Appendix T

Mine development social impact assessment

REGIS RESOURCES LTD



MCPHILLAMYS GOLD PROJECT

SOCIAL IMPACT ASSESSMENT

July 2019

Hansen Bailey

ENVIRONMENTAL CONSULTANTS

McPHILLAMYS GOLD PROJECT

SOCIAL IMPACT ASSESSMENT

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August 2019

For:

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DECLARATION

This report has been prepared by Hansen Bailey Environmental Consultants Principal Social Planner Bronwyn Pressland. Bronwyn holds a Bachelor of the Built Environment (Urban and Regional Planning) and a Master of Environmental Management. Bronwyn has more than 20 years' professional experience, including 12 years with Hansen Bailey. Bronwyn has provided community engagement and social impact assessment (SIA) and management services for a diverse range of major projects in New South Wales (NSW), Queensland and the Northern Territory. For the past 12 years Bronwyn has worked almost exclusively on resource development projects, including coal, bauxite and manganese. A copy of Bronwyn's curriculum vitae is provided in Appendix A.

The SIA component of the Environmental Impact Statement (EIS) contains all information relevant to the SIA for the McPhillamys Gold Project. The information provided is not of a false or misleading nature. The assessment was completed between February 2018 and July 2019. Hansen Bailey was engaged by LFB Resources NL, a 100% wholly owned subsidiary of Regis Resources Limited (Regis), as an independent assessor. Hansen Bailey has provided an impartial assessment of the anticipated social impacts of the McPhillamys Gold Project. There are no known conflicts of interest.

The consultation to inform the SIA was conducted in an ethical manner[1]. Consultation included the full disclosure of the nature of the research and the participant's involvement. Participation in SIA discussion was verbally agreed to and participants, where possible, provided signed informed consent to participate. Respect for participants throughout the consultation period was maintained, and interview and survey participation was voluntary. All participants had the right to withdraw from the interview process and the presumption and preservation of anonymity was upheld. An offer was extended to all participants in face-to-face interviews to receive a transcript of their personal discussions with Hansen Bailey; edits to transcripts were incorporated into final transcripts for Hansen Baileys' records and issued to relevant participants.

I, Bronwyn Pressland, confirm that the above statements and information given is true and correct to the best of my knowledge.

Signed:  Date: 20 August 2019

[1] National Health and Medical Research Council, Australian Research Council and the Australian Vice-Chancellors' Committee, 2015; and Vanclay, F., Baines, J. and Taylor, C.N, 2013.

EXECUTIVE SUMMARY

INTRODUCTION

This Social Impact Assessment (SIA) has been prepared by Hansen Bailey Environmental Consultants to support the Environmental Impact Statement (EIS) for the McPhillamys Gold Project (the project) a greenfield open cut gold mine (mine development) and associated water supply pipeline (pipeline development) in the Central West Region (CW Region) of New South Wales (NSW). Social and economic assessments, integrated with a comprehensive stakeholder engagement program, were undertaken for the project. This has enabled the identification of potential social issues and opportunities associated with the construction, operation and decommissioning of the project.

The SIA identifies the potential social impacts and opportunities of the project, and appropriate measures for managing adverse impacts and enhancing potential benefits. These measures have been designed to build on the positive benefits that the project will bring to the Central West Region and to create additional opportunities within the Blayney Shire Local Government Area (Blayney LGA) and nearby LGAs of Bathurst Region (Bathurst), Cabonne, Cowra Shire (Cowra), Lithgow City (Lithgow) and Orange City (Orange).

PROJECT DESCRIPTION

Project Overview

The mine development component of the project is located approximately 8 kilometres (km) north-east of Blayney within the Blayney and Cabonne LGAs. This locality has a long history of alluvial and hard rock mining, with exploration for gold and base metals occurring since the mid to late 19th century. The mine development project area (herein referred to as the mine project area) covers the mining lease (ML) application area for the project as well as the parts of the project that do not require an ML. The mine project area is located in the upper reaches of the Belubula River catchment, within the greater Lachlan River catchment.

The project involves the development and operation of an open cut gold mine, comprising approximately one to two years of construction, approximately 10 years of mining and processing, and a closure period (including the final rehabilitation phase) of approximately three to four years, noting there will be some overlap between phases. The total project life for which approval is sought is 15 years.

The project involves the construction and use of a conventional carbon-in-leach (CIL) processing facility with a processing rate of up to 7 Million tonnes per annum (Mtpa) to produce approximately 200,000 ounces, and up to 250,000 ounces, per annum of product gold. The processing facility will comprise a run-of-mine (ROM) pad and crushing, grinding, gravity, leaching, gold recovery, tailings thickening, cyanide destruction and tailings management circuits. Product gold will be taken off-site to customers via road transport.

Water will be supplied to the mine via a pipeline approximately 90 km long, transferring surplus water from Centennial's Angus Place Colliery and Springvale Coal Services Operations, and Energy Australia's Mt Piper Power Station near Lithgow, to the mine. The pipeline development is proposed across the LGAs of Bathurst, Lithgow and Blayney to facilitate the beneficial use of otherwise surplus water and to provide a reliable water source for the project.

Project Workforce

The peak project construction phase workforce is anticipated to be around 710 people in Year 1, although it is noted that the number of construction workers at any one time will vary through the year, averaging at around 580 people in this first year.

The projected operations workforce will fluctuate over time, generally reflecting changes in the mine production rate. The annual average operations workforce from Year 2 to Year 11 will be approximately 260 full-time equivalent (FTE) persons. The peak operations workforce of 320 FTE persons is anticipated to occur in around Year 4 and Year 5 and is associated with the increase in production within the open cut operations at this time.

The project construction workforce is anticipated to be made up of a combination of local hires (LHs) and non-local hires (NLHs). A LH (for the mine development) is anyone who resides within an approximate one hour commute of the mine project area and includes the LGAs of Blayney, Bathurst, Cabonne, Cowra and Orange (the mine development Local Area). In addition to these LGA's, the Lithgow LGA is also considered within the Local Area for the pipeline development.

The majority (80%) of the operations phase workforce is anticipated to be LHs. Regis is seeking to encourage all NLHs associated with the operations phase to relocate permanently to within a one hour commute of the mine project area.

The construction phase workforce (NLHS) will be accommodated in a combination of:

- Short-term accommodation options in the Local Area; and
- Private rental accommodation in the Local Area.

The workforce associated with the pipeline development will be encouraged to reside in a combination of short-term accommodation and private rental accommodation in Bathurst and Lithgow LGAs.

The operations phase workforce will be accommodated in existing housing within the mine development Local Area.

METHODOLOGY

Guidelines

The SIA has been prepared in accordance with the:

- Department of Planning and Environment (DPE) (now known as the Department of Planning, Industry and Environment (DPIE)) Environmental Assessment Requirements (EARs) for the project; and
- The NSW Department of Planning and Environment (DPE) *Social Impact Assessment Guidelines for State Significant Development* (SIA Guideline) published September 2017.

Method

The methodology included the following key components:

- Identification of the project's social area of influence;
- Profiling the socio-economic environment of the project's social area of influence informed through a review of existing information and consultation with affected individuals and communities;
- Identification and assessment of potential socio-economic impacts using a combination of qualitative and quantitative tools, including scenario assessment of potential workforce employment arrangements;
- Assessment of the significance of identified impacts and opportunities in accordance with the SIA Guideline; and
- Development of appropriate frameworks for managing and monitoring potential socio-economic impacts and opportunities.

SIA Consultation Process

A tailored and comprehensive consultation program was implemented by Hansen Bailey to inform the SIA. SIA consultation was undertaken by Hansen Bailey representatives independent of Regis Resources Limited (Regis). SIA consultation included the following three rounds of structured consultation over 12 months with near neighbours and the broader community:

- Round 1 - Scoping engagement;
- Round 2 - Impact identification; and
- Round 3 - Impacts and opportunities validation.

A total of 71 meetings were held with 337 participants during the three rounds of SIA consultation.

SIA consultation was supplemented with the findings of EIS consultation, which was undertaken separately by representatives of Regis, in parallel with the SIA consultation. The outcomes of both EIS and SIA consultation informed the identification and significance assessment of the potential impacts and opportunities of the project.

AREA OF SOCIAL INFLUENCE

The SIA assesses material social impacts, defined in the SIA Guideline as '*impacts that matter the most, and/or pose the greatest risk to those expected to be affected*'. The social area of influence of the mine development consists of the people that are likely to be impacted or affected by the project[2].

The SIA assesses the impact and opportunities of the project, however it focusses principally on the social impacts and opportunities associated with the mine development component. The potential social impacts of the mine development are unlikely to be confined within the immediate vicinity of the mine project area. The area of influence extends beyond the mine project area to the communities and LGAs that may experience changes to social conditions as a result of the project. The consideration of social impacts and opportunities of the mine development focusses on the Primary Assessment Area (PAA) and the Secondary Assessment Area (SAA) with some references to the Regional Assessment Area (RAA).

The PAA has been defined as the residents and communities located within an approximate two kilometre radius of the mine project area and includes the Kings Plains settlement (residents along Walkom Road), which is the closest settlement to the mine project boundary.

The SAA is defined as the Blayney LGA and includes the PAA. Discrete geographical and demographic sectors of the SAA (where located outside of the PAA) may also experience a different set of social impacts to the broader community (e.g. agricultural landowners located on the Belubula River and downstream of the mine project area, or lower socio-economic households in Blayney township). The spatial distribution of social impacts and opportunities has therefore been considered in the SIA.

The RAA for the mine development is defined as the combined area of the LGAs of Bathurst, Blayney, Cabonne, Cowra and Orange.

The consideration of social impacts and opportunities associated with the pipeline development focusses on the landowners directly affected by the pipeline corridor, nearby communities (Portland and Wallerawang) and the nearest regional centres of Bathurst and Lithgow as this is where the construction workforce associated with the pipeline development is likely to seek short-term accommodation.

[2] Vanclay, F. et. al., 2015.

SOCIO-ECONOMIC PROFILE

The SIA presents a detailed social baseline profile of the project's social area of influence with a focus on the PAA and SAA for the mine development.

Primary Assessment Area

An estimated 88 private residences are located within the PAA, the majority of residences are located to the south of the mine project area along the Mid Western Highway and to the west along Guyong Road. The estimated population of the PAA is 230 people[3].

The PAA can be divided into two discrete geographic catchments:

- The Kings Plains locality – broadly defined as the geographic area that extends from *Lynfern* homestead on the Mid Western Highway near Dungeon Road, east to Kellys Road and includes the settlement of Kings Plains on Walkom Road; and
- Guyong Road and surrounds – consisting of residences located to the west and north of the mine project area along Guyong Road, Vittoria Road and the Mitchell Highway, and within a two kilometre radius of the mine project area.

The communities of these two catchments, whilst articulating a similar set of values and aspirations, have different locational characteristics and population densities, which means they are likely to experience the potential social impacts of the project differently.

People residing in the Kings Plains locality who participated in SIA interviews self-identified as Kings Plains residents. The Kings Plains locality had an ERP in 2016 of 132 people and 44 dwellings[4]. Settlement across the Kings Plains locality consists of a combination of large acreages and smaller lifestyle blocks.

Secondary Assessment Area

The Blayney LGA includes the town of Blayney, Millthorpe Village and a number of smaller villages and other localities including Carcoar, Lyndhurst and Mandurama. The estimated

[3] ABS 2017b – 2016 ABS Meshblock counts (10056010000, 10149310000, 10149300000, 10115610000, 10116070000, 10116130000) have been used to calculate the estimated population of the PAA. The combined area of these Meshblocks is larger than the PAA and includes a total of 109 dwellings and 285 people. This indicates an average occupancy rate of 2.6 persons per dwelling. There are 88 dwellings in the PAA. Applying the rate of 2.6 persons per dwelling the population of the PAA is estimated at approximately 230 people.

[4] ABS 2017b - Based on 2016 ABS Meshblock counts for the Meshblocks of 10056010000, 10116130000 and 10116070000. The combined area of these three Meshblocks is larger than the Kings Plains locality and includes 56 dwellings and 173 people. This indicates a dwelling occupancy rate of 3.1 person per dwelling.

resident population (ERP) of the Blayney LGA in 2018 was 7,342 people[5]. The majority of population is concentrated in the centres of Blayney (2,963 people, 40% of LGA population) and Millthorpe (735 people, 10.1% of LGA population)[6]. In 2016 approximately 3.7% of the Blayney LGA population identified as Indigenous.

Blayney LGA is quintessentially a rural shire offering a safe, friendly and family based rural lifestyle. The heritage of the Blayney LGA is preserved in the rural landscape and buildings of the town of Blayney and the historic villages of the LGA. With the exception of Millthorpe, these villages support fewer than 150 residents. Rural values remain strong across the LGA as evidenced in the Blayney LGA planning framework and the Blayney LGA Community Plan[7].

Blayney township is the administrative centre and the main service centre for the Blayney LGA providing a range of goods and services including medical services, primary and secondary education services, and retail and professional services. Commercial growth in Blayney township has been slow due to the proximity of the township to the regional centres of Bathurst and Orange and the diverse range of services and facilities offered in these locations.

Land use across the LGA has changed little over time, with agriculture and mining remaining the dominate land uses. Newcrest's Cadia Valley Operation (CVO), a significant copper-gold mine is located in the western reaches of the LGA. Manufacturing and extractive industry activity occurs on the fringes of the Blayney township with a significant new quarry operation recently proposed on the north western side of Blayney. Infigen Energy is proposing the development of the Flyers Creek windfarm near Errowanbang Road within the Blayney LGA.

Blayney and the small villages and localities within the Blayney LGA (e.g. Millthorpe), have experienced a recent increase in popularity as commuter locations given their accessibility to Orange and Bathurst. The presence of quality school bus connections to Orange and Bathurst has also contributed to the popularity of these locations.

Tourism is an increasing industry sector in the Blayney LGA. The Blayney LGA is growing in popularity as a weekend and short stay destination with the historic buildings and streetscapes of Carcoar and Millthorpe being the key attractions. The reinstatement of rail services at Millthorpe in March 2019 means it is now possible to travel from either Sydney or Dubbo to Millthorpe each day.

IMPACTS AND OPPORTUNITIES

The SIA predicted a number of potential social impacts and opportunities associated with the project for the PAA and the SAA. The assessment shows that the majority of impacts and the most significant social impacts accrue to residents in closest proximity to the mine project area

[5] ABS, 2017.
[6] ABS, 2017.
[7] Blayney Shire Council, 2018.

i.e. residents of the PAA. The potential significant opportunities of the project accrue largely to the broader Blayney LGA.

Social Impacts Experienced to Date

During SIA consultation, some residents of the PAA identified a number of project related social impacts experienced to date. Identified experienced impacts include:

- Stress and anxiety due to uncertainty in relation to:
  - Whether the project would proceed;
  - The mine life;
  - The potential impacts and the extent to which they might be impacted;
  - The ability of Regis to suitably manage or control the impacts;
  - The opportunity for property acquisition and/or compensation; and
  - The potential impact on property values and saleability of property in the locality in the event that residents seek to relocate during the approvals process or following project determination.
- Reduced community cohesion within the Kings Plains settlement. A number of residents of the Kings Plains settlement cited evidence of a growing divide in the Kings Plains community due to differing attitudes towards the project and differences in opinion as to the perceived benefits and impacts of the project.
- Impacts to residents current way of life. Some residents expressed frustration with the amount of time the project was taking up in their daily life at the expense of other more enjoyable or necessary activities. Other residents noted the deferment of future property plans and life decisions due to project uncertainties (i.e. mine life, extent of impacts and uncertainty in relation to future property values).

In addition to the social impacts described above, a number of residents of the Kings Plains settlement perceive that existing property values have fallen sharply due to the increased presence of the project.

Potential Project Impacts

The SIA predicted a number of potential social impacts associated with the project for the PAA and the SAA. The outcomes of the SIA indicate that the PAA, particularly the Kings Plains locality will experience a number of significant social impacts as a result of the construction and operations phases of the project. These impacts relate to a range of factors including changes in rural amenity, property acquisition and the potential outmigration of residents, and changes in connectively and accessibility. These factors are predicted to adversely impact resident way of life, including use and enjoyment of outdoor space as well as social connectivity. Residents of the PAA hold strong fears that the project will lead to long-term impacts on the Belubula River system in addition to impacting groundwater accessibility for near neighbours.

The potential social impacts of the project on the SAA are confined largely to the construction phase of the project and are primarily associated with the potential influx of a temporary construction workforce to Blayney township and increased demand for short-term accommodation and private rental housing. The construction workforce accommodation demand has the potential to:

- Impact short-term accommodation accessibility in Blayney LGA (primarily Blayney township) for the non-mining sector and tourism industry for the duration of the construction phase;
- Displace low-income households from private rental accommodation; and
- Reduce accessibility for existing and new non-mining residents to private rental accommodation.

During the construction phase health services in Blayney LGA are likely to experience an increase in service demand due to the presence of the construction phase workforce.

Potential Project Opportunities

The SIA predicted a number of potential economic and social opportunities associated with the project for the broader SAA and RAA.

The project will provide direct employment for up to:

- 710 workers at peak construction with 55% assumed to already reside in the Local Area; and
- 320 workers at peak operations with an average annual direct workforce of approximately 260 with 80% assumed to already reside in the Local Area.

It will also provide indirect employment in the regional economy from employee and project expenditure.

The capital investment associated with the project is estimated to be in the order of $420 million (M). The project will result in total royalties over the project life of up to $79.9 M (or $46.7 M net present value).

The total annual impact of the peak year of construction on the regional[8] economy is estimated at up to:

- $531 M in annual direct and indirect regional output or business turnover;
- $218 M in annual direct and indirect regional value added;
- $114 M in annual direct and indirect household income; and
- 1,289 direct and indirect jobs.[9]

The main sectors in the regional economy likely to benefit from direct operational expenditure are construction services, other repairs and maintenance, professional, scientific and technical services, wholesale trade, exploration and mining support services, and heavy and civil engineering construction.

The project operation is estimated to make up to the following contribution to the regional economy:

- $492 M in annual direct and indirect regional output or business turnover;
- $272 M in annual direct and indirect regional value-added;
- $67 M in annual direct and indirect household income; and
- 788 direct and indirect jobs.[10]

Economic activity in the region will also arise from the expenditure of the project's workforce in the region. The revenue, expenditure and employment associated with the construction and operation phases of the project would stimulate economic activity for the regional economy. The main sectors in the regional economy likely to benefit from direct expenditure of wages in the regional economy include retail trade, food and beverage services, health care services, wholesale trade and primary and secondary education services.

In addition to the economic benefits, Regis is currently negotiating a Voluntary Planning Agreement (VPA) for the project with the Blayney Shire Council (BSC). The VPA is the primary mechanism for managing socio-economic impacts associated with the project and enhancing opportunities for the Local Area.

[8] The regional area defined in the *Economic Impact Assessment* (Gillespie Economics, 2019) (EIS Appendix DD) is the combined area of the LGAs of Blayney, Bathurst, Cabonne and Orange. This is different to the Local Area considered in the SIA which is defined as the combined area of the LGAs of Blayney, Bathurst, Cabonne, Cowra and Orange. Further, the Region in the SIA is defined as the Central West Region of NSW.

[9] Gillespie Economics, 2019.

[10] Gillespie Economics, 2019.

An estimated 20% and up to 40% of the operations phase workforce are anticipated to be NHLs who will relocate permanently into the Local Area to take up employment during the operations phase. Based on scenario testing, the project has the potential to directly attract between 48 and 104 people to the Blayney LGA representing a population increase of 1.5% and 3.4% respectively. Between 2006 and 2016 the population of Blayney LGA increased by 10% representing slow, but steady population growth.

The additional project induced population will have the following potential positive benefits for the Blayney LGA:

- Increased participation rates in local sporting groups and clubs supporting long term sustainability of these services;
- Increased enrolments at local education institutions;
- Increased pool of volunteer labour for local service and facility operations;
- Introduce new and additional skills into the LGA which may support existing services and businesses and strengthen community cohesion; and
- Stimulate demand for residential development in Blayney and neighbouring areas.

Mitigation and Management

The SIA includes a wide range of actions to avoid, mitigate and manage potential social impacts of the project and enhance the delivery of benefits to the SAA and the broader RAA. Iterative project planning, informed by baseline studies described and a range of EIS technical studies e.g. *Noise, Vibration and Blasting Impact Assessment*[11] (EIS Appendix L) and the *Visual Impact Assessment*[12] (EIS Appendix S), has allowed a range of social impacts to be avoided and others to be minimised throughout the life of the project.

The following three key social impact management frameworks have been developed for the project:

- Stakeholder Engagement Framework;
- Near Neighbours Impact Management Framework; and
- Workforce Accommodation and Workforce Management Framework.

[11] Muller Acoustic Consulting, 2019a and 2019b.

[12] Visual Planning and Assessment, 2019.

These management frameworks have been developed to:

- Ensure residents of the PAA and broader community remain informed on the project, the project approvals process;
- Mitigate and manage the project's social impacts on the communities of the PAA; and
- Mitigate and manage the impact of the project workforce on the Blayney LGA particularly with regards to workforce accommodation.

These frameworks include mechanisms for monitoring the effect of the management measures in minimising likely social impacts and enhancing potential benefits.

The following key actions, defined in the Near Neighbours Impact Management Framework, will be taken to manage the predicted social impacts of the project in the PAA:

- Ongoing stakeholder engagement – Ongoing and meaningful engagement with the Kings Plains community and residents of the broader PAA in relation to the progress of the project, the magnitude and extent of anticipated impacts and proposed management measures;
- Property specific management plans – On request from residents in the PAA, Regis will develop property specific management plans to address property owners' specific concerns relevant to the project; and
- Maintenance of a community complaints and grievances system, with investigation, response and where required, management actions undertaken for all complaints.

A detailed Construction Workforce Accommodation Strategy (CWAS) will be developed following project determination. The CWAS will be prepared in consultation with BSC, Orange360, other key accommodation providers and where necessary, proponents of existing or new major projects in the Blayney LGA. The strategy will:

- Demonstrate how the construction phase workforce will be accommodated across the Local Area;
- Demonstrate how workforce accommodation requirements will be managed during periods of high demand e.g. during key regional events such as Bathurst 1000;
- Document the approach to informing accommodation providers of predicted project workforce accommodation demands including anticipated timing;
- Enable the coordinated placement of the workforce in tourism accommodation throughout the Local Area; and
- Keep key stakeholders informed of predicted project accommodation demands across the construction phase.

