss SEARs for both stages and upcoming consultation opportunities	August 2023	Develop and distribute briefing letters	Spark Renewables
Meetings, emails, phone calls	Host Landholders	To provide continued engagement to landholders within and adjacent to the Project site. Gather insights for the SIA regarding potential project impacts and mitigation/ enhancement measures.	August 2023	Identify, undertake and record landholder engagement	Spark Renewables
Project website	All	Update project website to include information about the SEARs, EIS process, next steps and upcoming community engagement. The website will include FAQs, maps, plans, documents, CCC minutes, videos, photos and schematics.	August 2023	Update website	Umwelt/Spark Renewables

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Briefing meetings	Wentworth Shire Council staff Mildura Council staff Councillors State MP Federal MP	Discuss Project updates, planning pathways and engagement opportunities. Gather insights for the SIA regarding potential project impacts and mitigation/ enhancement measures.	August 2023	Send invitation to stakeholders regarding a briefing meeting Organise and attend briefing meeting	Umwelt/Spark Renewables
Online community survey	Broader community	To provide opportunity for the community to provide feedback, for Umwelt to understand project acceptance and scope social impacts. Validate impacts from scoping phase, understand potential mitigation and enhancement measures.	August/ September 2023	Review draft community survey Finalise and upload community survey	Umwelt/Spark Renewables
Key Stakeholder interviews	Council Community groups Environmental groups Service providers Business representatives Aboriginal groups	Gather information to inform the assessment of social impacts and discuss potential mitigation and enhancement measures. It will also provide the SIA team with detailed and specific information about the needs, desires and impacts on stakeholders related to the Project.	August/ September 2023	Develop interview guides, set up key stakeholder interviews and conduct	Umwelt/Spark Renewables
Newspaper/ Radio advertising/ Media interviews	Broader community	To inform the community about the Project and upcoming community events	August/ September 2023	Develop and organise newspaper and radio advertising Organise and prepare for media interview	Umwelt/Spark Renewables
Information session	Broader community	Face-to-face engagement with the community, providing opportunity for community members to meet the project team and ask questions relating to the Project and/or how they may be impacted or benefited. To present the draft findings of EIS & SIA to the community with Q&A	September 2023	Organise, promote, and attend information session	Umwelt/Spark Renewables

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Community workshop to discuss benefit-sharing planning	Broader community	To understand potential stakeholders, initiatives, projects and events the community want prioritised in funding To design the community benefit sharing strategy in line with community needs and aspirations	September 2023	Organise, promote, and attend workshop	Umwelt/Spark Renewables
Community newsletter / information sheet #4	Broader Community	To provide a Project update and present the draft findings of EIS & SIA. To inform the community of the EIS exhibition process. To communicate key changes incorporated to the planning application as a result of community consultation To provide an accessible, plain English summary document for community consumption during exhibition of the EISs To educate the community about the Project, possible impacts and benefits during exhibition of the EIS. If executed, to provide information about upcoming phone survey	Post lodgement of EIS	Develop information sheet/newsletter Organise printing and distribution	Umwelt/Spark Renewables

Exhibition of the EIS: delivery plan from receipt of SEARs to lodgement of the EIS

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Briefing letters	Wentworth Shire Council Mildura Council State MP Federal MP Community and interest groups Industry Traditional Owners	To advise key stakeholders about public exhibition process, consultation opportunities and offer a meeting.	First week of public exhibition	Develop briefing letters Distribute briefing letters	Spark Renewables
Project website	All	Update to the project website to advise the community about public exhibition, opportunities to speak to the Project team and how to make a submission.	First week of public exhibition	Update website	Umwelt/Spark Renewables
Media release	All	To advise the community about public exhibition, opportunities to speak to the Project team and how to make a submission.	First week of public exhibition	Develop media release	Umwelt/Spark Renewables
Umwelt/Spark Renewables4th Information sheet/ newsletter	Broader community	To advise the community about public exhibition, opportunities to speak to the Project team and how to make a submission.	First week of public exhibition	Develop info sheet/ newsletter Design info sheet/newsletter Organise printing and distribution of info sheet/ newsletter	Umwelt/Spark Renewables
Meetings (face-to-face, phone or virtual)/ expert presentations	Wentworth Shire Council staff Mildura Council staff Councillors State MP Federal MP Councillors Community groups Environmental groups Traditional Owners	To present an overview of the EIS, answer questions and inform groups how to make a formal submission	First week of public exhibition	Organise and conduct meetings/ expert presentations as requested	Umwelt/Spark Renewables

Activity	Targeted stakeholder group	Objectives	Timing	Tasks	Responsibility
Information session	Broader community	To provide an opportunity for residents to speak to the Project team about the EIS, view information, ask questions and find out how to make a formal submission.	TBC	Organise, promote and attend information session	Umwelt/Spark Renewables

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