A Community Consultative Committee (CCC) was established for the project in late 2018. The Project CCC will continue to operate for the life of the project. The Project CCC's key role will be to foster dialogue between Regis, the community and key stakeholders regarding the project. The CCC will aim to provide community members with a voice, and will give Regis a structured process for addressing community interests and concerns.

Regis is currently in negotiations with the BSC in relation to the preparation of the VPA for the project. The VPA is the primary mechanism for managing the socio-economic impacts associated with the project for the SAA, and enhancing positive benefits and opportunities.

The following additional management tools will also be developed prior to the commencement of the project construction phase to manage potential social impacts and support the realisation of opportunities across the project life:

- Stakeholder Engagement Plan;
- Corporate Volunteer Strategy;
- Local Content Plan;
- Indigenous Participation Plan;
- Recruitment and Training Strategy; and
- Social Impact Management Plan (SIMP).

Regis will commence the preparation of a Mine Closure SIA and SIMP at least five years prior to the potential mine closure and update the plan three years prior to mine closure. The Mine Closure SIA will be prepared in accordance with leading practice in mine closure.

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ABBREVIATIONS LIST

ABS	Australian Bureau of Statistics
ACHMP	Aboriginal Cultural Heritage Management Plan
AIP	Aquifer Interference Policy
AIS	Agricultural Impact Statement
ANCOLD	Australian National Committee on Large Dams
Angus Place	Angus Place Colliery
AQA	Air Quality Assessment
ASR	Age-Standardised Rate
ATSI	Aboriginal and Torres Strait Islander
B	Billion
Bathurst LGA	Bathurst Region Local Government Area
BHPG	Belubula Headwaters Protection Group
BHS	Blayney High School
BLALC	Bathurst Local Aboriginal Land Council
Blayney LEP	Blayney Local Environmental Plan 2012
BMZ	Blast Management Zone
BRC	Bathurst Regional Council
BSAL	Biophysical Strategic Agricultural Land
BSC	Blayney Shire Council
Centennial	Centennial Coal Company Limited
CC	Cabonne Council
CCC	Community Consultative Committee
CHA	Cultural Heritage Assessment For the Mine Development
CIL	Carbon-In-Leach
CMOC	China Molybedenum Co Ltd/Sumitomo
CP SEP	Construction Phase Stakeholder Engagement Plan
CSP	Community Strategic Plan
CTLX	Central Tablelands Livestock Exchange
CVO	Cadia Valley Operations
CWAS	Construction Workforce Accommodation Strategy
CW Region	Central West Region
CW&O Region	Central West and Orana Region
DA	Development Application
dB	Decibel
DE	Department of Education
DESSFB	Department of Employment, Skills, Small and Family Business

DJSM	Department of Jobs and Small Business
DPE	Department of Planning and Environment
DPIE	Department of Planning, Industry and Environment
EA	Energy Australia
EAR	Environmental Assessment Requirements
ECCO	Environmentally Concerned Citizens of Orange
EDS	Economic Development Strategy
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EMM	EMM Consulting
EP&A Act	Environment Planning and Assessment Act 1979
EPA	Environmental Protection Authority
ERP	Estimated Resident Population
ES	Ecosystem Services
FTE	Full-time Equivalent
FY	Financial Year
GDP	Gross Domestic Product
GRP	Gross Regional Product
GWA	Groundwater Assessment
ha	Hectare
HCN	Hydrogen cyanide
HIA	Health Impact Assessment
HV	Heavy Vehicle
ICNG	Interim Construction Noise Guideline
IPP	Indigenous Participation Plan
km	kilometre
LAC	Local Area Command
LCP	Local Content Plan
LEP	Local Environmental Plan
LGA	Local Government Area
LH	Local Hire
LHD	Local Health District
Lithgow LGA	Lithgow City Local Government Area
Local Area	The area within an approximate one hour commute of the mine project area
m	metres
M	Million
MIC	Maximum Instantaneous Charge

mine development	Construction and operation of the mine and associated mine infrastructure within the project area
ML	Mining Lease
MPHS	Multipurpose Health Service
MPPS	Mt Piper Power Station
Mtpa	Million tonnes per annum
MVC	Millthorpe Village Committee
Newcrest	Newcrest Mining Limited
NGO	Non-Government Organisation
NLH	Non-Local Hire
NML	Noise Management Level
NO_X	Oxides of nitrogen
NSW	New South Wales
NVIA	Noise, Vibration and Blasting Impact Assessment
OCC	Orange City Council
OLALC	Orange Local Aboriginal Land Council
PAA	Primary Assessment Area
PCYC	Police Citizens Youth Club
PFS	Pre-Feasibility Study
PHA	Preliminary Hazard Analysis
PHIDU	Public Health Information Development Unit
pipeline development	Construction and operation of the water supply pipeline and ancillary infrastructure to transfer water to the mine development within the defined pipeline corridor
Pipeline Development CHA	Pipeline Development Cultural Heritage Assessment
PMP	Property Management Plan
PNTL	Project Noise Trigger Levels
PVZ	Primary View Zone
Year	Project Year
RAA	Regional Assessment Area
RAMHP	Rural Adversity Mental Health Program
RAPs	Registered Aboriginal Parties
Regional Plan	Central West and Orana Regional Plan 2036
RFB	Rural Fire Brigade
RFS	Rural Fire Service
RMP	Rehabilitation Management Plan
RMS	Roads and Maritime Services
ROM	Run-Of-Mine

RTS	Recruitment and Training Strategy
SA2	Statistical Area 2
SCSO	Springvale Coal Services Operations
SEIFA	Socio-Economic Indices for Areas
SEP	Stakeholder Engagement Plan
SF	State Forest
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SS	State Suburb
SSD	State Significant Development
SWA	Surface Water Assessment
TA	Traffic Assessment For the Mine Development
TIA	Traffic Impact Assessment For the Pipeline Development
TMP	Traffic Management Plan
TSF	Tailings Storage Facility
TSP	Total suspended particulates
Regis	Regis Resources Limited
The project	McPhillamys Gold Project including both mine development and pipeline development
Mine project area	Mine development project area
µm	Micrometres
VIA	Visual Impact Assessment
VLAMP	Voluntary Land Acquisition and Mitigation Policy
VPA	Voluntary Planning Agreement
VSF	Vittoria State Forest
WRE	Waste Rock Emplacement
XPT	New South Wales XPT is the main long-distance passenger train operated by NSW TrainLink

McPHILLAMYS GOLD PROJECT
SOCIAL IMPACT ASSESSMENT

for
LFB Resources NL

PART A – INTRODUCTION

1 INTRODUCTION

This section provides an introduction to the Social Impact Assessment (SIA) for the McPhillamys Gold Project (the project). It describes the background and context of the project, introduces the proponent, and outlines the purpose and structure of the SIA.

1.1 BACKGROUND

LFB Resources NL a 100% wholly owned subsidiary of Regis Resources Limited (Regis), is seeking State Significant Development (SSD) consent for the construction and operation of the project, a greenfield open cut gold mine (mine development) and associated water supply pipeline (pipeline development) in the Central West Region (the CW Region) of New South Wales (NSW). The project application area to which the development application (SSD 18_9505) relates is illustrated at a regional scale in Figure 1.

The mine development component of the project is located approximately 8 kilometres (km) north-east of Blayney within the Blayney Shire and Cabonne Local Government Areas (LGAs). This locality has a long history of alluvial and hard rock mining, with exploration for gold and base metals occurring since the mid to late 19th century. The mine development project area (herein referred to as the mine project area) is illustrated in Figure 2 and covers the Mining Lease (ML) application area for the project as well as the parts of the project that do not require an ML.

The mine project area is located in the upper reaches of the Belubula River catchment, within the greater Lachlan River catchment. Water will be supplied to the mine project area via a pipeline approximately 90 km long, transferring surplus water from Centennial's Angus Place Colliery (Angus Place) and Springvale Coal Services Operations (SCSO), and Energy Australia's (EA) Mt Piper Power Station (MPPS) near Lithgow. The pipeline development is proposed across the Bathurst Regional LGA (Bathurst LGA), Lithgow City LGA (Lithgow LGA) and Blayney LGA to facilitate the beneficial use of otherwise surplus water and to provide a reliable water source for the project. The alignment of the pipeline development is illustrated in Figure 3a-h.

1.2 THE PROJECT

1.2.1 Project Description

A full project description is provided in Chapter 2 of the EIS[13]. The key components of the project as conceptually illustrated in Figure 2 are as follows:

- Development and operation of an open cut gold mine, comprising approximately one to two years of construction, approximately 10 years of mining and processing, and a closure period (including the final rehabilitation phase) of approximately three to four years, noting there will be some overlap between phases. The total project life for which approval is sought is 15 years.
- Development and operation of a single circular open cut mine with a maximum diameter of approximately 1,050 metres (m) and a final depth of approximately 460 m, developed by conventional open cut mining methods encompassing drill, blast, load and haul operations. Up to 8.5 Million tonnes per annum (Mtpa) of ore will be extracted during the project life.
- Construction and use of a conventional carbon-in-leach (CIL) processing facility with a processing rate up to 7 Mtpa to produce approximately 200,000 ounces, and up to 250,000 ounces, per annum of product gold. The processing facility will comprise a run-of-mine (ROM) pad and crushing, grinding, gravity, leaching, gold recovery, tailings thickening, cyanide destruction and tailings management circuits. Product gold will be taken off-site to customers via road transport.
- Placement of waste rock into a waste rock emplacement (WRE) which will include encapsulation of material with the potential to produce a low pH leachate. A portion of the WRE will be constructed and rehabilitated early in the project life to act as an amenity bund.
- Construction and use of an engineered tailings storage facility (TSF) to store tailings material.
- Construction and operation of associated mine infrastructure including:
  - Administration buildings and amenities;
  - Workshop and stores facilities, including associated plant parking, laydown and hardstand areas, vehicle washdown facilities, and fuel and lubricant storage;
  - Internal road network;
  - Explosives magazine and ammonium nitrate emulsion storage facilities;
  - Topsoil, subsoil and capping stockpiles;
  - Ancillary facilities, including fences, access roads, car parking areas and communications infrastructure; and
- On-site laboratory.

[13] EMM, 2019.

- Establishment and use of a site access road and intersection with the Mid Western Highway.
- Construction and operation of water management infrastructure, including water storages, clean water and process water diversions and sediment control infrastructure.
- A peak construction workforce of approximately 710 full-time equivalent (FTE) workers. During operations, an average workforce of around 260 FTE employees will be required, peaking at approximately 320 FTE employees in around years four and five of the project.
- Construction and operation of a water supply pipeline approximately 90 km long from Centennial's Angus Place and SCSO, and EA's MPPS operations near Lithgow to the mine project area. The pipeline development will include approximately four pumping station facilities, a pressure reducing system and a communication system. Approximately 13 Megalitre/day (up to a maximum of 15.6 Megalitre/day) will be transferred for mining and processing operations.
- Installation and use of environmental management and monitoring equipment.
- Progressive rehabilitation throughout the mine life. At the end of mining, mine infrastructure will be decommissioned, and disturbed areas will be rehabilitated to integrate with natural landforms as far as practicable, consistent with relevant land use strategies of the relevant Councils.

1.2.2 Project Terminology

The following terms are used throughout this assessment to describe the project:

- The project – the project in its entirety; encompassing the mine development and pipeline development;
- Project application area – the area in its entirety to which the development application (SSD 18_9505) relates; comprising the mine development project area and the pipeline corridor as illustrated in Figure 1;
- Mine project area – refers to the mine development project area as illustrated in Figure 2;
- Pipeline corridor – an approximate 90 km pipeline alignment from Centennial's Angus Place and SCSO; and EA's MPPS operations near Lithgow to the mine project area as illustrated in Figure 3a-h;
- Mine development – construction and operation of the mine and associated mine infrastructure within the project area; and
- Pipeline development – construction and operation of the pipeline and associated infrastructure to transfer water to the mine development within the pipeline corridor.

1.3 ASSESSMENT REQUIREMENTS

This section describes the key regulatory requirements relevant to the identification and management of social impacts arising from the project. The project is subject to the following NSW regulatory requirements and guidelines relating to the conduct of the SIA:

- NSW Department of Planning and Environment's (DPE) (now known as the Department of Planning, Industry and Environment (DPIE)) Environmental Assessment Requirements (EARs) for the project; and
- *Social Impact Assessment Guidelines for State Significant mining, petroleum and industry development* (NSW SIA Guideline)[14].

The DPE regulatory requirements are outlined in Section 1.3.1. The requirements of the NSW SIA Guideline and compliance with these requirements is discussed in Section 1.3.2.

1.3.1 Environmental Assessment Requirements

This assessment has been prepared in accordance with the requirements of the DPE. These were set out in the EARs for the project, issued on 24 August 2018 and revised on 19 December 2018. The EARs identify matters which must be addressed in the EIS. Table 1 lists individual requirements relevant to the assessment of social impacts and where each requirement is addressed in this report.

Table 1
SIA related EARs

Requirement	Section Addressed
An assessment of the social impacts of the project, prepared in accordance with the *Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development* (2017), including the likely impacts of the development on the local community, cumulative impacts (considering other mining developments in the locality), and consideration of workforce accommodation.	All sections of the SIA.
An assessment of the likely economic impacts of the development, paying particular attention to: • The significance of the resource; • Economic benefits of the project for the State and region; • The demand for the provision of local infrastructure and services; and • Consideration of the need for a Voluntary Planning Agreement in relation to the demand for the provision of local infrastructure and services	Section 6 (Key Management Tools), and 6.2.8. of the SIA

[14] Department of Planning and Environment (DPE) 2017b.

Requirement	Section Addressed
During the preparation of the EIS, you should consult with relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups, Registered Aboriginal Parties (RAPs) affected landowners, and holders of existing mining and exploration authorities intersected by the proposed pipeline corridor. You must also establish a Community Consultative Committee (CCC) for the project in accordance with the *Community Consultative Committee Guidelines for State Significant Projects*[15], and consult with the committee during the preparation of the EIS. The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.	Section 3.4 and Section 3.5 of the SIA and Chapter 4 of the EIS (EMM 2019).

To inform the preparation of the EARs, DPE invited other government agencies to recommend matters to be addressed in the EIS.

No advices were received from government agencies specifically in relation to social impacts. However, advice received from several Government and Non-Government organisations (NGOs) in relation to the EARs identified a range of issues relevant to the SIA. These issues include:

- Employment, in particular local employment;
- Potential impacts to landowners in proximity to the mine project area;
- Workforce accommodation demand including the provision of short-term accommodation, housing stock and housing diversity;
- Workforce supply, training and development, including support for apprenticeships, traineeships or other education-based initiatives;
- The interaction between mine-related traffic, resident traffic and school bus routes;
- Demand on health, education, community and emergency services, as well as other services in the CW region; and
- Cumulative social impacts.

[15] NSW Government, 2019.

1.3.2 SIA Assessment Requirements

The SIA addresses the key requirements of the SIA Guideline[16] including:

- Consideration of all potential social impacts including cumulative impacts;
- Preparation of a social baseline, documenting conditions and trends in the social area of influence without the project, with respect to the matters identified as material during scoping (Section 5 and Section 9);
- Assessment of social impacts and opportunities with potential for a material effect on social values, including integration of EIS results with a bearing on the social environment (Section 6 and Section 10);
- Development of adaptive management and monitoring strategies (Section 7 and Section 10.4); and
- Significance assessment of identified social impacts and opportunities (Section 8 and Section 0) and determination of the mitigated social impact significance (Section 8).

The approach to the preparation of this SIA is consistent with the Core Principles of the SIA Guideline[17] which include:

- Identification of impacts which are material i.e. impacts that matter the most, and/or pose the greatest risk to those expected to be affected, and assessment that is proportionate to the scope and scale of potential social impacts;
- Development of action-oriented and adaptive management strategies;
- Inclusion of a range of stakeholder viewpoints;
- Consideration of the distributive equity of impacts and benefits;
- An assessment of the impacts and benefits of the project over the full lifecycle; and
- Provision of a rigorous, impartial and transparent SIA.

Compliance with the Core Principles and the associated SIA Guideline Review Questions is demonstrated in Appendix H.

[16] DPE, 2017b.
[17] DPE, 2017b.

1.4 PURPOSE AND SCOPE

The purpose of the SIA is to:

- Identify, predict and evaluate the potential social impacts and benefits of the project within its social area of influence (defined in Section 5.1.1); and
- Identify appropriate strategies to avoid, mitigate or manage the negative impacts and to enhance the positive opportunities presented by the project.

The SIA forms part of the EIS prepared in support of the application for SSD consent under the *NSW Environment Planning and Assessment Act 1979* (EP&A Act). The SIA considers the potential social impacts and benefits of the project i.e. the mine development and the pipeline development, across the project life, including decommissioning.

1.5 DOCUMENT STRUCTURE

The SIA is divided into the following four discrete components:

- **Part A – Introduction (Sections 1 – 4)** – presents the purpose and scope of the SIA, describes the project context and project social characteristics, provides an overview of the SIA methodology and details the consultation undertaken to inform the EIS and SIA.
- **Part B – Mine development (Sections 5 – 8)** – presents the social baseline, describes the predicted impacts and opportunities and outlines the approach to management, monitoring and reporting for the mine development.
- **Part C – Pipeline development (Sections 9 – 10)** – presents the social baseline, describes the predicted impacts and opportunities and outlines the approach to management, monitoring and reporting for the pipeline development.
- **Part D – Conclusion (Section 11)** – presents a summary of the key findings of the SIA for the project and the references used during the preparation of this SIA.

- **Appendix A** – Curriculum Vitae of SIA Specialists;
- **Appendix B** – Detailed SIA Methodology;
- **Appendix C** – Scoping Outcomes;
- **Appendix D** – SIA Consultation Findings;
- **Appendix E** – Local Business Survey Findings;
- **Appendix F** – Social Baseline Assessment;
- **Appendix G** – Impact Significance Assessment Tables; and
- **Appendix H** – SIA Guideline Requirements.

2 PROJECT CONTEXT AND SOCIAL CHARACTERISTICS

This section presents an overview of the local and regional geographic setting and the social characteristics of the project. The purpose of this section is to assist the reader in understanding the context in which the project has been assessed, and the relevance of key components of the SIA methodology.

2.1 PROJECT CONTEXT

The project application area (Figure 1) is located within the Blayney, Cabonne, Bathurst and Lithgow LGAs and is within the CW Region. The mine project area is located predominantly within the Blayney LGA, with a small portion of the mine project area extending into the Cabonne LGA. The pipeline corridor is located predominantly within the Bathurst LGA, with approximately 22 km of the pipeline corridor located in the Lithgow LGA. A small portion of the pipeline corridor (approximately 2 km) is located within the Blayney LGA.

2.1.1 Local Setting

Mine Project Area

The mine project area is illustrated in Figure 2 and Figure 5 and is located approximately 8 km east of the township of Blayney, being predominantly within a rural setting. The small settlement of Kings Plains is located to the immediate south of the mine project area (Figure 5). The Kings Plains settlement has an estimated resident population (ERP) of 45 people[18] and 16 residences. It consists of a combination of rural lifestyle blocks and larger rural landholdings. The broader Kings Plains locality consists of all land to the south of the mine project area, including the Kings Plains settlement. In 2016 the Kings Plains locality had an ERP of 132 people[19].

The mine project area is located on predominantly cleared agricultural land and covers an area of 2,513 hectares (ha). The land within the mine project area is currently used for grazing (cattle and sheep). This typically reflects the agricultural activities found in the eastern area of Blayney LGA. A scattering of agricultural infrastructure (predominantly fencing and dams) occur across the mine project area. The mine project area includes a portion of the upper reaches of the headwaters of the Belubula River. Dungeon Road, an existing unsealed road, traverses the mine project area. Subject to the agreement of Blayney Shire Council (BSC)

[18] Australian Bureau of Statistics (ABS) Census Data is not available for small areas such as Kings Plains. The population estimate provided is based on a combination of house counts from aerial photography interpretation and consultation conducted to date with residents.

[19] ABS 2017b - Based on 2016 ABS Meshblock counts for the Meshblocks of 10056010000, 10116130000 and 10116070000. The combined area of these three Meshblocks is larger than the Kings Plains locality and includes 56 dwellings and 173 people. This indicates a dwelling occupancy rate of 3.1 person per dwelling.

and Cabonne Council (CC), Dungeon Road will either be permanently closed or relocated outside of the mine disturbance area (Figure 2) to facilitate project operations.

Pipeline Corridor

The pipeline corridor is illustrated in Figure 1 and Figure 3a-h. The majority of the pipeline corridor is located within the Bathurst LGA. The pipeline development includes the construction of approximately four pumping stations (Figure 3a-h), three of which will be located in Lithgow LGA at Angus Place, SCSO and MPPS. The fourth pumping station will be located near the Bathurst Waste Management Centre within the Bathurst LGA.

Land use in proximity to the pipeline corridor is illustrated in Figure 3a-h and includes:

- Infrastructure corridors e.g. major road networks and gas infrastructure easements;
- Rural residential development;
- Agriculture;
- Public facilities, e.g. Bathurst BMX Track, Bathurst Mountain Bike Park and Bathurst Waste Management Centre; and
- Commercial forestry activities.

The pipeline corridor traverses a number of mining lease and exploration licence areas held by other parties.

2.1.2 Regional Setting

Central West Region

The project application area is located entirely within the CW Region of NSW. The CW Region adjoins the Orana Region to the north, the Far West NSW Region to the west and the Hunter Region to the east. The CW Region consists of the LGAs of Bathurst Region (Bathurst), Blayney, Cabonne, Cowra, Forbes, Lachlan, Lithgow City (Lithgow), Oberon, Orange City (Orange), Parkes and Weddin.

The LGAs of Blayney, Bathurst, Cabonne, Cowra and Orange contain centres located within a one hour commute of the mine project area. It is likely that both the construction and the operations workforce for the project will be drawn from these centres, with the pipeline construction workforce also drawn from Lithgow LGA.

The CW Region is characterised by a concentrated settlement pattern of small towns and villages, scenic landscapes and a relaxed rural lifestyle[20]. The eastern portion of the CW Region is located less than 2 hours commute time from Sydney, making it an attractive destination for tourists and for people seeking a rural lifestyle within proximity to the city.

[20] DPE, 2017a.

In 2016, the CW Region had a population of 285,500 with forecast growth to 308,950 by 2036[21] (2017a). Dubbo, Orange and Bathurst are the largest regional cities. The CW Region also supports the strategic centres of Lithgow, Mudgee and Parkes.

The CW Region has a diverse economy based on agriculture, viticulture, tourism, coal and mineral resource activity and manufacturing. Resource exploration and mining activities (gold, silver and coal) are existing activities within the CW Region. In 2016, the mining industry accounted for 4.11% of regional jobs (3,039 jobs) and contributed:

- 31.62% ($2.45 billion (B)) of regional export value;
- 15.47% ($0.93 B) of regional imports; and
- 8.73% ($0.95 B) of total value added[22].

Coal exploration and mining activity is focussed predominantly in the eastern and north-eastern portions of the CW Region within Lithgow LGA and the Orana Region within the Mid Western LGA. Mineral exploration and mining (gold and copper) is predominantly focussed in the central to southern portions of the CW Region. There are major gold and copper mines operating at Cadia Valley Operations (CVO) in the Blayney LGA, Northparkes Mines and Tomingley between Parkes and Dubbo, Tritton near Nyngan and Mineral Hill near Condobolin. Opportunities for mining rare earths and metals have also emerged across the CW Region.

2.1.3 Nearby Towns and Villages

The project application area is situated in proximity to several towns and regional centres including Blayney, Bathurst, Lithgow and Orange.

The approximate distance and commuting times from the mine project area to surrounding major communities are provided in Table 2.

Table 2
Distance and Commuting Time from the Mine Project Area to Major Centres

Significant Urban Settlements	Distance	Commute Time	Route
Blayney	8 km	8 mins	Mid Western Highway
Bathurst	30 km	24 mins	Mid Western Highway
Orange	43 km	35 mins	Via Guyong Road, Vittoria Road and Mitchell Highway

[21] DPE, 2017a.

[22] REMPLAN, 2019.

Significant Urban Settlements	Distance	Commute Time	Route
	40 km	43 mins	Via Spring Hill, Millthorpe and Blayney
Cowra	77 km	56 mins	Mid Western Highway via Blayney
Canowindra	77 km	55 mins	Mid Western Highway and Belubula Way
Molong	80 km	1hr 10 mins	Via Guyong Road, Vittoria Road, Mitchell Highway, Northern Distributor Road, and Mitchell Highway
Lithgow	92 km	1 hr 12 mins	Mid Western Highway and Great Western Highway

Source: Google Maps accessed April 2019.

Table 3 lists the approximate distances and commuting times from the mine project area to the surrounding villages within the Blayney LGA. With the exception of Millthorpe, these villages have very small resident populations (<150 persons) and consist predominantly of a small collection of public buildings, such as a church, local hotel or public primary school, as well as private residences. Some of the villages, such as Millthorpe and Carcoar are becoming increasingly attractive locations for people to reside.

Table 3
Distance and Commuting Time from the Mine Project Area to Villages

Small Villages	Distance	Commute Time	Route
Newbridge	14 km	19 mins	Kings Plains Road and Newbridge Road
Millthorpe	20 km	16 mins	Mid Western Highway and Millthorpe Road
	24 km	19 mins	Guyong Road and Vittoria Road
Barry	22 km	19 mins	Mid Western Highway and Hobbys Yard Road
Carcoar	23 km	18 mins	Mid Western Highway
Neville	32 km	27 mins	Mid Western Highway and Neville Road
Mandurama	31 km	24 mins	Mid Western Highway
Lyndhurst	36 km	28 mins	Mid Western Highway

Source: Google Maps accessed April 2019

2.1.4 Nearby Mining Operations

Table 3 outlines the existing operating gold mines in proximity to the project application area and specifically the mine project area. The closest operating mine to the mine project area is Newcrest Mining Limited's (Newcrest) CVO (Figure 4). CVO is primarily located in the Blayney LGA and also has the largest workforce of the gold mines presented in Table 4. In addition to

the gold mining operations listed, there are a number of significant coal mining operations located in the CW Region (Ulan Coal Mine, Moolarben Coal Mine and Wilpinjong Coal Mine) approximately 180 km - 200 km north of Blayney.

Table 4
Existing Gold Mining Operations in the Central West Region

Mine Operation	Ownership	Description	Host LGA	Approx employee no. 2017/2018	Proximity to Project
CVO	Newcrest Mining Limited	Open cut copper gold mine	Blayney/ Cabonne	880[1]	30 km north-west of Blayney
Tomingley Gold Operations	ALKANE Resources Ltd	Open cut gold mine	Parkes	146 FTE[2]	190 km north-west of Blayney
CMOC-North Parkes Mine	China Molybedenum Co Ltd/Sumitomo (CMOC)	Gold and copper mine	Parkes	313 FTE[3]	170 km north-west of Blayney
Cowal	Evolution Mining	Open cut gold mine	Bland	345 employees and 175 contractors[4]	230 km west of Blayney

Source:

1. Regis Resources pers. comms Newcrest, 2019.
2. Pitt&Sherry (2018) *Independent Environmental Audit Tomingley Gold Operations,* 27 August 2018 Rev01.
3. CMOC (2018) *CMOC-North Parkes Mines 2017 Annual Review January 2017-December 2017.*
4. Evolution Mining (ud) *Cowal Fact Sheet.*

Blayney LGA also has a number of closed gold mines including the former Browns Creek Mine and Junction Reefs Mine.

2.1.5 Nearby Major Projects

There are a number of new projects proposed in the Blayney LGA and neighbouring LGAs. The status of these projects is presented in Table 5.

Table 5
Proposed Major Projects in the Blayney LGA and Adjacent LGAs

Project	Proponent	LGA	Status	Workforce Size		Indicative Project Timing
				Construction	Operation	
Bathurst Second Circuit, Mt Panorama	Bathurst Regional Council	Bathurst	SEARs1 issued 21/12/2018	NA	NA	Stage 1 CP Nov 2020
Brewongle Solar Farm	Photon Energy	Bathurst	SEARs issued 2017	100	10	NA CP 9-12 months
Kempfield Silver Mine	Argent Minerals Limited	Bathurst	SEARs Issued 2012	150 FTE	90 FTE	NA CP 12 months OP 5 years
Flyers Creek Wind Farm MOD 4	Flyers Creek Wind Farm Pty Ltd	Blayney	Proponent Reviewing Submissions 2018	140 FTE	6-10 FTE	NA CP 12-18 months
East Guyong Quarry Mod 2	Hanson Construction Materials Pty Ltd	Cabonne	Assessment	NA	No change	NA
Orange Waste Project (MOD 2)	Orange City Council (OCC)	Cabonne and Orange	Approved 20/12/2018	NA	NA	NA
Blayney Quarry	Ben Volkofsky	Blayney	Assessment	NA	NA	NA

Notes:

1. *SEARs – Secretary's Environmental Assessment Requirements, now known as Environmental Assessment Requirements (EARSs)*

NA – No information available
CP – Construction Phase
OP – Operations Phase

In addition to the projects mentioned in Table 5, significant construction work is currently underway at CVO. Newcrest has recently (2018) approved the progression of the Cadia Expansion Pre-Feasibility Study (PFS) to the Feasibility Phase[23]. The feasibility study is due for completion in the first half of financial year (FY) 2020. The Cadia Expansion Project involves the expansion of the existing processing plant and the development of the next Macro Block PC2-3. Development of PC2-3 does not require further permitting as it is generally in accordance with the existing approval[24]. The construction of PC2-3 has already

[23] Newcrest Mining Limited, 2018.

[24] Newcrest Mining Limited, 2018.

commenced with first production anticipated in financial year 2022. Other components of the expansion will be subject to permitting and regulatory approvals. The size of the construction and operations workforce for PC2-3 is currently unavailable.

2.1.6 Aboriginal Community

The mine project area is located within the area identified as the traditional country of the Wiradjuri People.

According to OzArk Environment and Heritage[25] the majority of the pipeline corridor falls within land occupied by the Wiradjuri people. The eastern portion of the pipeline corridor is located within the area of interaction with surrounding traditional peoples.

There are multiple Registered Aboriginal Parties (RAPs) identified for the pipeline corridor. A complete list is provided in the *Pipeline Development Cultural Heritage Assessment*[26] (Pipeline Development CHA) (EIS Appendix Z).

2.2 PROJECT SOCIAL CHARACTERISTICS

This section presents the characteristics of the project relevant to the consideration of potential social impacts and opportunities. Further project information is presented in the EIS[27].

2.2.1 Project Schedule

An indicative schedule for the construction, operations and decommissioning phases of the project is described in the following sections. The EIS refers to project years, rather than calendar years, with Year 1 being the first year of construction. It should be noted that mining schedules could vary accordingly as they are subject to continual revision based on changing mining and market conditions and timing.

There will be an overlap between the construction and operational phases. There will also be an overlap between processing and the decommissioning phase.

[25] OzArk, 2019b.
[26] OzArk, 2019b.
[27] EMM, 2019.

Construction Phase

The construction phase of the mine development will include the following activities:

- Site establishment, including installation of erosion and sediment controls, vegetation clearing, topsoil/subsoil stripping and stockpiling activities;
- Early development of the open cut to provide material for haul roads, amenity bunds, run-of-mine (ROM) pad, TSF and water management facility embankments and the site access road;
- Construction of the pit amenity bund and southern amenity bund of waste rock emplacement (WRE);
- Construction of the mine access road from the Mid Western Highway and internal access roads;
- Development of borrow pits;
- Construction of the TSF and water management facilities, including bulk earthworks to construct the embankments of the TSF and water management facilities and necessary lining works;
- Construction of the administration buildings, car parking, workshop facilities, equipment stores, explosives magazine and ammonium nitrate emulsion storage;
- Construction and commissioning of the processing plant; and
- Installation of site services including power, communication and potable water and wastewater services.

Operations Phase

The operations phase consists of open cut operations and processing. As explained above, there will be some overlap in construction and operations phase activities. Operations phase activities include:

- Development of the open cut mine at the start of the project in Year 1. However, the initial few months will primarily involve the extraction of waste rock, including non-acid forming (NAF) material, which will be used in the construction of the required hardstand areas, roads and water management facility and TSF embankments;
- Processing of ore commencing in around Year 2 and continuing until Year 11; and
- Continuation of mining activities in the pit until around Year 10. Progressive rehabilitation will be undertaken throughout the mine life.

Mine Closure and Rehabilitation

Progressive rehabilitation will be undertaken throughout the mine life, as areas become available, particularly as the WRE is constructed. Once ore extraction and processing is complete, the mine will enter a decommissioning phase, which is anticipated to take around three to four years in Year 11 – Year 15. This phase will involve the removal of project related

infrastructure from the site and final rehabilitation of all disturbed areas. Further information is provided in the *Rehabilitation and Closure Strategy*[28] (EIS Appendix U) prepared for the project.

2.2.2 Hours of Construction and Operation

The first six months of construction of the mine development will generally be carried out during standard construction hours as per the *Interim Construction Noise Guideline* (ICNG)[29]:

- Monday to Friday - 7:00 am to 6:00 pm;
- Saturday – 8:00 am to 1:00 pm; and
- No work on Sundays or public holidays.

Outside of these hours, some works will be carried out as required such as low intensity construction activities, environmental management such as dust control, delivery of oversized equipment, and servicing of equipment. In these circumstances, works will be undertaken in accordance with the noise criteria for outside of recommended standard hours in the ICNG.

For clarity, low intensity construction activities would generally consist of:

- Use of hand tools;
- Electrical and telecommunications wiring, installation and connections;
- Equipment relocation;
- Installation and commissioning of plant and equipment;
- Use of small mobile equipment (backhoe, bobcat, truck, small mobile crane) for activities such as:
  - Steel fixing;
  - Concreting;
  - Erection of building structures and steel work;
  - Small lifts and movement of materials on site; and
  - Trenching and drainage.

After six months, construction and mine development activities will be carried out 24 hours per day, 7 days per week. For the pipeline development, construction will be undertaken generally in accordance with the standard construction hours as per the ICNG.

[28] EMM, 2019d.

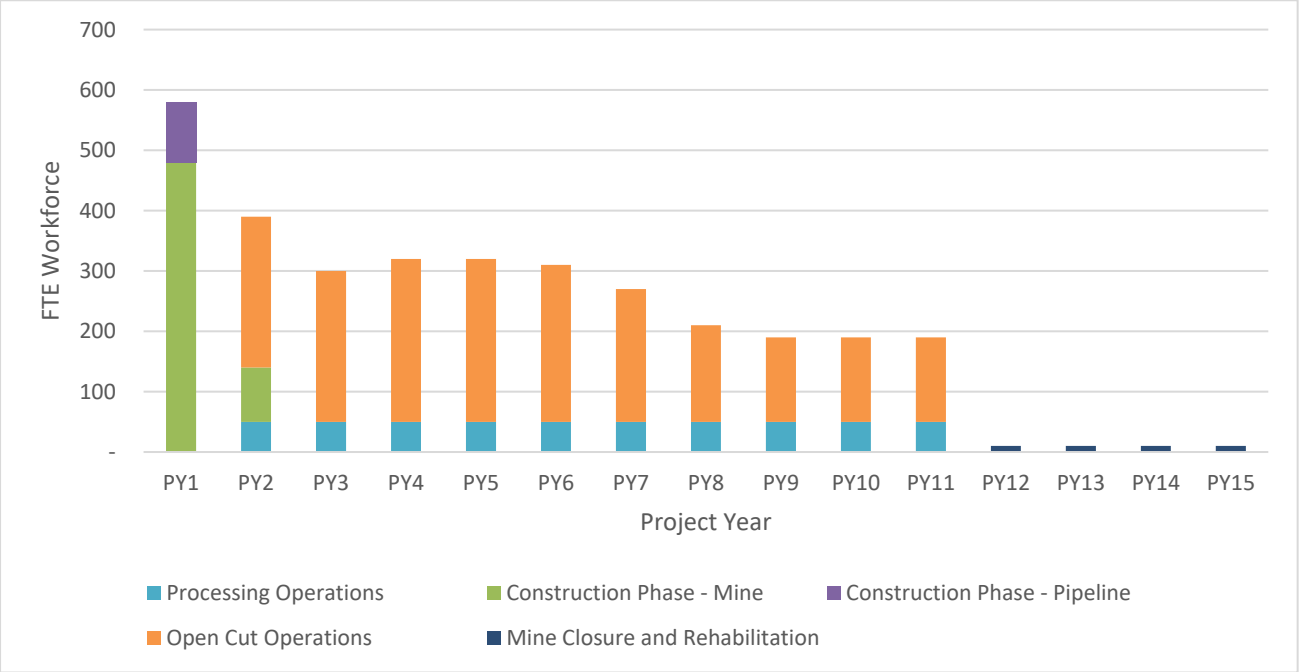
[29] Department of Environment and Climate Change, 2009.

2.2.3 Workforce Demand

Workforce numbers will vary across the different stages of the project according to need. Figures presented in this section are based on initial project workforce planning and are subject to change. All workforce numbers referenced are FTE positions.

Graph 1 illustrates the indicative FTE annual average project workforce by project phase.

Graph 1
Indicative Annual Average FTE Workforce, by Project Phase



Source: Regis, 2019.

Construction Phase

The peak project workforce is anticipated to be around 710 people in Year 1, although it is noted that the number of construction workers at any one time will vary through the year, averaging at around 580 people in this first year. Further detailed information is provided in the following sections.

Operations Phase

The projected operations workforce will fluctuate over time, generally reflecting changes in the mine production rate. The annual average operations workforce from Year 2 to Year 11 will be approximately 260 FTE persons. Approximately two to three people will be employed in pipeline corridor maintenance. A number of personnel from the open cut construction workforce are anticipated to transition to the mine operations phase.

The peak operations workforce of 320 FTE persons is anticipated to occur in around Year 4 and Year 5 and is associated with the increase in production within the open cut operations at this time.

It is anticipated that the majority of the processing operations workforce will be Regis employees, and that the majority of the workforce associated with open cut operations will be contract personnel.

The SIA assesses the socio-economic impacts of the annual average operations workforce. The analysis of workforce accommodation and services demand also considers the impact of the additional 60 people in Year 4 and Year 5 i.e. peak operations phase workforce.

Decommissioning and Rehabilitation

The project decommissioning and rehabilitation phase will require a much smaller workforce compared to the operations phase. It is anticipated that around 10 FTE persons from Year 12 to Year 15 will be required for this work.

2.2.4 Workforce Recruitment

The required workforce will be sourced through a range of recruitment processes, including local and regional recruitment, apprenticeships, traineeships and graduate programs and contract labour. A definitive strategy for recruitment of the workforce will be developed following project determination and in line with detailed construction planning. A Local Content Plan (LCP), which will include an assessment of local contractor capabilities, will be prepared.

Workforce Hiring Scenario

The acceptable daily commute distance from a worker's usual place of residence to the mine project area has been defined as one hour and reflects the requirements of Regis' corporate health and safety standards. A local hire (LH) therefore is defined as any person who resides within a one hour commute of the mine project area (herein defined as the 'Local Area').

Table 6 shows an estimate of the proportion of LHs and non-local hires (NLHs) for key project phases. Approximately 60% (367 workers) of the total construction phase workforce for the mine development component of project and 20% (24 workers) of the pipeline construction phase workforce are anticipated to be LHs. An estimated 80% of the project operations phase workforce is anticipated to be LHs.

Table 6
Estimated Proportion of LHs and NLHs by Project Phase[1]

Project Phase	Local Hire		Non-Local Hire	
	Percent (%)	Number	Percent (%)	Number
Construction Phase - processing plant development	55	209	45	171
Construction Phase - open cut	75	158	25	52
Construction Phase - pipeline	20	24	80	96
Operations Phase	80	208	20	52

Source: Regis 2019.
Note: 1. Data used is based on FTE peak workforce for the construction phase and FTE annual average workforce numbers for the operations phase.

The numbers presented in Table 6 are estimates and have been determined following analysis of:

- Consideration of project skill set requirements for both the construction and operations phase; and
- An analysis of labour market conditions and available skill sets across the Local Area.

The LH assumptions have also been informed through analysis of employment trends for past projects within the Local Area (e.g. Cadia East Project). The NLH assumption for the pipeline construction workforce (estimated at 85%) reflects the specialist and short-term nature of the pipeline construction activities.

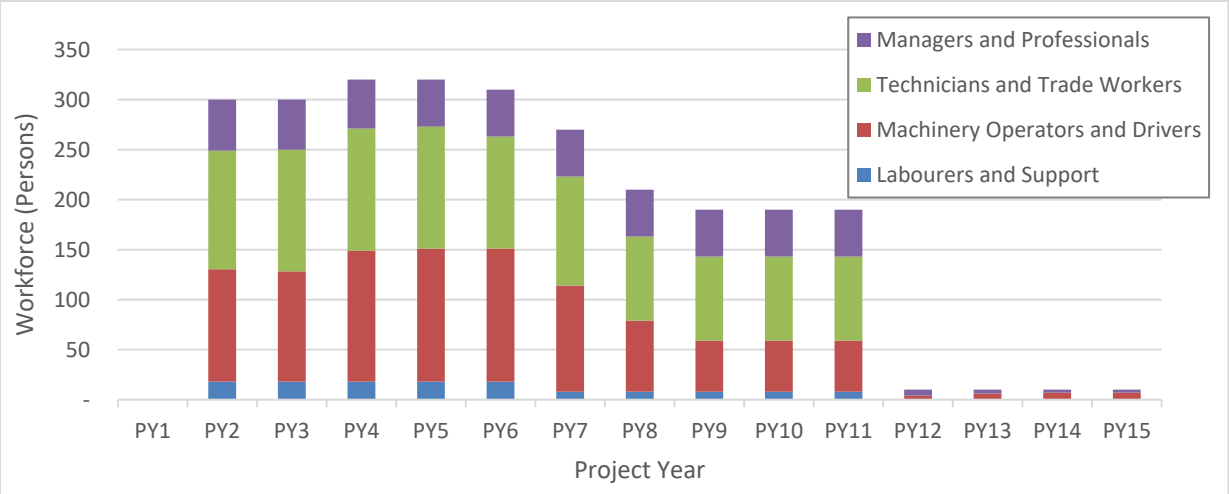
Workforce shift rosters continue to be refined by Regis and will be determined by Regis at the commencement of the project.

2.2.5 Workforce Characteristics

The occupational requirements of the project workforce will vary according to the different project phases. During Year 1 of the construction phase, the majority of the workforce (77%) will be employed as technicians and trade workers.

The vocational characteristics of the operations phase workforce is presented in Graph 2. During the project operations and decommissioning phases, the majority of the workforce will be employed as either labourers and support workers (39%) or machinery operators and drivers (37%).

Graph 2
Predicted Operations Phase Workforce Vocational Characteristics[1]



Source: Regis provided data, 2019.
Note: 1. Data used is FTE annual average workforce numbers.
2. PY is equivalent to Project Year.

2.2.6 Workforce Accommodation

Construction Phase

The project construction workforce is likely to consist of a combination of LHs and NLHs. All NLHs will be accommodated in a combination of short-term accommodation, including hotels and motels, as well as private rental accommodation.

Operations Phase

The project operations workforce will be accommodated in private housing within the Local Area.

Regis currently owns 19 residential dwellings including two properties under option on land within, adjoining or in close proximity to the mine project area. Of these 19 residential dwellings, six are located within the mining lease area and will not be available for ongoing use as residential dwellings once project operations commence. The remaining dwellings may be suitable for residential occupancy at different stages of the project.

2.2.7 Operations Phase Workforce Residential Location Assumptions

All NLHs associated with the operations phase will be encouraged to reside permanently within a one hour commute of the mine project area (Local Area). Over time, Regis anticipates 100% of the project operations phase workforce will reside in the Local Area. Regis will not support fly-in fly-out work arrangements.

The Local Area offers a number of different lifestyle options. Each locality in the Local Area offers different lifestyle opportunities to potential residents - in the choice of:

- Settlement size;
- Housing cost and type;
- Commuting distance;
- Lifestyle;
- Local services and facilities; and
- Employment opportunities for partners.

It is therefore difficult to determine with accuracy the exact number of people who will be settling in any particular location, as a result of the project. However, the regional centres of Bathurst and Orange are likely to attract the majority of the workforce due to the range of housing available, the diversity of services and facilities (particularly education) and the diversity of employment opportunities available for partners. Consultation with BSC representatives highlighted potential residential opportunities in several of the villages within Blayney LGA.

Table 7 presents the origin and predicted final residential location of all NLHs associated with the operations phase of the project. Table 7 shows that the:

- Majority of NLHs will relocate permanently to within the Local Area; and
- LGAs of Blayney, Orange and Bathurst are likely to attract the majority of employees sourced from outside the Local Area.

More than likely there will also be movement of people within the Local Area as it is reasonable to assume that some employees who currently reside within the Local Area but some distance from the mine project area may choose to relocate closer(e.g. from Cowra to Blayney or the villages of the Blayney LGA). The percentages presented in Table 7 are considered approximations and are used throughout the remainder of the SIA to assess impacts on population size, housing and service provision. Table 7 presents the predicted project arrangements.

Table 7
Assumptions Regarding Likely Final Residential Location of NLHs – Operations[1]

Residential Location	Origin		Place of Final Residence		Change
Blayney LGA	25%	65	33%	85	8%
Orange LGA	25%	65	31%	81	6%
Bathurst LGA	15%	39	21%	55	6%

Residential Location	Origin		Place of Final Residence		Change
Cabonne LGA	10%	26	10%	26	0%
Cowra LGA	5%	13	5%	13	0%
Lithgow LGA	5%	13	0%		-5%
Outside Of Central West NSW	15%	39	0%	0	-15%
Total	100%	260	100%	260	na

Source: Regis provided data, 2019.
Note:
1. Data used is the annual average workforce numbers.

2.2.8 Workforce Transport and Logistics

Construction Phase

During the project construction phase, all NLHs employed in mine development and open cut activities will commute on a shift roster basis to the mine project area. All LHs will commute on a daily basis from their place of residence to the mine project area. A combination of private vehicle and project provided mini buses will be used during construction and maintenance shutdowns for the transportation of the construction workforce from the regional centres.

Operations Phase

The operations phase workforce will commute in private vehicles on a daily basis from their place of residence to the project. Regis will continue to investigate options to encourage car-pooling.

3 SIA METHODOLOGY

This section presents a summary of the SIA methodology. A detailed description of the SIA methodology, including the supporting consultation program is provided in Appendix B.

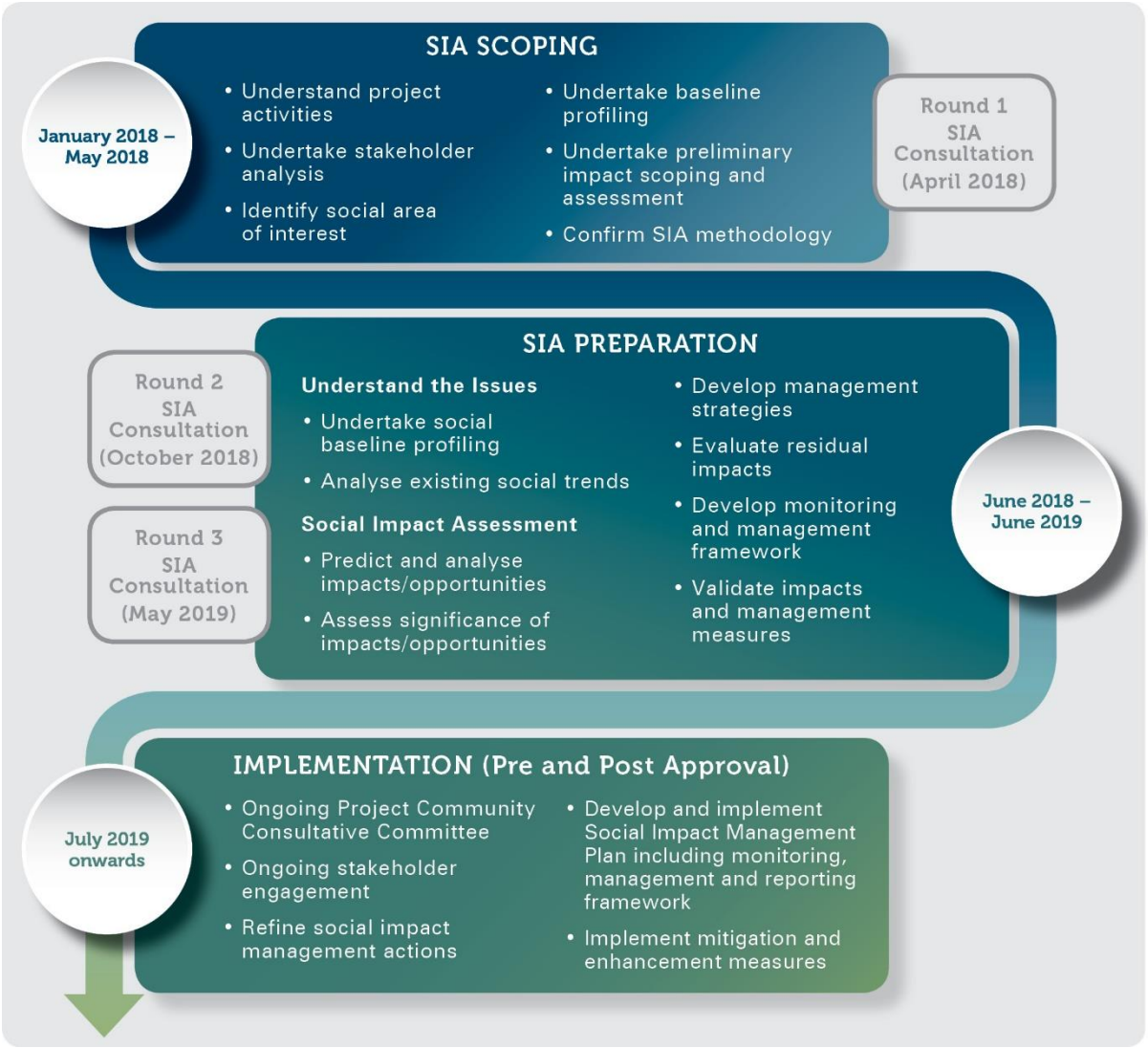
3.1 OVERVIEW OF APPROACH

The SIA methodology is summarised in Diagram 1 and includes the following three components:

- SIA Scoping;
- SIA Preparation; and
- SIA Implementation.

The first two components (i.e SIA scoping and SIA preparation) have been completed, with a description of the process and outcomes reported within this document. The third component (SIA implementation) will be progressed in parallel with the project approvals process and following project determination.

Diagram 1
SIA Methodology



3.2 SIA SCOPING

3.2.1 Objectives

The scoping phase of the SIA was undertaken during the first half of 2018 and was conducted in accordance with the NSW SIA Guideline. The scoping phase focussed on the mine development component of the project.

The core objectives of the scoping phase were to:

- Identify and understand potentially affected people and the project's area of social influence; and
- Identify and assign a proportionate level of assessment to the potential social impacts needing further investigation in the EIS.

3.2.2 Approach

The scoping methodology adopted was consistent with the requirements of the NSW SIA Guideline and best practice directions such as Vanclay et al.[30]. The core objectives of the NSW SIA Guidelines (Appendix H) were achieved through the use of a variety of scoping tools and methodology as summarised below and described further in Appendix B. The scoping process included:

- Identifying the project activities likely to influence the occurrence of social impacts (Section 2.2);
- Identifying and analysing key stakeholders for the SIA (Section 3.5.2);
- Defining the project social area of influence (Section 5.1.1);
- Identifying and analysing different stakeholder's perceptions of the potential social impacts associated with the project (Section 3.4); and
- Identifying and assessing the preliminary social impacts and opportunities associated with the project (Appendix C).

The outcomes of the SIA scoping phase informed the scope of this SIA. In particular, the findings of the SIA scoping phase highlighted the need for separate and targeted consultation with near neighbours and the disaggregation of social impacts for the following spatial areas within the Blayney LGA:

- Near neighbours, specifically:
  - Kings Plains locality
  - Kings Plains settlement;
  - Near neighbours to the north and north-west; and
- Downstream landowners along the Belubula River.

3.3 SIA PREPARATION

3.3.1 SIA Study Area

The SIA Study Area is defined by the project's social area of influence. The SIA Study Area for the mine development incorporates the 'Primary Assessment Area (PAA)', the 'Secondary Assessment Area (SAA)' and the 'Regional Assessment Area' (RAA). These components are defined inTable 8. The SIA Study Area for the pipeline development is defined in Table 9.

[30] Vanclay et al., 2015.

Table 8
SIA Study Area Definition – Mine Development

SIA Study Area Component	Description
PAA	Defined as the area within an approximate 2 km radius of the mine project area inclusive of the Kings Plains locality and Kings Plains settlement (Figure 5). An estimated 88 private residences are located within the PAA, the majority to the south of the mine project area along the Mid Western Highway and to the west along Guyong Road. The estimated population of the PAA is 230 people[31].
SAA	Defined as the Blayney LGA (Figure 4). The main communities of interest within the Blayney LGA are Blayney and Millthorpe. Outside of the PAA, the primary area of influence of the project is likely to be the town of Blayney.
RAA	Defined as the combined LGAs of Bathurst, Blayney, Cabonne, Cowra and Orange.

Table 9
SIA Study Area Definition – Pipeline Development

SIA Study Area Component	Description
PAA	The PAA for the pipeline development is the area of land directly impacted by the pipeline corridor and includes land within the Bathurst and Lithgow LGAs and 2 km within the Blayney LGA. The pipeline development will directly impact 16 private landholders, plus landholders associated with Angus Place Colliery, Centennial Coal and Energy Australia. Lithgow City Council and the BRC and five crown entities (Forestry NSW, RMS, Department of Fisheries, Department of Industry (Crown Land) and Railcorp).
SAA	Defined principally as the Bathurst and Lithgow LGAs (Figure 1). The main community of interest within the Bathurst LGA is the urban centre of Bathurst. The main communities of interest within the Lithgow LGA are Lithgow City, and the small locations of Blayney and Millthorpe, and the smaller townships of Portland and Wallerawang.

The primary focus of the SIA is the PAA and SAA for the mine development and the PAA for the pipeline development as these areas are most likely to be impacted by the project.

3.3.2 Social Baseline Study

Understanding the local and regional socio-economic characteristics of the project's social area of influence enabled the identification and analysis of project impacts and opportunities.

[31] ABS 2017b – 2016 ABS Meshblock counts (10056010000, 10149310000, 10149300000, 10115610000, 10116070000, 10116130000) have been used to calculate the estimated population of the PAA. The combined area of these Meshblocks is larger than the PAA and includes a total of 109 dwellings and 285 people. This indicates an average occupancy rate of 2.6 persons per dwelling. There are 88 dwellings in the PAA. Applying the rate of 2.6 persons per dwelling the population of the PAA is estimated at approximately 230 people.

A description of the social baseline for the project's social area of influence is presented in Section 5 (mine development) and Section 9 (pipeline development). A detailed social baseline for the project is presented in Appendix F. The social baseline study includes a description of the project's social area of influence focussing on a set of quantitative indicators and supporting qualitative discussion.

Quantitative and qualitative information has been sourced through a combination of:

- Desktop research; and
- Primary data collection e.g. consultation, surveys and including information from other relevant technical studies undertaken for the EIS.

A range of tools were used to understand and analyse the social baseline. These tools included, but were not limited to:

- Historical literature review, including analysis of past community responses to key events and developments (e.g. the closure of Blayney Abattoir approximately 20 years ago, severe drought and construction of the CVO including the more recent (2011) Cadia East Project);
- Analysis of available population, demographic and labour market statistical data;
- Review of consultation findings to inform the preparation of the Community Plan for the Blayney LGA;
- A business survey;
- Survey of accommodation providers in the Blayney LGA; and
- Targeted SIA consultation with near neighbours and broader Blayney community, private and public sector service providers as described in Appendix B and Appendix D.

Social baseline analysis focused principally on the mine development component of the project. Only quantitative and qualitative indicators considered useful and meaningful to the assessment of project related social impacts are presented in the social baseline. The social baseline study was informed through the findings of the SIA Scoping Phase and in particular the identification of relevant social indicators.

Data Limitations

Data limitations exist for the PAA. The boundary of the PAA and the smaller areas defined within the PAA e.g. Kings Plains locality do not align with any established geographical area for which statistical data is collated. A large portion of the PAA is located within the ABS geographical area referred to as the Kings Plains State Suburb (SS) (SSC12151). However, the neighbouring Blayney SS (SSC10410), within which part of the PAA is located, is significantly larger than the PAA. Further, due to the small population size within the Kings Plains SS, limited population and demographic information is provided by the ABS. ABS

Meshblock counts have also been used to understand population and dwelling numbers within the PAA. In a number of cases the Meshblock areas extend beyond the PAA footprint. Due to the small population size within the Meshblock areas, data is limited.

The population and demographic analysis for the PAA has therefore drawn on a combination of data from the 2016 ABS Census for the Kings Plains SS, ABS Meshblock counts within the PAA, interpretation of aerial imaging for the PAA, and the findings of SIA consultation, specifically face-to-face interviews with near neighbours in the Kings Plains locality.

3.3.3 Impact and Opportunities Assessment

Impact Prediction

The potential social impacts were predicted and assessed for the full project lifecycle, based on the combined analysis of:

- The findings of baseline profiling including:
  - Stakeholder values and aspirations including connection to place;
  - Stakeholder experiences with existing and historical mining operations in the Blayney LGA e.g. CVO, Junction Reefs Mine and Browns Creek Mine;
  - Stakeholder experiences in dealing with social and economic change arising from key events e.g. prolonged drought, closure of Blayney Abattoir etc.;
- Findings of EIS and SIA consultation;
- The experiences of other stakeholder groups residing in proximity to existing mining operations;
- EIS findings on changes to environmental values; and
- The likelihood of material changes to social conditions and trends as a result of the project.

The impact assessment includes consideration of cumulative social impacts and opportunities.

Other EIS specialist studies have examined potential impacts on environmental values which influence social values (including visual amenity, air quality, surface water, groundwater and noise impacts) from a scientific and standards based perspective. The SIA has examined the social dimensions of these environmental impacts, including consideration of how potential impacts are predicted to be experienced from the perspective of affected and interested people.

The SIA presents separate impact assessments for the mine development (Section 6) and the pipeline development (Section 10), reflecting the significant differences in scale, proximity of nearby communities and propensity of each component to give rise to social impacts.

Scenario Testing

Scenario testing was used to quantify the likely social impacts and opportunities presented by two different workforce hiring scenarios for each of the construction and operations phases.

Table 10 presents two different construction phase workforce hiring scenarios. In each scenario, a different proportion of the construction phase workforce is sourced from within the Local Area i.e. within a one hour commute time of the mine project area.

Scenario 1 represents the predicted project arrangement. Under Scenario 1, approximately 55% of the total construction phase workforce will be LHs and approximately 45% will be NLHs. The proportion of LHs in Scenario 1 is not considered an upper limit and will vary according to labour market conditions at the respective point in time.

Under Scenario 2, approximately 39% of the total construction phase workforce will be LHs and 62% will be NLHs.

The workforce hiring arrangements for the pipeline development remain consistent across both scenarios.

Table 10
Sensitivity Assessment Scenarios – Project Construction[1]

Construction Phase	Local Hire		Non-Local Hire		Total Workforce
	Percent	Number	Percent	Number	
Scenario 1					
Processing plant development	55	209	45	171	380
Open cut development	75	158	25	52	210
Pipeline development	20	24	80	96	120
Total	**na**	**391**	**na**	**319**	**710**
Scenario 2					
Processing plant development	20	76	80	304	380
Open cut development	80	168	20	42	210
Pipeline development	20	24	80	96	120
Total	**na**	**268**	**na**	**442**	**710**

Source: Regis provided data, 2019.
Note:
1. Data used is based on FTE peak workforce numbers.

Table 11 presents two different operations phase workforce hiring scenarios. In each scenario, a different proportion of the operations phase workforce is sourced from within the Local Area. Scenario 1 is the predicted project arrangement.

Under Scenario 1, approximately 80% of the operations phase mine workforce will be LHs and approximately 20% will be NLHs. The proportion of LHs in Scenario 1 is not considered an upper limit and will vary according to labour market conditions at the respective point in time.

Under Scenario 2, approximately 60% of the operations phase mine workforce will be LHs and approximately 40% will be NLHs.

Table 11
Sensitivity Assessment Scenarios – Project Operations[1]

Project Phase	Local Hire		Non-Local Hire		Total Workforce
	Percent	Number	Percent	Number	
Scenario 1 – Project Arrangement	80	208	20	52	260
Scenario 2 – Alternative Arrangement	60	156	40	104	260

Source: Regis provided data, 2019.
Note:
1. Data used is based on FTE annual average workforce numbers.

3.3.4 Mitigation and Management

Actions to avoid, mitigate and manage the negative impacts of the project and enhance project opportunities were identified for all social impacts. The identification of strategies was informed through stakeholder inputs, Regis existing corporate management strategies, industry research and existing practice. Regis will continue to refine the mitigation and management strategies defined within the SIA in parallel with the project approvals process.

During the third round of SIA consultation (Section 3.5.4 and Appendix D) stakeholders were provided with an opportunity to review and comment on the acceptability of the measures proposed to mitigate or manage social impacts and enhance opportunities.

The social impact management and monitoring framework for the mine development is presented in Section 7 and for the pipeline development, in Section 10.4.

3.3.5 Significance Assessment

Once the social impacts and opportunities were assessed, they were then prioritised by assigning a level of significance. The significance of each social impact and opportunity was evaluated using the methodology described in the SIA Guidelines, summarised below and provided in full in Appendix B. With regards to workforce hiring arrangements, the significance assessment considers the social impacts associated with the ‘preferred project arrangement’.

Social impact significance was assessed using the following process:

- Stage 1 – Description of the potential impact demonstrating whether the impact is negative or positive, direct or indirect, long-term or short-term, local or regional.
- Stage 2 – Evaluation of the risk posed by the social impact with reference to:
  - Stakeholder perceptions of the potential level of social risk posed by the negative social impact (informed through the findings of SIA consultation);
  - The likelihood of the potential negative social impact occurring; and
  - The consequence of the potential social impact or opportunity, that is minimal minor, moderate, major or catastrophic (or reasonable worst-case).
- Stage 3 – Quantification of the social risk[32] using a social risk matrix (likelihood and consequence), before and after mitigations are applied (unmitigated/mitigated risk).
- Stage 4 – Determination of a final significance rating (High, Medium or Low) based on consideration of the aspects described above i.e. the outcomes of the quantitative social risk analysis and the perceived social risk from the perspective of the stakeholder.

The evaluation approach outlined above was also used to evaluate the significance of the potential social opportunities of the project by adjusting the approach taken and replacing:

- Level of stakeholder concern with level of stakeholder interest; and
- Social risk with an assessment of likelihood and the scale of improvement or benefit.

Determining the significance of impacts and opportunities involved the combined consideration of technical knowledge and local stakeholder perspectives. This approach is consistent with the NSW SIA Guideline and reflects the fact that a sole reliance on stakeholder perceptions may lead to biased results and the neglect of important impacts and opportunities. Stakeholders cannot always anticipate the scope and effects (positive and negative) of certain developments[33].

As a result of the significance assessment described above, each impact and opportunity was assigned a level of significance - ‘low’, ‘moderate’ or ‘high’.

In general, a ‘high’ social impact indicated that project-specific social management is required to be implemented, which if successfully implemented, would reduce the significance of the social impact.

[32] As defined in Vanclay et al (2015) pp vi “*social risk is considered to be both risk (threats) to the success of the project, but also risk (social issues) created by the project, which in turn become threats to the project*.”

[33] Terrapon Pfaff et. al., 2017, pp. 3.

During the third round of SIA consultation (Section 3.5.4 and Appendix D), stakeholders were provided with an opportunity to review and comment on the outcomes of the significance assessment and the associated social impact and opportunities ratings.

The outcomes of the significance assessment undertaken separately for the mine development and the pipeline development are presented in Appendix G and discussed in Section 8 (mine development) and Section 10 (pipeline development).

3.4 EIS CONSULTATION

Regis was responsible for the planning, coordination and implementation of the broader stakeholder engagement to inform the EIS. This engagement was undertaken separate to the SIA consultation. A detailed description of the EIS consultation is provided in the EIS Chapter 4[34].

3.4.1 Summary of EIS Consultation

Project consultation undertaken by Regis to date includes consultation with Federal and State regulators and government departments, local government agencies, infrastructure owners, service providers and nearby mining companies and tenement holders, as well as consultation with near neighbours, the local community, directly affected landowners, Aboriginal community members (RAPs) and interest groups. The results of consultation were provided to the SIA team for consideration in the identification and assessment of social impacts.

The findings of the EIS consultation process are discussed in detail in the EIS[35]. The following sections provide a summary of the consultation undertaken by Regis to inform the EIS.

Table 12 presents a summary of the EIS consultation activities undertaken by Regis with key stakeholders within the Local Area.

[34] EMM, 2019.

[35] EMM, 2019.

Table 12
EIS Consultation Activities

Stakeholder	Form of Consultation	Date
Landowners located within the project application area	• Face-to-face meetings	• Ongoing since 2013 with landowners within the mine project area and near neighbours to the mine project area • Ongoing since 2017 with landowners within the pipeline corridor
Landowners adjoining and nearby the mine project area	• Face-to-face meetings	• Ongoing since 2012 with landowners within the mine project area and near neighbours to the mine project area
	• Five Community Information Sheets	• Ongoing 2018-2019 and delivered to near neighbours of to the mine project area and in 2019 to residents of the Blayney LGA
	• Community information sessions	• 25-26 September 2018 (Blayney) • 14-15 May 2019 (Blayney)
	• Regis Public Meeting	• 29 May 2013 (Blayney) • 23 May 2019 (Blayney)
Broader Community	• Community Information Sheet	• Distributed to all residents in Blayney LGA April 2019
	• Presentations to a range of interest groups e.g. Rotary and Probus, NSW Farmers Blayney branch, Environmentally Concerned Citizens of Orange (ECCO)	• Ongoing since 2017
	• Two day community information sessions	• 25-26 September 2018 (Blayney) • 14-15 May 2019 (Blayney)
	• Two day community information sessions	• Tuesday 14 May and Wednesday 15 May 12-7pm
	• Regis Public Meeting	• 29 May 2013 (Blayney) • 23 May 2019 (Blayney)
Relevant LGAs (including Blayney, Bathurst and Orange LGAs)	• Formal project meetings with council representatives including councillors	• Regular dialogue and multiple meetings with BSC between 2017 and 2019 • Meetings with Bathurst Regional Council (BRC) in 2013 and again in 2018-2019 in relation to the pipeline development • Meetings with Lithgow City Council (LCC) 2018 in relation to the pipeline development • Project briefings to CC, Orange City Council (OCC) and Cowra Shire Council (CSC)

Stakeholder	Form of Consultation	Date
Non-Government Organisations (NGOs) and Industry Groups	• Project briefings and presentations	• Presentations to a range of NGOs including Belubula Headwaters Protection Group (BHPG), Environmentally Concerned Citizens of Orange (ECCO) • Meetings and presentations to industry groups including the NSW Farmers
Project CCC	• Formal Project CCC meetings with Independent Chair	• CCC established December 2018 with Meetings held in December, February, and May 2019
RAPs	• Engagement with Orange Local Aboriginal Land Council (OLALC) and Bathurst Local Aboriginal Land Council (BLALC)	• Ongoing since 2013 for both the mine development and the pipeline development

3.4.2 Project Community Consultative Committee

A Project CCC was established in November 2018, in accordance with the EARs. The Project CCC has an independent chair, appointed by the DPE. The first Project CCC meeting was held on 17 December 2018. Meetings are currently held approximately every two months, and will continue to be held on this basis for the foreseeable future. To date, Project CCC meetings have focussed on providing project updates, presenting the findings of technical studies and responding to participant questions regarding the project. The third Project CCC meeting held in May 2019 included a site tour for all Project CCC representatives. Representatives of the DPE attended the May 2019 meeting and provided meeting attendees with an overview of the project approvals process and answered key questions regarding this process.

3.5 SIA CONSULTATION

This section provides a summary of the stakeholder engagement undertaken to inform the SIA. A detailed description of the SIA consultation activities is provided in Appendix B.

3.5.1 SIA Consultation Objectives

The objectives of the SIA consultation include to:

- Ensure community members and stakeholders understand the project details, timing, and workforce arrangements so that discussions about impacts and benefits are meaningful;
- Provide a range of opportunities to encourage community members and key stakeholders to participate in discussion;

- Provide inclusive engagement throughout the assessment process; and
- Ensure the SIA considers the interests, lived experiences, perspectives, opinions and perceptions of people who may be directly affected by project impacts.

The first objective was informed through consultation undertaken principally by Regis as part of the EIS consultation process. SIA consultation undertaken by Hansen Bailey informed the remaining objectives.

SIA consultation enabled the:

- Involvement of key stakeholders in reviewing and defining the scope of the assessment;
- Collection of quantitative and qualitative data for the social baseline;
- Identification of interests, issues and concerns of near neighbours to the mine development to gain an understanding of how potential impacts may be experienced in the PAA;
- Provision of opportunities for stakeholder input to the social baseline, assessment and mitigation strategies;
- Confirmation of data, assumptions and findings through relevant technical studies and further engagement; and
- Comprehensive evaluation of predicted impacts and opportunities, informed by the knowledge and experience of local stakeholders.

3.5.2 Key Stakeholders

Key stakeholders for SIA consultation were identified during the SIA Scoping Phase (Table 13). Additional stakeholders were identified and engaged with as the SIA progressed.

Table 13
Key Stakeholders for SIA Consultation

Stakeholder Categories	Stakeholder Groups
Landowners within the mine project area	• Landowners, residents and leaseholders located within the mine project area. Regis currently owns all land within the mine project area and has an option over one property to the south of the mine project area
Landowners within the pipeline corridor	• Landowners located within the pipeline corridor and directly impacted by the pipeline construction
Landowners nearby the mine project area	• Landowners and commercial businesses within an approximate 2 km radius of the mine project area
Downstream landowners	• Landowners located downstream of the mine project area along the Belubula River
Nearby communities	• Residents of Blayney and the villages of Blayney LGA

Stakeholder Categories	Stakeholder Groups
Local Government	• BSC • BRC • LCC
Indigenous community	• RAPs, Wiradjuri People
Business community	• Business operators within Blayney LGA • Accommodation providers in the LGAs of Blayney, Bathurst Lithgow and Orange
Government and non-government service and infrastructure providers	• Education and children's service providers in Blayney LGA • Health and medical service providers in Blayney e.g. Blayney Health Service • Emergency Service providers e.g. Blayney Ambulance Service, Chifley Police District, Canobolas Zone District Rural Fire Service (RFS) • Disability and elderly support services e.g. Blayney Meals on Wheels • Housing support services e.g. Housing Plus • School bus service providers
Industry groups	• Central Tablelands Water • NSW Farmers Association
Community groups and NGOs	• Blayney interest groups e.g. Rotary, Probus etc. • Blayney sport and recreation groups e.g. Blayney Fishing Club • Community action groups e.g. BHPG • Blayney religious organisations e.g. Abundant Life Church • Town and Village Associations e.g. Blayney Town Association, Millthorpe Village Committee (MVC) • Tourism Associations e.g. Orange360 and Blayney Shire Visitor Information Centre
Elected representatives	• Councillors of BSC

3.5.3 SIA Consultation Scope

SIA consultation identified and informed an understanding of the different stakeholder perceptions of project impacts and benefits/opportunities. The scope of SIA consultation evolved over time to support the effective integration of social, economic and environmental considerations.

A diverse range of engagement methods (i.e. interviews, surveys, focus groups, face-to-face meetings, telephone discussions and workshops) were utilised to gain an understanding of the communities of interest, including resident way of life, experiences with mining to date and perceptions of social impacts and opportunities.

SIA consultation included three rounds of structured engagement over 18 months:

- Round 1 – Scoping engagement;
- Round 2 – Impact identification; and
- Round 3 – Validation of impacts, opportunities, and proposed management strategies.

A total of 71 meetings were held with 337 participants during the three rounds of consultation.

The following sections provide a brief overview of the scope of engagement for each of the three rounds of engagement. A more detailed discussion is presented in Appendix B with key outcomes documented in Appendix D.

Round 1 Consultation - Scoping

Round 1 SIA Consultation was undertaken by Hansen Bailey during April 2018. The purpose of the engagement was to understand the values and aspirations of near neighbours to the mine project area, scope the preliminary social impacts and inform an understanding of the social baseline.

Round 1 Consultation involved:

- 21 face-to-face semi-structured interviews with near neighbours to the mine project area;
- A meeting with the General Manager of BSC; and
- One meeting with a group of residents from the Kings Plains locality.

Forty-three people participated in Round 1 SIA consultation.

Round 2 Consultation - Impact Identification

Round 2 Consultation for the mine development was undertaken by Hansen Bailey in October 2018. Engagement with directly affected pipeline landowners to inform the SIA was undertaken by Hansen Bailey in February 2019.

The purpose of Round 2 Consultation was to:

- Collect qualitative information to inform the social baseline study;
- Validate existing qualitative and quantitative social baseline data;
- Understand the experiences of different stakeholder groups to past events e.g. closure of Blayney Abattoir, construction of Cadia East Project;

- Understand the magnitude and extent of any project related impacts experienced to date by near neighbours or other stakeholders; and
- Identify and understand the collective and individual perceived impacts and opportunities of the project for different stakeholder groups e.g. near neighbours, Blayney residents and service providers.

SIA consultation undertaken in October 2018 included:

- Four focus groups in Blayney, facilitated by Hansen Bailey, with a total of 54 people participating;
- Seventeen face-to-face semi-structured interviews with near neighbours to the mine development, and representatives of the Blayney community, service providers and organisations with a total of 34 people participating; and
- Eight group meetings with Blayney organisations including Rotary, Men's Shed, BSC, Probus, BHPG, Sports Council and Health Council.

A total of 179 people participated in SIA consultation during October 2018.

In addition, ten telephone interviews were conducted with directly impacted pipeline landowners (in February 2019), including one telephone discussion with NSW Forestry Corporation.

Round 3 Consultation - Validation

Round 3 SIA Consultation was undertaken by Hansen Bailey in May 2019. The purpose of Round 3 SIA Consultation was to seek stakeholder feedback on the significance assessment outcomes, and the management strategies proposed.

Round 3 consultation included:

- Six workshops with near neighbours to the mine project area (five with Kings Plains residents and one with residents to the north and west of the mine project area);
- Four workshops with Blayney residents;
- Presentations and discussions with Blayney Health Council and Health Service, BSC, BHPG, Blayney Rotary, Blayney Men's shed and Millthorpe Village Committee (MVC); and
- Two additional face-to-face meetings with individual landowners.

A total of 115 people participated in Round 3 SIA consultation.

In addition, during Round 3 consultation Regis facilitated two community open days. Hansen Bailey attended both open days to discuss the outcomes of the SIA with attendees. An estimated 150 people attended the community open days.

3.5.4 Summary of Engagement Approach

Table 14 provides a summary of the stakeholder engagement undertaken by Hansen Bailey to inform the SIA. This engagement is separate to, and in addition to, the EIS consultation undertaken by Regis (summarised in Section 3.4 and described in the EIS[36].

Table 14
SIA Stakeholder Engagement Scope and Schedule

Stakeholder Group	Engagement Methods	Timing
BSC	• Presentation of SIA methodology to BSC. • Various meetings with the BSC General Manager to discuss existing social conditions, and potential project impacts and opportunities. • Various face-to-face and telephone meetings with the Director of Planning and Environmental Services to discuss residential development in Blayney LGA. • Face-to-face meetings with relevant BSC representatives. • Presentation to BSC to provide SIA update including high level outcomes.	April 2018 October 2018 May 2019
Councillors of BSC	• Structured interviews with four BSC councillors to validate social baseline information, experienced impacts of CVO and potential impacts and benefits of the project.	October 2018
Near-neighbours to the mine project area	• Face-to-face interviews and phone interviews with property owners in proximity to the mine project area to validate social baseline information, identify perceived social impacts and opportunities and discuss potential management measures.	April 2018 October 2018
	• SIA workshops (six) in Blayney to seek feedback from near neighbours on the outcomes of the impact significance assessment and potential management measures. • Individual interviews (two) with near neighbours to discuss existing and potential social impacts.	May 2019
Directly affected landowners on the pipeline corridor	• Telephone interviews conducted with 10 directly impacted pipeline landowners.	February 2019
Accommodation providers Blayney LGA	• Telephone survey of accommodation providers to inform an understanding of short-term accommodation provisions.	September 2018

[36] EMM, 2019.

Stakeholder Group	Engagement Methods	Timing
Real Estate Agents Blayney LGA	• Telephone survey of local real estate agents to inform an understanding of local housing market conditions.	September 2018
Business Community Blayney LGA	• Telephone survey of local Blayney businesses (50) local real estate agents (two) to inform an understanding of local business conditions, existing staff recruitment issues and perceived impacts and opportunities of the project for the business community.	March 2019
Government and Non-government Service and infrastructure Providers	• Telephone discussions with select providers to validate social baseline and inform assessment of social impacts: – Housing Plus Orange; – Blayney Ambulance Service; – Canobolas Zone District RFS; – Millthorpe Public School; and – Various Blayney LGA child care providers. • Interviews with service providers including: – Blayney Health Service; – Chifley Police District; – Blayney High School (BHS); – Blayney Meals on Wheels; and – Abundant Life Church. • A number of providers also attended the SIA Focus Group discussions held in October 2018.	October and November 2018
	• Meeting with Blayney Heath Services.	May 2019
Communities of Blayney LGA	• SIA focus groups (four) with residents of the Blayney LGA to gather/validate social baseline, understand perceived impacts of the project to date, and inform assessment of social impacts and opportunities.	October 2018
	• SIA workshops (four) with previous SIA consultation participants to validate impact significance assessment and discuss potential management measures.	May 2019
Indigenous representatives	• Telephone interview with Wiradjuri Elder in October 2018. • Wiradjuri representatives participated in Blayney SIA workshops in October 2018. • RAPs were involved in the cultural heritage assessments for the project in March 2017, October 2017, September 2018 and January 2019.	2017-2019 Particularly in October 2018
Community groups and non-government organisations (NGOs)	• Meeting with the BHPG to discuss SIA, perceived impacts and opportunities. • Telephone discussions with representatives of community groups and volunteer organisations, and NGO directors. • Presentations to Blayney Rotary and Blayney Probus. • Meeting with MVC. • Meeting with Blayney Sports Council. • Meeting with Blayney Men's Shed.	October 2018

Stakeholder Group	Engagement Methods	Timing
	• Meetings with the BHPG (one) and MVC (one) to discuss outcomes of SIA significance assessment. • Meeting with Blayney Health Council (as part of the Health Service Meeting). • Meeting with Blayney Men's Shed • Presentation to Blayney Rotary.	May 2019

To ensure the confidentiality and privacy of information collected, and to maintain a level of comfort during engagement with groups or individuals, participants were asked to complete a consent to participate form or provide verbal agreement prior to the commencement of discussions.

All structured face-to-face interviews with stakeholders lasted between 1-3 hours and were conducted at a time and place convenient to participants. Hansen Bailey's approach to the SIA consultation was to be as accommodating as possible. Stakeholder interviews were offered at a variety times: before and after work hours, during the day, and over weekend periods. Call-backs were also arranged if people were unable to make any of the group meeting times or preferred to speak with a Hansen Bailey representative privately or over the phone.

Vulnerable, socio-economically disadvantaged and "difficult-to-reach" groups of the community were identified during the scoping and social baseline phases of the SIA. The elderly population, single parents and low-income earners were identified as vulnerable groups of the Blayney community through quantitative data and through discussions with NGOs and religious affiliations. To reach these different audiences, the SIA team contacted local day care centres, offered to attend play group meetings, offered public and individual meetings at a range of times, contacted religious organisations and spoke with NGOs in the area (i.e. Meals on Wheels, Can Assist and Housing Plus). Personnel of these organisations were encouraged to provide the SIA team's details to vulnerable individuals/groups to allow them to contact Hansen Bailey if they wished to discuss the project.

3.5.5 Limitations of SIA Consultation

Limitations of the SIA consultation include:

- Some participants were not fully informed of the project and its' key components prior to the conduct of consultation. This is primarily attributable to the timing of the SIA consultation and the release of additional project information through the EIS consultation program;
- Stakeholder perceptions of the project and potential impacts are based on early project understanding; and
- The willingness of participants to comment on the likelihood and significance of potential impacts and benefits. During Round 3 SIA consultation, many workshop participants listened to the discussion around impacts and management, but did not participate in the process of further evaluation.

4 CONSULTATION FINDINGS

This section provides a brief summary of stakeholder perceptions of the project with a focus on near neighbours and residents of the Blayney LGA.

4.1 OVERVIEW

The summary reported below is the synthesis of SIA consultation undertaken over an approximate 12 month period to May 2019. It is a summary designed to capture the dominant discussion threads over the period of consultation. A detailed review of the findings of each SIA consultation activity is provided in Appendix D, which also includes a list of all issues (positive and negative) raised during SIA consultation and in relation to the project.

The findings of consultation show that across the Blayney LGA there are a range of views towards the project. These views vary from strong opposition through to strong support. Analysis of attendance and participation in SIA consultation suggests many people who support the project may have felt uncomfortable declaring their views in a public forum due to perceived pressure from or a desire not to offend individuals or groups who are strongly opposed to the project.

4.2 EXPERIENCED IMPACTS

During SIA consultation, some near neighbours of the PAA identified a number of project related social impacts experienced to date. Identified experienced impacts include:

- Stress and anxiety – The most commonly experienced social impact identified by almost all residents in the PAA related to health and wellbeing. The majority of residents in the PAA, and in particular the Kings Plains locality cited elevated levels of stress and anxiety due primarily to uncertainty, and specifically:
  - Whether the project would proceed;
  - The mine life;
  - The potential impacts and the extent to which they might be impacted;
  - The ability of Regis to suitably manage or control the impacts;
  - The opportunity for property acquisition and/or compensation; and
  - The potential impact on property values and saleability of property in the locality in the event that residents seek to relocate during the approvals process or following determination.
- Conflict and reduced community cohesion – A number of Kings Plains residents cited evidence of a growing divide in the Kings Plains community due to differing attitudes towards the project and differences in opinion as to the perceived benefits and impacts of the project. Some residents also indicated the presence of conflict within families due to divergent project opinions.

- Impacts to way of life – Some residents provided a range of examples of how the project is currently impacting their existing way of life. These examples included:
  - A loss of time in the day due to the time spent reading project materials, attending engagement sessions and reflecting on potential project impacts and the extent to which Kings Plains would be impacted;
  - Deferment of future property plans and life decisions due to project uncertainties i.e. mine life, extent of impacts etc. and uncertainty in relation to future property values; and
  - Conflict between family members due to a combination of the above factors and differing attitudes towards the project.

In addition to the social impacts described above, a number of residents of the Kings Plains locality perceive that existing property values have fallen sharply due to the increased presence of the project.

4.3 PROJECT PERCEPTIONS

SIA consultation shows that resident attitudes towards the project and perceptions of social impacts is influenced by proximity to the project. The findings of SIA consultation showed the closer the resident to the mine project area, the greater the number of perceived social impacts raised during engagement and the fewer project benefits identified.

4.3.1 Perceived Social Impacts

The following sections provide a brief summary of the potential social impacts frequently raised during SIA consultation.

Near Neighbours

In relation to the PAA, resident perceptions of potential social impacts were generally consistent, particularly within the Kings Plains locality. Near neighbours perceive that the project will result in a number of significant social impacts. The most frequently raised perceived social impacts include:

- Amenity impacts – The majority of near neighbours, particularly residents of the Kings Plains locality perceive that the project will adversely impact the social, economic, cultural and environmental attributes of the locality that collectively enhance their way of life. The majority of these near neighbours anticipate tangible and adverse changes in amenity, both day and night. Many residents of the Kings Plains locality perceive that the magnitude of these impacts will be such that they will no longer desire to live in the locality.
- Impacts to existing way of life – One of the key findings of the SIA consultation undertaken with near neighbours is the value placed on the outdoor way of life and the

associated amenity. Family life is strongly oriented to the outdoors either for recreation or business purposes e.g. agricultural operations. Residents of the PAA expect to experience a reduction in the use and enjoyment of both indoor and outdoor spaces due to amenity impacts from the project. During SIA consultation this message was consistently raised by residents of the Kings Plains locality.

- Impacts to rural values – The majority of near neighbours hold strong rural values. These residents have a strong attachment to a specific vision of life in the locality, which emphasizes its' rural character and amenity. These near neighbours view the project as a threat to these values: the protection of rural land and natural assets e.g. the Belubula River, and the protection and enhancement of the rural way of life.
- Changes in accessibility to water – Many residents of the PAA perceive that the project will impact the quality and quantity of water in private groundwater bores and the Belubula River. Near neighbours rely on groundwater bores and rainwater for water supply. The current drought condition in the CW Region was consistently raised by residents of the PAA during discussions in relation to the potential impacts of the project on water resources. The significance residence attribute to this potential project impact is therefore considered to be strongly influenced by the ongoing drought in the CW Region. Water is a highly valued asset in the CW Region.
- Private property impacts, specifically changes in property values – All near neighbours perceive that the project will adversely impact private property values. Resident concerns in relation to property value is exacerbated by a fear as to whether access to groundwater will be impacted and whether blasting activities will damage property. Several landowners indicated that their property was also superannuation for the future and therefore perceived the project to be impacting their future aspirations.
- Impacts to health and wellbeing – Residents fear the health impacts of having a mine in close proximity. Residents perceive that dust from the project will affect areas outside of the mine project area, leading to adverse impacts on the health and wellbeing of neighbouring residents. Some near neighbours noted that several existing residents have health issues which potentially make these residents more vulnerable to changes in air quality.

Residents of the PAA who reside to the north and west of the mine project area anticipate experiencing similar social impacts to those identified by residents of the Kings Plains locality. However, residents along Guyong Road also expect that the project will result in an increase in traffic on Guyong Road, reducing road user safety, a particular concern given the presence of a school bus route along Guyong Road. Residents also anticipate changes in amenity due to noise from increased project related traffic on Guyong Road.

Downstream Landowners

Downstream landowners have similar concerns to near neighbours with respect to water and rural values. Downstream landowners expressed a strong sense of 'resource hierarchy' where water is the ultimate asset that must be protected. This is not surprising given the prolonged

severe drought in the CW Region. The project is perceived as a threat due to competition for similar resources and the potential adverse impact it could have on water. This view is shared by the majority of near neighbours and many people from the broader LGA who participated in SIA consultation.

Landowners on the Belubula River downstream of the project hold strong concerns that the project, specifically the TSF, will significantly and adversely impact the quality and quantity of water in the Belubula River over the long-term. These landowners indicated that they are reliant on surface water flows in the Belubula for agricultural operations e.g. stock watering. Downstream landowners see the project as a threat to the economic viability of their agricultural operations and ultimately property values.

Broader Blayney Community

The broader community of Blayney LGA raised many and varied issues in relation to the potential social impacts of the project. Many SIA consultation participants share similar views as near neighbours and downstream landowners in relation to rural values, water and amenity. Other frequently raised potential social impacts relate to:

- Use and enjoyment of Carcoar Dam – Many residents identified attachment to Carcoar Dam and are concerned that any changes in the Belubula River system might adversely impact Carcoar Dam and reduce its attractiveness as a recreation (fishing and water skiing) destination as well as for over-night camping.
- Housing demand – Some residents and service providers are concerned that project related workforce accommodation demands will destabilize the housing market significantly reducing housing affordability and displacing rental households from the rental market in favour of mining tenants.
- Short-term accommodation demand – A number of residents and service providers are concerned about the potential for project workforce accommodation demands to push the non-mining sector, particularly tourists out of short-term accommodation options i.e. hotels and motels. These residents were concerned that the Blayney LGA would not be able to capitalise on the recent growth in visitors to the LGA and in particular during regional events e.g. Bathurst 1000.
- Character and amenity of Blayney township – A few residents raised concerns in relation to the potential impact of the project on the character and amenity of Blayney township. These residents are concerned that an influx of workers associated with the project will detract from the rural character of the Blayney township and any anti-social behaviour by the workforce will affect perceptions of safety and security, and cohesion in the community. This concern is influenced to some extent by residents own experiences living in Blayney when the Cadia East Project was constructed, but also hearsay of experiences in other communities with mining.

- Local business participation – A number of business owners expressed an expectation that they would 'miss out' on any economic benefits from the project, believing that benefits will only accrue to the broader region. This perception was attributed to the small size of local businesses, their capacity and capability to competitively tender for any work.
- Labour draw – The BSC, business owners and operators in Blayney LGA identified the potential for labour draw as a significant social impact. The business community raised concern that the project would draw both skilled and semi-skilled labour away from existing businesses impacting business operations and potentially long-term viability. Small trade businesses were particularly concerned about the potential loss of apprentices. The business community noted they were disadvantaged because of an inability to compete with mine wages, which are generally regarded to be much higher than local trade wages.

4.3.2 Perceived Social Opportunities

Local benefits from the project were identified primarily by the broader community of the Blayney LGA, reflecting the distance from the mine project area. Few near neighbours perceived that the project would deliver benefits to the surrounding community or the broader Blayney community. Potential project benefits identified by the broader community included:

- Economic growth – The majority of SIA consultation participants acknowledge that the project has the potential to drive economic growth in the Blayney LGA, however thought that the economic value of this growth would likely be smaller than that accruing to nearby Orange and Bathurst LGAs.
- Job creation – Residents identified job creation as a benefit of the project, noting it would be good to have another locally based employment generator that attracted labour back into Blayney and provided opportunities for existing school leavers.
- Improvements and/or expansion in services and facilities – Several residents suggested that like Newcrest, Regis will make a financial investment in the community supporting the delivery of improvements and/or expansion in services and facilities. Few residents were aware of the Voluntary Planning Agreement (VPA) process.
- Increased local spend – Some business owners and operators cited increased local spend as an opportunity associated with the project. The majority of these people viewed the construction phase as the primary driver of local spend, based on the premise that the majority of the workforce would likely reside in Blayney LGA for the duration of the construction phase.

4.3.3 Perceptions of Distributional Fairness

SIA consultation highlighted differing perceptions of distributional fairness in the Blayney LGA. During Round 1 and Round 2 SIA Consultation several participants questioned the likely distribution of project economic benefits, suggesting that the local area i.e. Blayney LGA would likely carry the social and environmental burden of the project with the economic benefits accruing to localities outside of the LGA. For some near neighbours there is a sense that the local community is "*disproportionally carrying the costs of mining and is disadvantaged simply because it is at the centre of the impact"* [37]*.*

A study conducted by CSIRO in 2014[38] explored the attitudes of Australians toward the mining industry. The study involved the survey of 5,121 Australians. One attitude explored was the distributive fairness of mining associated benefits. In relation to distribution fairness, the study found that:

- Overall, survey participants were not strongly of the view that the economic benefits of mining are distributed fairly;
- Respondents felt more strongly overall that mining communities received a fair share of the benefits of mining; and
- And for those people living in mining communities specifically, the data indicates that the benefits of mining are perceived to have been distributed much more fairly at the community level than at the personal level.

4.3.4 Perceptions of Fairness and Trust

Trust and accountability were key discussion themes progressed by near neighbours and a number of other stakeholders during the Round 3 SIA Consultation.

A number of near neighbours expressed a lack of trust in the EIS technical modelling results and questioned the reliability of the modelling results particularly where noise, dust and water are concerned. Based solely on SIA consultation, this lack of trust appears to be in part attributable to:

- Varying degrees of knowledge of impact modelling methodologies and also regulatory requirements amongst participants; and
- Established perceptions amongst some residents, as to how they expect to be affected by the project. In situations where the findings of EIS technical assessments challenge these established perceptions, these residents expressed scepticism with respect to the technical findings.

[37] Askew and Askland, 2016, p. 109.

[38] Moffat et al., 2014, pp. 13.

There is also evidence that for some residents, their perceptions of fairness and trust have been influenced by the experiences of other people living in proximity to existing mining operations. A few participants indicated they had spoken with residents of other communities in proximity to coal mining operations. These residents had noted their negative experiences. Several residents of the PAA also highlighted examples of situations in the Hunter Valley where small communities were adversely impacted by coal mining operations.

Many participants in SIA consultation expressed doubt in relation to the safety and integrity of the TSF. This is despite Regis providing comprehensive information regarding the design and management of the TSF available at the Community Open Days in May 2019. Discussions with participants during SIA consultation suggests that this lack of faith is influenced by the recent events at the CVO (the partial TSF failure) and historical mining events in the Blayney LGA e.g. Browns Creek Mine incident.

The study conducted by CSIRO[39] also explored perceptions of trust in a range of important factors in the mining industry in Australia: the mining industry, state government, federal government, and NGOs. For each of these factors, the study assessed three items of trust: the extent each was trusted to act in the best interests of society, act responsibly, and do what is right. The study found that:

- NGOs were the most trusted, with industry second, followed by federal and state governments; and
- The levels of trust overall, for all groups, were low.

4.3.5 Perceptions of Procedural Fairness

Procedural fairness refers to whether individuals perceive that they have a reasonable voice in decision-making processes[40]. Participants in SIA consultation frequently made comments in relation to procedural fairness and demonstrated varying perceptions of the extent to which they believe Regis has involved near neighbours and the broader community in decisions about the project. The majority of comments on procedural fairness were drawn from SIA consultation with near neighbours rather than the broader Blayney community. For the most part, perceptions of procedural fairness amongst residents of the PAA and in particularly the Kings Plains locality were negative.

The findings of SIA consultation indicate that some near neighbours perceive they have had sporadic access to project information, and that project information has been inconsistent in its messaging. These perceptions can be attributed in part to a lack of awareness and understanding amongst near neighbours (and the broader community) of the key steps in the

[39] Moffat et al., 2014, pp. 13.

[40] Besley, 2010 and Tyler, 2000 as cited in Moffat et al., 2014.

project approvals process, and the process for preparing an EIS. Some residents perceive that stakeholder engagement exists, but that it lacks substance and transparency.

During SIA consultation near neighbours expressed varying degrees of expectation in relation to the supply of project information. On several occasions different participants in SIA consultation cited examples of project related activities perceived to be happening within or outside the mine project area e.g. groundwater sampling or tree plantings on neighbouring private properties, or purchase of land outside the mine project area and expressed frustration that they were uninformed about the purpose of these activities when the activities more than likely were directly related to the project. EIS Open Days in September 2018 were considered to be poorly advertised and therefore many people felt that they missed the opportunity to participate. The EIS Open Days held in May 2019 were considered by some residents to occur too late in the process to enable the community to make an informed decision about how the project will impact individuals and the community.

Despite this, the EIS Open Days in May 2019 were attended by an estimated 150 people, many of whom commented to project team members in attendance how worthwhile the Open Day had been, how detailed and varied the information was, and how valuable the opportunity was to speak with the technical consultants.

A number of residents also indicated reservations about the duration of the EIS public exhibition period, suggesting it is too short to enable a full review of the EIS contents and the drafting of appropriate submissions. This is despite DPE granting an extension of the public exhibition period to at least 42 days. The standard minimum public exhibition period is 28 days.

4.3.6 Perceptions of Governance

Participants in SIA consultation had varying perceptions of governance relative to the project. Perceptions of governance related primarily to "*fairness and rigour in legislative, regulatory and policy platforms"* [41]*.*

With respect to informal governance and in particular the BSC, some residents, primarily near neighbours, expressed a sense that BSC will not use VPA funds to address the social impacts of the project, rather they will allocate the funds to alternative expenditure. Some residents also expressed a sense that BSC would not act in the best interests of the near neighbours because of the potential economic benefits of the project for the LGA.

[41] Askew and Askland, 2016.

With respect to formal governance, many consultation participants questioned:

- The ability of Regis to comply with the environmental conditions of consent;
- The capacity of the NSW Environment Protection Authority (EPA) to hold companies accountable for environmental offences; and
- Who in government was accountable for the implementation of SIA management measures.

PART B – MINE DEVELOPMENT

5 SOCIAL BASELINE

This section provides a summary of the social conditions and trends in the social area of influence for the mine development for matters identified as material to the SIA.

5.1 INTRODUCTION

Section 5 focusses primarily on the communities in proximity to the mine project area i.e. the PAA and the SAA (Blayney LGA). The social baseline is structured as follows:

- Section 5.2 – Planning Context – describes the state, regional and local planning framework relevant to the project and the communities of interest;
- Section 5.3 – History and Settlement Patterns – describes the Aboriginal and European history relevant to the Blayney LGA;
- Section 5.4 – SAA – provides a summary description of the relevant social baseline conditions in the Secondary Assessment Area (SAA) with further detailed information included as Appendix F; and
- Section 5.5 – PAA – provides a detailed description of the relevant social baseline conditions in the PAA with a focus on the Kings Plains locality and the settlement of Kings Plains.

Further social baseline information, including information relevant to the RAA is presented in Appendix F.

5.1.1 Social Area of Influence

The social area of influence of the mine development consists of the people potentially impacted by this component of project[42]. The potential social impacts of the mine development are unlikely to be confined to within the immediate vicinity of the mine project area. The area of influence extends beyond the mine project area, to the communities and LGAs that may experience changes to social conditions as a result of the project. Discrete sectors of these communities may also experience a different set of impacts to the broader community. For example, landowners along the Belubula River between the mine project area and Carcoar Dam have significant concerns in relation to the potential for the project to impact surface water quantity and quality in the Belubula River with resulting impacts on commercial agricultural operations and future property aspirations.

[42] Vanclay, F. et al., 2015.

The various components of the mine development's social area of influence are described in Table 15. The social area of influence defines the SIA Study Area for the mine development component of the project.

Table 15
Mine Development Social Area of Influence of the Project

Stakeholder Group	Description
Private Properties within the Mine Project Area	There are currently 10 residential dwellings located on land within the mine project area, with a current total occupancy of 11 persons (Figure 5)[43]. Regis has acquired or has agreement to acquire all freehold land within the mine project area. The mine development will therefore not directly impact private landholdings.
Neighbouring Properties	Figure 5 shows the location of the mine project area in relation to nearby private properties and residences. There are 88 privately owned residential properties located within an approximate 2 km radius of the mine project area. The potential for these near neighbours to experience impacts to amenity is high during both the construction and operation phases of the mine development. Regis also owns two residential dwellings located outside the mine project area on land to the immediate north of the mine project area, and two dwellings immediately to the east, as well as an agreement to acquire one private property to the immediate south of the mine project area.
Nearby Communities	Figure 1, Figure 4 and Figure 5 show the location of the mine development in relation to nearby local communities. Kings Plains settlement is the closest community to the mine project area, located immediately south of its' southern boundary. The potential for the Kings Plains settlement to experience adverse social impacts e.g. reduced amenity and cumulative biophysical impacts as a result of the mine development is high. Other urban centres of primary interest to the SIA include Blayney and Millthorpe Village, the regional centres of Bathurst and Orange, and Cowra the main urban centre for Cowra LGA. The mine development has the potential to impact upon the supply of short-term accommodation for the tourism industry as well as housing availability and social infrastructure accessibility in Blayney and Millthorpe, as the closest urban centres to the project area. In the case of Blayney and to a lesser extent Millthorpe there is also the potential for impacts to character and identity. The regional centres of Orange and Bathurst are likely to be a major source of the project workforce for construction and operations and may experience positive economic benefits. Cowra may be a source of workforce for the project and could experience some positive economic benefits.
LGAs	The LGA of primary interest for the SIA is the Blayney LGA, however the LGAs of Bathurst, Orange, Cabonne and Cowra are also considered given the likely distribution of direct employment, population, social infrastructure, business and housing impacts. The inclusion of these additional LGAs acknowledges the strong economic, social and cultural interconnectedness that exists between the LGAs of Blayney, Bathurst, Cabonne and Orange.

[43] As at 3 April, 2019.

Stakeholder Group	Description
Indigenous Areas	As noted in Section 2.1.6 the mine development is the traditional country of the Wiradjuri People. Wiradjuri People reside across the Blayney LGA and neighbouring LGAs. The mine development has the potential to result in social impacts and opportunities for the Wiradjuri People.
Belubula River System	Scoping consultation indicated that potential surface water and groundwater impacts to the Belubula River are concerns for local interest groups e.g. BHPG and also landowners who reside downstream of the mine project area along the Belubula River. Later rounds of consultation also highlighted stakeholder concerns e.g. local fishing groups, in relation to the potential for impacts to water quality and quantity in Lake Carcoar. These issues have been comprehensively assessed in specialist studies prepared for the EIS. The social dimensions of these issues have been explored in Section 6.2 and Section 6.3.
CW Region	The project is SSD. Impacts and benefits such as State revenue and Gross Domestic Product (GDP) are captured within the Economic Impact Assessment (EcIA)[44] (EIS Appendix DD). Detailed analysis of broader and State-wide economic benefits is not a key focus for the SIA, however, recognition of these benefits and impacts is a key consideration when discussing the distributive social equity of the project.

5.2 PLANNING CONTEXT

5.2.1 Regional Planning Context

Central West and Orana Regional Plan 2036

The Central West and Orana Regional Plan 2036[45] (the Regional Plan) provides a framework to guide land use planning priorities and decisions over the next 20 years. The associated Implementation Plan includes priority actions as well as medium and longer-term actions to coincide with population and economic change. The Central West and Orana Region (the CW&O Region) incorporates 19 NSW LGAs. The Central West part of the CW&O Region includes the LGAs of Blayney, Orange, Bathurst, Cabonne and Lithgow.

The Regional Plan supports the following key regional goals:

- The most diverse regional economy in NSW;
- A stronger, healthier environment and diverse heritage;
- Quality freight, transport and infrastructure networks; and
- Dynamic, vibrant and healthy communities.

[44] Gillespie Economics, 2019.

[45] Department of Planning and Environment, 2017a.

The Regional Plan identifies the following top three economic opportunities for the Blayney, and Cabonne LGAs:

- Blayney – Agribusinesses, Transport and Logistics, and Mining; and
- Cabonne – Agribusiness, Tourism and Mining.

Table 16 presents the Regional Plan priorities for these LGAs.

Table 16
Regional Plan Priorities

Blayney LGA Priorities	Cabonne LGA Priorities
• Continue to revitalise Blayney's main street and central business district	• Maintain and enhance the economic diversity of Cabonne's towns, villages and commercial centres
• Continue to grow the mining, agribusiness, transport and logistics sectors and associated businesses	• Support villages to attract appropriate development
• Investigate the development of a regionally significant intensified agricultural precinct for agribusinesses, leveraging existing strategies advantages and future infrastructure	• Support the mining and agribusiness sectors and associated businesses through land use planning policies
• Leverage Blayney's strategic advantages including its proximity to Bathurst, Orange, Cowra, Canberra and Sydney; the existence of major utility services; and access to transport, warehousing and freight facilities	• Leverage opportunities from the LGA's rural character to diversify the economy in areas such as tourism
• Continue to grow the renewable energy industry sector	• Support the connectivity of the local, regional and state transport network
• Leverage opportunities from the LGA's rural character to support diverse industries such as tourism	• Protect agricultural land from encroachment from residential development

Source: DPE 2017a.

RDA Central West NSW Regional Planning Framework

The Federal Government's *Regional Development Australia Central West NSW Regional Planning Framework (2017-2020)*[46] (RDA Central West) outlines the priorities for sustainable economic development across the CW Region. Each of the objectives: regional competitiveness; human capital; sustainable communities; connectivity and partnerships; support the Future Directions and Strategic Objectives identified in the *Blayney Shire Community Strategic Plan 2018 - 2028*[47] (Community Plan).

[46] RDA Central West, 2017.

[47] Blayney Shire Council, 2018.

Regional Economic Development Strategy

The *Orange, Blayney and Cabonne Regional Economic Development Strategy 2018- 2022*[48] (Regional EDS) sets out a long-term economic vision and associated strategy for the three LGAs of Orange, Blayney and Cabonne.

The economic vision articulated in the Regional EDS is:

> *"A large and diverse regional economy with a vibrant network of towns, villages and a regional city that leverage opportunities from being at the heart of NSW in order to grow wealth and prosperity"* [49]*.*

The Regional EDS articulates a framework for identifying actions crucial to achieving the regional vision. The aims of the Regional EDS are to:

- Aim 1 - Develop existing strengths in agriculture, agricultural processing, agri-technology and manufacturing;
- Aim 2 - Support growth in mining and mining services;
- Aim 3 - Build on the region's core specialisation in healthcare;
- Aim 4 - Realise economic opportunity in education and public administration; and
- Aim 5 - Drive tourism growth and enhance the liveability of the region.

The Regional EDS also identifies infrastructure priorities and early stage priority actions for each of the identified aims. The following infrastructure priorities and early stage priority actions identified in relation to supporting growth in mining and mining services are identified in the Regional EDS:

- Infrastructure Priorities:
  - Natural Resource Access: Ensure efficient natural resource access (land and water) to support a sustainable mining sector.
- Early Stage Priority Actions:
  - Closely engage the community in land-use scenario planning to ensure future viability of developing mining industries.
  - Proactively facilitate efficient mining development through local land-use strategies and environmental plans.
  - Work with mine proponents to ensure planning approvals maximise mine benefits while minimising any social and environmental costs.

[48] AgEconPlus, 2018.

[49] AgEconPlus, 2018 pp. 1.

- Develop forward strategy to identify efficient sources of water supply for mining development.
- Develop a renewable energy strategy for the region with key stakeholders to address high energy prices and to enhance industry competitiveness.

These priority actions present opportunities for Regis to support the delivery of the project and enhance the distribution of benefits to the Orange, Blayney and Cabonne LGAs. A VPA could provide the means for BSC to progress a number of priority actions contained within the Regional EDS. Table 17 describes actions to be progressed by Regis to support the achievement of specific aims identified in the Regional EDS and in recognition that the project workforce is likely to be drawn from across the Orange, Blayney and Cabonne LGAs.

Table 17
Summary of Actions to Support the Vision of the Regional EDS

Aim	Actions to be Progressed by Regis
Support growth in mining and mining services	• Participate with Newcrest and other significant industry operations in discussions with BSC, CC and OCC to progress the development of a renewable energy strategy for the region.
Drive tourism growth and enhance the liveability of the region	• Engage with BSC, OCC and CC in relation to the development of the project workforce accommodation strategy to determine whether workforce accommodation planning can support the provision of longer term budget accommodation to the regional area. • Engage with the BSC, OCC and CC in relation to identifying ways in which Regis can support the achievement of one or more of the early state priority actions.

5.2.2 Local Planning Context

Land Use Planning

Blayney Local Environment Plan

Local Environmental Plans (LEPs) specify the planning and land use management aims for public and private land through zoning in accordance with the EP&A Act. The majority of the mine project area and the adjoining land is located within the Blayney LGA and development is subject to the land use zoning provisions of the *Blayney Local Environmental Plan 2012*[50] (Blayney LEP). Land within the mine project area is zoned RU 1 Primary Production under the provisions of the Blayney LEP. Land adjoining the project area is predominantly zoned RU1 Primary Production. There is also a portion of land zoned RU3 Forestry adjoining the eastern boundary of the mine project area.

Open cut mining is a permitted land use with consent in the RU1 Primary Production zone.

[50] Blayney Shire Council, 2012.

The overall aims of the Blayney LEP include to:

- Encourage development that complements and enhances the unique character and amenity of Blayney including its settlements, localities, and its rural areas;
- To provide for a range of development opportunities that will contribute to the social, economic and environmental resources of Blayney in a way that allows present and future generations to meet their needs; and
- To facilitate and encourage sustainable growth and development.

Cabonne Local Environmental Plan

Land within and adjoining the mine project area to the north is zoned RU 1 Primary Production under the provisions of the *Cabonne Local Environmental Plan 2012* (Cabonne LEP)[51]. Vittoria State Forest to the north east of the mine project area is zoned RU3 Forestry. The overall aims of the Cabonne LEP are consistent with those of the Blayney LEP. Open cut mining is a permitted land use with consent in the RU1 Primary Production zone.

Blayney Settlement Strategy

The *Blayney Settlement Strategy* [52] (Settlement Strategy) prepared in 2011:

- Identifies key issues facing each of the eight key settlements in the Blayney LGA; and
- Identifies strategies to address those issues and manage the future growth and enhancement of each of the settlements over the next 10-20 years.

The Settlement Strategy is limited to those areas that are currently zoned RU5 Village or R5 Large Lot Residential under the Blayney LEP.

The Kings Plains settlement is not considered in the Settlement Strategy because the zoning of all land within the Kings Plains settlement is RU1 Primary Production and not RU5 Village or R5 Large Lott Residential. Further, with the exception of the Kings Plains Rural Fire Brigade (RFB) Kings Plains settlement does not support the community facilities e.g. church, school, sporting fields, typically found in other villages of the Blayney LGA.

BSC has also commenced a review of the existing Settlement Strategy and anticipates release of a new strategy by the end of 2019.

[51] CC, 2012.

[52] BSC, 2012.

Local Community Planning Governance

Blayney Shire Community Strategic Plan

The Community Plan is the strategic plan of the Blayney LGA community. The Community Plan aligns with the priorities identified for the Blayney LGA in the CW&O Regional Plan (Section 5.2).

The project supports the identified five core themes of the Community Plan[53] through the following mechanisms:

- Negotiation and implementation of a VPA for the project will facilitate the release of funds for a range of investment activities which may include community infrastructure and service improvements as identified in the Community Plan;
- Establishment of a Project CCC provides the opportunity for Council and Council representatives to work with Regis and the community to help ensure that the mine development supports the achievement of the vision and aspirations defined in the Community Plan;
- A focus on the creation of local employment opportunities associated with all phases of the project, and on attracting new residents to Blayney LGA;
- Supporting the local business community to access and capitalize on the economic opportunities presented by the project;
- Supporting growth and vibrancy in the Blayney town centre; and
- Completion of a comprehensive assessment of the environmental, economic and social impacts and opportunities of the project and submission of an EIS to DPIE for the project.

Town and Village Community Plans

BSC has endorsed the *Town and Community Plans* for Lyndhurst, Mandurama, Newbridge, Blayney, Carcoar, Neville, Millthorpe and Barry/Hobbys Yards. These plans capture the vision and aspirations of each of the individual villages and town communities of Blayney LGA, with a range of projects and priorities that they view as important to their futures.

The aspirations and values outlined in all of the Town and Village Community plans are centred on five key themes, including:

- Maintain communication with other villages and Blayney, as well as encourage inter - village events;
- Promote affordable living;
- Improve and maintain the streetscape and visual appeal of the town to encourage tourism, including promoting the history and heritage within the town;

[53] BSC, 2018.

- Support local businesses and engage with schools and other services; and
- Create a sense of place by being inclusive, friendly and family orientated[54].

There is no separate *Town and Village Community Plan* for Kings Plains.

5.2.3 Heritage Values

There are no Commonwealth or National Aboriginal or European heritage listed places within the mine project area.

The following buildings and historical gold mining areas in proximity to the mine project area are listed in Schedule 5 Environmental Heritage of the Blayney LEP:

- Kings Plains Mining Area ("Last Chance Mine");
- Former Anglican Church;
- Iralee homestead, gardens and outbuildings;
- Lynfern homestead, gardens, stables and woolshed;
- Former Kings Plains public school and teacher's residence;
- Kareela homestead and garden;
- Springfield woolshed; and
- Woolshed (222 Pounds Lane).

The Beekeepers Inn (formerly Halfway House) is listed in Schedule 5 Environmental Heritage of the Bathurst Regional Local Environmental Plan 2014 (Bathurst Regional LEP).

These sites are all located outside the mine project area. None of the identified buildings are Commonwealth or National European heritage listed places. The heritage assessment for the mine development (EIS Appendix P) identified one site, MGP H23, as possibly having some cultural values at a state level, although further research is required to confirm this is the case. The heritage assessment also identified a number of items that whilst not listed, are deemed to be of local significance within the disturbance footprint of the mine (Section 6.2.4).

5.3 HISTORY AND SETTLEMENT PATTERNS

This section provides a summary of the Aboriginal history and European settlement history of the Blayney LGA. The information is drawn from the *2010 Blayney Shire Council Community*

[54] Town and Village Community Plans, 2018.

Heritage Study[55], and the *Mine Development Cultural Heritage Assessment*[56] (CHA) (EIS Appendix P) prepared for the mine development component of the project.

5.3.1 Aboriginal History and Cultural Values

The mine project area is located within an area identified as the traditional country of the Wiradjuri People. The location of freshwater sources is likely to have been the main controlling factor of Aboriginal occupation of the mine project area. It is probable that past Aboriginal people who occupied the project area were hunter-fisher-gatherers employing both foraging and collecting subsistence strategies. These people would have primarily occupied the riparian zones of the Lachlan and Macquarie rivers dispersing from the riverine corridors to exploit ephemeral resources of the more poorly watered, hilly hinterland during favourable climatic conditions[57].

Aboriginal people of the NSW central westand NSW are concerned about any development that might impact upon Aboriginal heritage and other values on land that is traditionally theirs. All land has high cultural significance for individual Aboriginal people and for the Aboriginal community collectively. It should also be noted that any development upon, or disturbance of land is contrary to principal Aboriginal beliefs regarding land, its values and its inherent cultural significance.

Aboriginal community representatives Greg Ingram and Ian Sutherland, Heritage Officers of the OLALC involved in the CHA for the mine development, identified the mine project area as a place that Aboriginal people had occupied in the past. Physical evidence of this past land use was provided by the presence of Aboriginal archaeological sites in the project area. The CHA identified 38 cultural heritage sites in the mine project area, none of which are of high scientific or cultural significance.

5.3.2 European History and Settlement Patterns

The following historical analysis highlights the significant natural (climatic), economic (development) and social processes that have influenced land use and population change over time across the Blayney LGA, and demonstrates the resilience of the community of Blayney LGA and in particular residents of Blayney township.

[55] NSW Department of Planning, 2010.
[56] Landskape, 2019
[57] Landskape, 2019.

Early European Settlement of Blayney District

Europeans first sighted the Blayney region in 1813[58]. Temporary settlement occurred throughout the Blayney area in the 1820s when government stock stations were developed and private pastoralists claimed land. Some of the earliest towns in the CW Region were Carcoar and Millthorpe. The village of Carcoar, the third oldest town in NSW west of the Blue Mountains, was established at 'Coombing' as a pastoral enterprise comprising horse, cattle and sheep grazing by Thomas Icely in 1831. By 1838, the settlement was formally established as a town, and by 1850, the town's population (500) almost rivalled that of Bathurst[5960]. It was during this period that Stoke Stable was built and by 1860 Carcoar was large enough to warrant a hospital. Carcoar became the main administration centre west of Bathurst, with a municipal council, court house and hospital[61].

Unlike Carcoar, Blayney's development was sporadic. Houses, a mill and an inn were in existence by 1837, but it was not until 1843 that a village was established that would eventually grow into Blayney. During the mid 1800s, the villages of Mandurama and Millthorpe (originally named Spring Grove) were established, with the village of Barry settled in the second half of the 1800s. The discovery of gold in 1851 brought a sharp population increase to the region and the villages of the district flourished.

Mining and Industry

The discovery of gold to the north at Ophir in 1851 would have a profound impact on the natural environment and bring significant changes to the social, political and economic environments of the Blayney district. The gold rush altered the employment and social structure of settlements throughout the district pushing the focus from the agricultural industry onto the mining industry with higher rates of employment.

The Arrival of the Railway in 1876

The ensuing history of Blayney, Carcoar and Millthorpe was largely dominated by the growth of Bathurst and Orange and the infrastructure constructed to service these centres. Blayney and Millthorpe flourished with the arrival of the Bathurst to Orange railway in 1876 at the expense of Carcoar, which did not receive a rail line until 1888. Millthorpe's economy received a further boost with the establishment of The Mill in 1884 by the Great Western Milling Company. The construction of the railway was also the catalyst for the settlement of the village of Newbridge. With the arrival of the railway Carcoar's role diminished and the population declined as miners moved to the new goldfields.

[58] BSC & Blayney Town Association Inc (ud).
[59] Barnes, 1999.
[60] Heritage Branch, 2009.
[61] BSC (ud).

The date of the establishment of Blayney's lime kilns is not known, however the first recorded sale of lime from Blayney was in 1850, at which time it was mainly bought to improve soil for agricultural purposes. In the 1880s, after the establishment of the railway, the kilns were able to be expanded as the lime could be sold and distributed more widely[62].

The arrival of the railway was the catalyst for a more diversified economic base in the district. The presence of a wide range of naturally occurring metals supported greater economic stability than other neighbouring regions. From the late 1880s gold mines operated intermittently at Browns Creek (10 km north-west of Blayney), Junction Reefs, Forest Reefs, Cadia Valley, Wire Gully and Gallymont. The Blayney Copper Mine and Carcoar Iron Quarry were also established during this period.

Settlement Patterns of the 1900s

The depression of the early 1900s saw an increase in the district's population as people returned from other areas to be with relatives and to live off the land. By the end of the 1930s the district's economy was struggling. The industrial role of Millthorpe reduced as the grain industry and potato market relocated[63].

The depression and the Second World War saw temporary reversals of the drift of population to larger centres, but the trend proceeded well into the 1950s. During the 1950s larger agricultural properties were broken up through family sub-division, the soldier settlement scheme and purchases by smaller landowners.

Economic Growth and Decline in The Mid 1900s

A boom in wool prices in the early 1950s resulted in increased wealth and lead to improved rural productivity which supported the opening of the Blayney Abattoir in 1957[64]. The Blayney Abattoir at its peak employed 1600 people from the district. The local council of the time provided hundreds of new houses in Blayney and upgraded access roads from farming areas to secure labour for the abattoir. A pet food factory began operations in Blayney in 1989, leveraging off the abattoir. The housing provided by the local council remains the dominant housing type in Blayney to this day.

In 1976, the then Blayney Shire had a population of 6,085 people. Approximately 4,000 people resided in the areas closest to Orange and Bathurst i.e. the northern section (Blayney, Millthorpe and Newbridge)[65]. The rural recession in the 1970s lead to a direct reduction in abattoir operations impacting the viability of related local businesses. By 1986 the Blayney

[62] Australian Broadcasting Corporation, 2017.
[63] Millthorpe Village Committee, 2009.
[64] Patman, 2016.
[65] ABS, 2019a.

Shire population had declined to 5,870 people, however the population of the northern section of the Blayney Shire experienced only a small population decline during this period.

A combination of severe drought and low stock prices lead to reduced operations at the Blayney Abattoir before it closed in 1999. The refrigerated transport business that for more than 40 years had carried the livestock and refrigerated meat from the Blayney Abattoir also closed[66]. An over-reliance on a single employment industry with a lack of alternative employment options resulted in high unemployment in Blayney township and resulted in a falling housing market.

During the period of abattoir operation Blayney became known as an 'abattoir town'. Today the abattoir is a significant part of Blayney's history. A review of comments left on the Blayney Abattoirs Facebook page[67] highlights the memories and attachment past and present Blayney residents (previous abattoir employees and their children) have for the Blayney Abattoir. It also suggests the abattoir provided significant intergenerational employment across interconnected family groups with fathers, uncles and cousins employed at the abattoir at the same time.

The findings of SIA consultation undertaken with long-term residents of Blayney indicate a mixed response from residents to the eventual closure of the abattoir. While some residents mourned the loss of jobs and reduced economic prosperity, others welcomed the improved amenity and potential to shift the perception of Blayney away from being an 'abattoir town'. Anecdotal evidence suggests the lingering daily stench of the abattoir and associated pollution was a significant downside of the operation. The strong community desire not to return to the abattoir era is evident in the significant community opposition to the more recent (2016) proposal to develop a goat abattoir in Blayney.

At the same time as the Blayney Abattoir closed, mining at nearby Browns Creek Mine ceased following a catastrophic event. At the time of the event, Browns Creek Mine employed more than 100 residents from Blayney and nearby communities.

The impact of the Blayney Abattoir and Browns Creek Mine closures were offset by significant growth in the mining and manufacturing sector in the Blayney LGA in the 1990's, including:

- The commencement of gold and copper production at the Cadia Valley Mine in 1989;
- A significant expansion to the Cadia Valley Mine (Cadia East Project) from 2000 and between 2010 and 2012 which generated both construction and operation jobs for local residents and resulted in significant economic benefits for the Blayney LGA and neighbouring Orange City and Cabonne LGAs;

[66] Australian Abattoirs, 2013.

[67], Blayney Abattoirs, Facebook page 2019.

- An upgrade to the Nestle Purina PetCare facility in Blayney in 2014 which created an additional 100 full-time jobs at the facility; and
- The construction and opening of the Cadia Valley Dewatering Plant in Blayney in 2016 which replaced an existing dewatering plant which commenced in 1998.

The impact of these mining and manufacturing activities on the population of the Blayney LGA is evidenced in the small but steady population growth across the LGA. The population has increased from 6,025 people in 1996 to 6,169 in 2006 and in 2018 is estimated at 7,257 people. The majority of this population continues to be concentrated in Blayney and the village of Millthorpe.

5.4 SECONDARY ASSESSMENT AREA

5.4.1 Context

Blayney LGA is quintessentially a rural shire offering a safe, friendly and family based rural lifestyle. Blayney LGA is described as "*rich with historic, cultural and natural assets, along with productive sectoral resources and rolling rural landscapes*"[68]. The heritage of the Blayney LGA is preserved in the rural landscape and buildings of the town of Blayney and the historic villages of Barry, Carcoar, Lyndhurst, Mandurama, Millthorpe, Neville and Newbridge. With the exception of Millthorpe these villages support fewer than 150 residents.

Land use across the LGA has changed little over time, with agriculture and mining remaining the dominate land uses. Rural values remain strong across the LGA as evidence in the Blayney LGA planning framework and the Regional EDS. Extractive industries activities occur around the township of Blayney with a significant new quarry operation recently proposed on the north western side of Blayney. Infigen Energy is proposing the development of the Flyers Creek windfarm near Errowanbang Road within the Blayney LGA and Newcrest has future works proposed at CVO.

The Blayney township, located 8 km from the mine project area, is the administrative centre of the LGA with a historic rural centre supporting a diverse but small commercial centre. Blayney is also the main service centre for the Blayney LGA providing a range of goods and services including medical services, primary and secondary education services, and retail and professional services. Commercial growth in Blayney township has been slow due to the proximity of the township to Bathurst and Orange and the diverse range of services and facilities offered in these locations.

Blayney and the small villages and localities within the Blayney LGA e.g. Millthorpe, have experienced a recent increase in popularity as commuter locations given their accessibility to

[68] Place Design Group, 2016.

Orange and Bathurst. The presence of quality school bus connections to Orange and Bathurst has also contributed to the popularity of these locations.

Tourism is an increasing industry sector in the Blayney LGA. The Blayney LGA is growing in popularity as a weekend and short stay destination with the historic buildings and streetscapes of Carcoar and Millthorpe being the key attractions. The village of Millthorpe has a rich agricultural history, a legacy of grand buildings, heritage architecture and a heritage streetscape. Millthorpe is listed with the National Trust[69], as part of the Central West branch, and is evolving as a popular and attractive destination for day trippers from Orange, village tours and for short-breaks. The reinstatement of rail services at Millthorpe in March 2019 means it is now possible to travel from either Sydney or Dubbo to Millthorpe each day.

5.4.2 Community Values and Aspirations

The Blayney LGA planning framework including the Community Plan emphasises the protection of rural values and the 'rural way of life' across the LGA while encouraging sustainable growth and renewal through economic diversification.

The vision for the Blayney LGA is articulated in the Community Plan and encompasses a range of themes including:

- A quintessential rural shire;
- A thriving and welcoming rural shire;
- Sustainable population and economic growth based on coexistence; and
- A safe and inclusive community.

The Community Plan describes the Blayney LGA as a cohesive community that pride themselves on being friendly, hardworking, loyal and community focused. Residents "*value honesty and respect for each other, our natural and built heritage and our valuable resources*"[70].

The values and aspirations frequently identified by the Blayney LGA community during Round 2 SIA consultation are summarised in Diagram 2. Core values include the rural lifestyle and character of Blayney, and the accessibility of the locality to the larger regional centres of Orange and Bathurst.

[69] A non-statutory organisation committed to conservation and heritage.

[70] Blayney Shire Council, 2018.

Diagram 2
Values and Aspirations of the Blayney Community[71]



The Community Plan describes the strengths, weaknesses, opportunities and threats to the Blayney LGA. The Blayney LGA has many opportunities for economic growth, including those building on agriculture, transport, tourism, industry and mining activities. The Community Plan highlights the need to promote Blayney LGA as a great place to work or raise a family, but identifies a lack of residential zoned land as a barrier to much needed new housing development opportunities in the high demand locations such as Millthorpe and Blayney.

The Community Plan identifies mining as a divisive issue across the Blayney LGA, noting that mining benefits the local economy, but in the past has created pressures on housing, employment and tourism. Mining shift patterns have affected participation in sport and community life. SIA consultation confirmed that some residents of the Blayney LGA view the mining industry as moving Blayney LGA forward economically, and others view the industry as a threat to the core character and agricultural functions that shape the nature of Blayney LGA.

SIA consultation highlighted evidence of conflicting community values regarding competition for natural resources in the Blayney LGA. This has been exacerbated by the cumulative effect of prolonged drought on farmers and the agricultural economy[72] and recent events at CVO, namely the partial failure of a tailings dam wall. Further, the natural environment is of paramount value to the CW Region. Residents want to protect the environment and land for either their own income and uses, or for preservation measures.

[71] Based on findings of SIA Consultation undertaken in 2018 and 2019 to inform the project SIA
[72]Morton, 2018.

5.4.3 Population and Demography

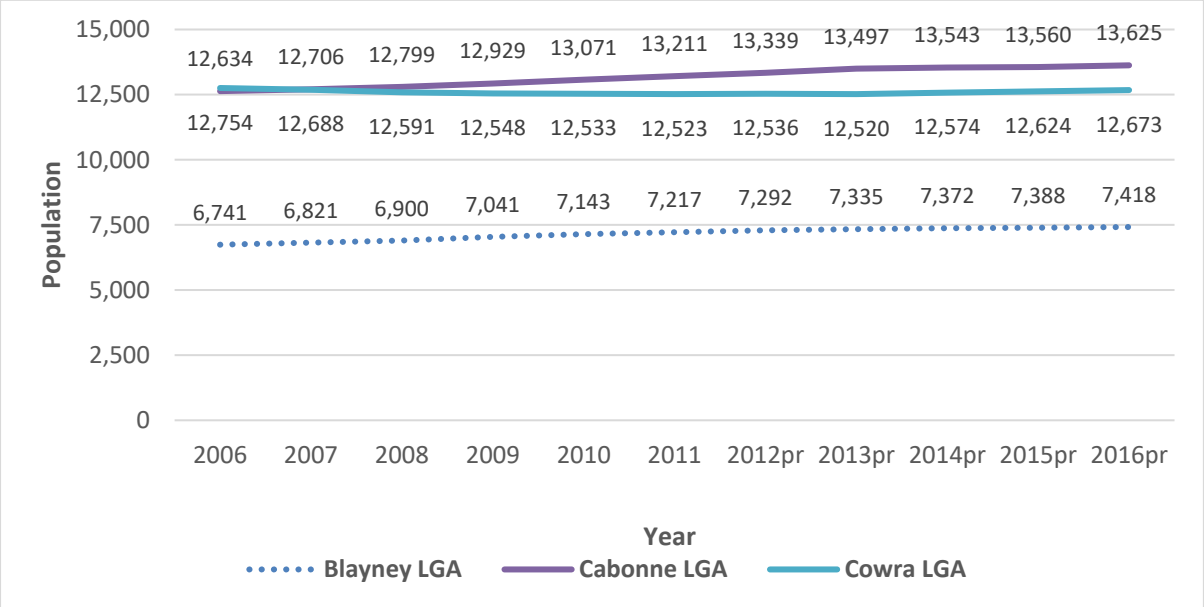
Population and Population Growth

In 2018, the Blayney LGA had an ERP of 7,342 people. The recorded 2016 ABS Census ERP for Blayney LGA was 7,257 people[73]. The majority of population is concentrated in the centres of Blayney (2,963 people, 40% of LGA population) and Millthorpe (735 people, 10.1% of LGA population)[74].

Between 2006 and 2016 the population of Blayney LGA increased by 10% representing slow but steady population growth. Blayney LGA experienced a smaller population increase than the neighbouring LGAs of Orange City and Bathurst (13.8% and 14.8%, respectively) but a similar increase to that experienced in the Cabonne LGA[75].

Graph 3 presents annual population growth from 2006 to 2016 for the LGAs of Blayney, Cabonne and Cowra. Graph 4 presents similar statistics for the LGAs of Orange City and Bathurst Region.

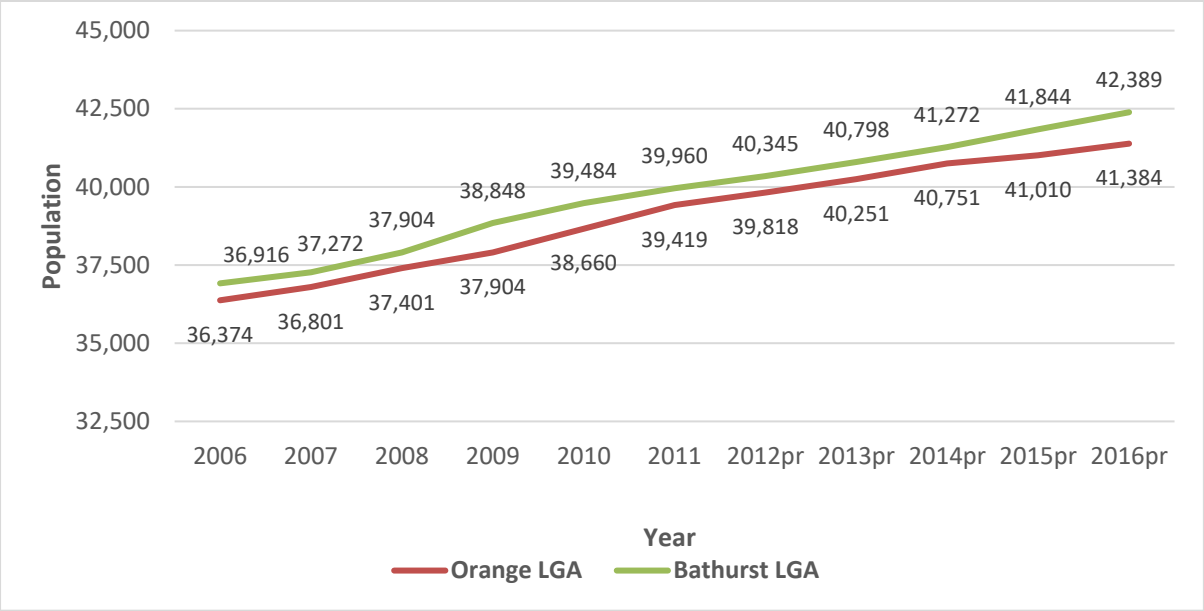
Graph 3
Population Growth – Blayney, Cabonne and Cowra LGAs



Source: ABS 2017a.

[73] ABS, 2017.
[74] ABS, 2017.
[75] ABS, 2017a.

Graph 4
Population Growth – Orange and Bathurst LGAs



Source: ABS 2017a.

Between 2016 and 2036 the population of Blayney LGA is projected to increase by 7.4%[76] to 8,000 people. This growth rate is significantly lower than the projected increase of 28.1% in the NSW population for the same period. The respective populations of Bathurst, Cabonne and Orange LGAs are also expected to grow at a significantly faster rate than Blayney LGA (27.6%, 17.2% and 24.2% respectively). The regional centres of Bathurst and Orange will to continue to attract the majority of population.

Demographic Characteristics

Analysis of key population and demographic indicators for 2016 for the Blayney LGA show:

- A relatively stable population, with a low rate of annual population growth compared to nearby LGAs of Orange and Bathurst;
- A higher median age than the CW Region and NSW (42 years compared to 41 years and 38 years respectively);
- A greater proportion of population aged less than 15 years (20.6%) compared with the CW Region (19.8%) and NSW (16.3%);
- An aging population reflective of the regional population, with 18.5% of population aged over 65 years compared with 16.3% of the NSW population;
- A similar proportion of family households (71.6%) compared with the CW Region (68.5%) and NSW (72.0%);

[76] DPE, 2017.

- A similar proportion of lone person households (26.7%) compared with the CW Region (28.8%) and significantly higher proportion than NSW (23.8%);
- Similar proportions of couple family with children (41.8%) and couple family without children (41.5%). This trend is comparable to the CW Region but significantly different to NSW (45.7% and 36.6% respectively); and
- A smaller proportion of one parent families (15.4%) than the CW Region (17.1%) and NSW (16.0%).

5.4.4 Indigenous Population

In 2016, Blayney LGA had an Indigenous population of 266 people, equivalent to 3.7% of the total population. The proportion of Indigenous population in the Blayney LGA is greater than NSW (2.9%) but smaller than the Indigenous population of each of the surrounding LGAs. The Indigenous population of Blayney LGA has experienced significant growth over the last 10 years. Between 2006 and 2016 the Indigenous population of Blayney LGA increased by 71%. Between 2011 and 2016, the Indigenous population increased by 30% compared with a total population increase in Blayney LGA of 4% for the same period.

Analysis of key indicators relevant to the Indigenous population of the Blayney LGA and compared with the non-Indigenous population, at the time of the 2016 ABS Census[77] show:

- A significantly younger population than the non-Indigenous community with a median age of 19 years compared to 43 years respectively;
- A smaller proportion of Indigenous population aged 65 years or more (5%) compared with the non-Indigenous population (19%);
- A greater proportion of population aged under 10 years (20%) compared with the non-Indigenous population (13%);
- A smaller proportion of working age population in the labour force (53%) compared with the non-Indigenous population (64%);
- A dependency ratio of 0.79 compared with 0.65 for the non-Indigenous community of Blayney LGA indicating each Indigenous person of working age has more dependents to support, on average than the non-Indigenous community;
- Larger household occupancy rates compared to the non-Indigenous community of the Blayney LGA (3.1 residents compared with 2.4 residents);

[77] ABS, 2017.

- A larger proportion of family households than the non-Indigenous community of Blayney LGA. Of Indigenous households in Blayney LGA, 39% were couples with children and 29% were one-parent families, 10% and 19% higher respectively than the non-Indigenous community of Blayney LGA; and
- No Indigenous residents resided in improvised housing or were in institutional housing in the Blayney LGA.

5.4.5 Housing and Accommodation

A detailed description of housing stock and tenure, the housing market and social housing is in the Blayney LGA and the broader RAA is presented in Appendix F. Housing data has been sourced from the 2016 ABS Census, SQM Research, Realestate.com.au and the *BSC Housing Needs Analysis*[78]*.*

The housing setting in Blayney LGA, and in particular Blayney township has the following characteristics:

- The most common household type in Blayney LGA is families (71.6%) with approximately 40% couple families with children;
- Lone person households make up 26.7% of all households reflecting the significant proportion of the population aged over 65 years. Of all household types, the number of lone person households in Blayney LGA will experience the greatest growth between 2016 and 2036;
- The most common dwelling type in Blayney LGA is a separate dwelling, representing 96% of all dwelling stock;
- The majority of housing stock, including rental stock is concentrated in Blayney township and to a much lesser extent Millthorpe Village;
- There is a lack of suitable housing stock and stock diversity to suit the needs of the growing number of lone person households, as well as other household types[79];
- Low housing costs in Blayney township in 2019 (median house price of $279,000 and median weekly rent for a house of $290);
- Low residential rental vacancy rates. The current residential rental vacancy rate in the Blayney township is 1.1% (six properties); and

[78] Housing Plus, 2018.

[79] Housing Plus, 2018.

- Housing affordability (rent/purchase) is greater in Blayney LGA than the nearby centres of Orange and Bathurst. Housing affordability combined with the availability of education and health services in Blayney, and proximity to Orange and Bathurst makes Blayney township an attractive residential location for low-income families; and
- The growth in lone person households will increase demand for smaller and accessible homes.

Residential Land Development

The number of dwellings in Blayney LGA increased by 250 between 2006 and 2016. Recent housing market analysis for undertaken by Housing Plus[80] suggests that based on the NSW Government estimates of population growth for the Blayney LGA, and the same occupancy levels as 2016, the number of dwellings in Blayney LGA will need to increase by 20 per year to 2036 to meet future housing demands. BSC approved on average 31 development applications (DAs) for single dwellings per year between 2008 and 2018. Most of this development activity (~65%) occurred in Blayney township. Approximately 14% of these DAs were for large lot residential 'lifestyle blocks' in Millthorpe[81].

Recent growth in housing stock in Blayney LGA has focussed principally on two large lot residential areas - Browns Creek Road area to the west of Blayney and Forest Reefs Road area to the west of Millthorpe. However, it has been almost a decade since the Blayney township has had new residential blocks available for home construction[82].

Future Land Development

In 2016, BSC facilitated the Blayney Shire Developer Forum to identify further residential growth opportunities and barriers to residential growth in Blayney township. The findings of this forum confirmed that the main reason private developers were not undertaking residential subdivision in Blayney township was because of the low return on land sales. At the time of the forum vacant residential lots in Blayney generally sold for between $80,000 and $90,000[83].

To help stimulate the housing market in Blayney township and secure the interest of local and regional property developers, BSC has undertaken their own subdivision of land for residential development. On 21 May, BSC released 14 new residential blocks in Streatfield Close near the centre of Blayney town. The 14 blocks range from 838 m^2 to 1,095 m^2 and are scheduled to be ready for building at the end of 2019. The blocks range in price for $132,000 to $155,000, substantially higher than the early vacant land prices in Blayney. As of 2 June 2019, five of the 14 blocks had been sold.

[80] Housing Plus, 2018.
[81] Elton Consulting, 2019.
[82] Blayney Shire Council, 2019.
[83] Dicker, 2019 pers comms.

In addition to the Streatfield Close development, a long standing vacant block (with significant subdivision potential) has recently been purchased in Blayney township and the new owner has already made preliminary enquiries to the BSC planning department regarding residential subdivision in the near future.

BSC has also commenced a review of the existing *Blayney Shire Settlement Strategy*[84] and anticipates the release of a new strategy by the end of 2019.

Social Housing

The number of social housing properties in Blayney is very small[85]. Of the 58 social housing dwelling units available in Blayney LGA, two thirds have three or more bedrooms. There are 20 households in Blayney LGA currently on the waiting list for social housing. The typical waiting time for social housing in Blayney is up to five years. Housing Plus[86] reports that the "*demand for social housing compared to social housing stock is low"*.

Housing Affordability

Affordability is a function of both housing costs and household income. The housing affordability characteristics of the Blayney LGA, drawn from the *BSC Housing Needs Analysis*[87] are described below:

- Blayney LGA has significantly fewer households in rental stress than NSW, 7.3% compared to 12.9% for NSW;
- Analysis of rental affordability[88] in Blayney LGA shows that households on low incomes have moderate access to affordable housing in Blayney LGA;
- Analysis of purchase stress shows there are fewer purchasers in housing stress in Blayney LGA (5.3%) compared to renters in housing stress (7.3%), however both levels are lower than NSW; and
- Very low-income households in Blayney LGA are unable to purchase property. By contrast, more than half of low-income households can afford to buy property, which is considerably higher than NSW.

A lack of public housing and crisis housing in the Blayney LGA coupled with relative lower housing affordability makes Blayney LGA an attractive place to live for low-income persons and families[89].

[84] Blayney Shire Council, 2012.
[85] Housing Plus 2018, pp. 9.
[86] Housing Plus 2018, pp. 10.
[87] Housing Plus, 2018.
[88] Based on households paying up to 30% of household income on rental costs
[89] Housing Plus, 2018.

Short-Term Accommodation

Short-term accommodation relates to those types of accommodation that are typically provided to visitors or tenants for a short period of time; for example, motels, serviced apartments, bed and breakfast, self-contained homes, caravan and camping, although the length of tenancy in these forms of accommodation can often extend to lengthy stays, depending on accommodation availability, price and personal circumstances.

There is a small number of short-term accommodation establishments in the Blayney LGA, the majority concentrated in Blayney township and Millthorpe, although some of the smaller villages do have short-term accommodation options. Short-term accommodation includes hotels, motels, Air BnB establishments, camping grounds (in Blayney this includes on-site cabins), and bed and breakfast accommodation.

In October 2018, Hansen Bailey undertook a survey of accommodation providers in the Blayney LGA (Appendix B). Approximately 170 rooms of accommodation are available within the Blayney township and villages based on the survey results of 15 short-term accommodation providers. The survey did not include smaller bed and breakfast providers or listings on AirBnB or booking.com.

The findings of the accommodation survey indicated that:

- The majority of accommodation providers in Blayney LGA were not at full capacity in general throughout the year, with the exception of key regional events;
- Short-term accommodation providers in Blayney and nearby Millthorpe primarily provide temporary accommodation to tourism visitors to the Blayney LGA and broader Region. However, some accommodation providers noted that they were increasingly catering for mining staff, temporary contracting workforces and personnel visiting the town for meetings; and
- The majority of short-term accommodation providers have repeat business that is booked well in advance of events such as Bathurst 1000, Bathurst to Blayney Bike Ride, Orange FOOD Week and Millthorpe Markets.

A greater range of establishments is available in the nearby centres of Orange and Bathurst.

5.4.6 Employment and Economic Strengths

This section describes the labour and employment characteristics of the Blayney LGA, in context with the CW Region and NSW.

Labour Force

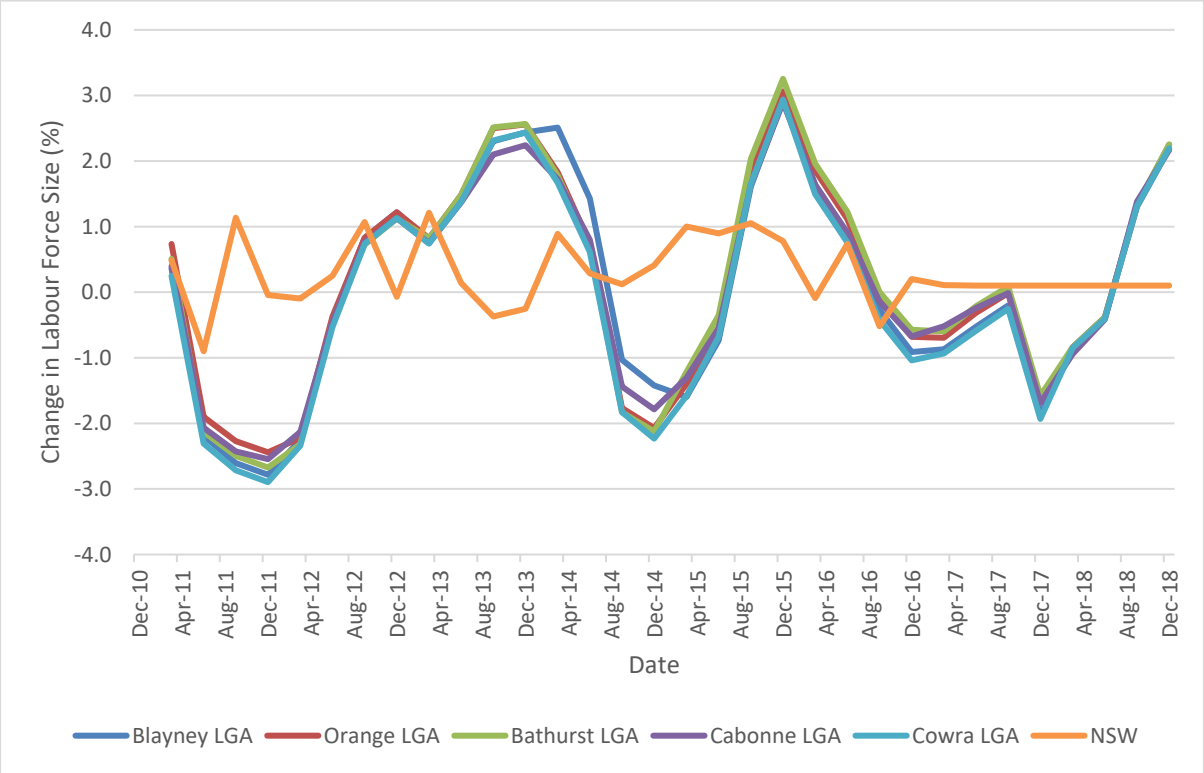
In 2016, based on ABS Census data there were 3,422 residents of the Blayney LGA in the labour force including:

- 1,987 people employed full-time; and
- 1,043 people employed part-time.

Labour force information from the Department of Employment, Skills, Small and Family Business (DESSFB) shows that in December 2018, the Blayney LGA had a labour force of 3,966 people representing 6.3% of the total labour force of the RAA (which represents the wider labour pool for the project).

Graph 5 shows the change in labour force size across the Blayney LGA relative to the LGAs of the RAA and NSW between December 2010 and March 2017. Labour force changes in the Blayney LGA have remained consistent with those in the neighbouring LGAs. There is a strong alignment of labour conditions across the RAA, indicating that this area operates as a labour region, within which labour likely reallocates in order to equalise. Localised labour force disruptions are not evident within the data. The labour force size in both the Blayney LGA and component LGAs of the RAA fluctuate over longer periods of time compared to the NSW trend.

Graph 5
Change in Labour Force Size, 2010 – 2018



Source: ABS 2019a and Department of Jobs and Small Business (DJSM) 2019.

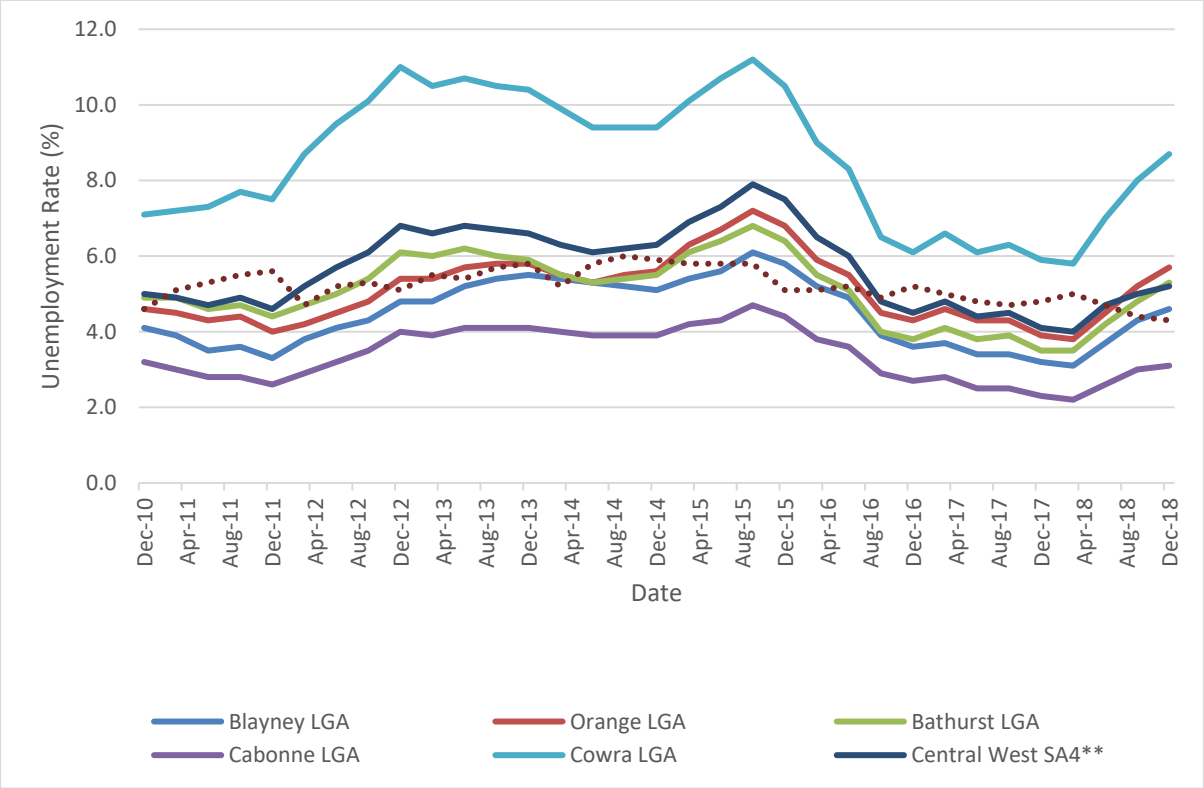
Unemployment

Graph 6 presents trends in unemployment for Blayney LGA relative to the LGAs of the RAA and NSW. Trends in unemployment rates across the Blayney LGA and the LGAs of the RAA are generally consistent, with Cowra LGA maintaining a significantly higher unemployment rate than surrounding areas but a similar trend in unemployment rates.

At December 2018, Blayney LGA had an unemployment rate of 4.6% (182 persons), compared to an unemployment rate of:

- 5.3% (1,218 persons) in Bathurst LGA;
- 3.1% (231 persons) in Cabonne LGA;
- 8.7% (512 persons) in Cowra LGA; and
- 5.7% (1,256 persons) in Orange LGA.

Graph 6
Unemployment Rate, 2010 - 2018



Source: Department of Employment, Skills, Small and Family Business (DESSFB) 2019.
*Notes: ** Unemployment rates for Central West SA4 and NSW are unsmoothed data.*

Employment by Industry

Mining, agriculture and manufacturing, have been the mainstay of the Blayney LGA economy for many years. In 2016 in the Blayney LGA, the:

- Mining industry sector employed 727 (24% of total employment across all industry sectors);
- Agricultural industry sector employed 392 people (13% of total employment across all industry sectors); and
- Manufacturing industry sector employed 368 people (12% of total employment across all industry sectors).

Between 2011 and 2016 the number of jobs in the mining industry sector in Blayney LGA increased from 530 to 727, and in the manufacturing industry from 328 to 368. Between 2011 and 2016 the number of jobs in Blayney LGA in the agricultural industry remained consistent at just under 400.[90]

In comparison, the top three industry sectors of employment in 2016 for the resident population of Blayney LGA were the:

- Agricultural, forestry and fishing sector (407 or 12.6%);
- Health care and social assistance sector (401 people or 12.4%); and
- Retail Trade sector (284 or 8.8%).

Given the size of the health care sector in the Blayney LGA, it is likely that a significant proportion of Blayney LGA resident employment in the health care industry sector is met by roles in Bathurst LGA and Orange LGA both of which have strong health care sectors.

In 2016, an estimated:

- 6.4% (approximately 206 people) of residents of the Blayney LGA were employed in the mining industry, representing less than 30% of total employment in the mining industry sector in the LGA. The majority residents employed in the mining industry were employed in metal ore mining (gold mining) which reflects the presence of CVO in the LGA; and
- 5.9% (approximately 200 people) of residents of the Blayney LGA were employed in the manufacturing sector, representing 54% of total employment in the manufacturing sector in the LGA.

[90] REMPLAN, 2019

This suggests that the Blayney LGA is a significant importer of workers in the mining and manufacturing sectors, as discussed in the following section.

Employment Share

The economic strength of a region can also be noted by the extent to which an area "imports" or "exports" labour and by comparing jobs within industry sectors in a region to the number of people employed in the same industry sector. This is important in an area that is expecting a major project as it can show, to some degree, the extent to which a region is likely to be able to supply the required labour in given industry sectors.

In 2016 there were an estimated 2,991 jobs located in the Blayney LGA however only 1,527 Blayney LGA residents (50% of all employed persons) were employed within the LGA. This shows that Blayney LGA is both a considerable importer of labour (1,464 jobs) and an exporter of labour (1,503 persons). Approximately 30% of employed residents of the Blayney LGA worked in the Orange LGA and 10% in Bathurst LGA, highlighting the economic links between these areas.

In 2016 there were 727 mining jobs in Blayney LGA, however less than 300 residents of the Blayney LGA were employed in the mining industry. This shows that Blayney LGA is a considerable importer of mining workers (i.e. Blayney LGA relied upon areas outside of the LGA to supply mining labour for jobs within the Blayney LGA in 2016). The manufacturing sector is also a significant importer of labour. In 2016, there were 368 jobs in manufacturing in the Blayney LGA, but only 300 residents of the Blayney LGA were employed in manufacturing.

Industry Sector Contributions

In 2018 the Gross Regional Product (GRP) of Blayney LGA was estimated at $661 million (M), supported principally by the mining, manufacturing and agriculture industry sectors. The following sections describe the various industry sector contributions to GRP. This information is drawn from REMPLAN (2019).

<u>Mining Industry Sector</u>

Current mining activity in the Blayney LGA is focussed principally on Newcrest's CVO. In 2017, the mining industry sector in Blayney LGA:

- Generated $717.5 M in gross revenue (output);
- Imported $412 M in regional goods and services; and
- Contributed $226.6 M in valued added to the Blayney LGA economy.

Manufacturing Industry Sector

The Blayney LGA has a collection of businesses based on the manufacture, transport, storage and wholesale of food products, which make up a substantial part of the local economy. Existing manufacturing industries include Nestle Purina Blayney, SeaLink, ICR Engineering, and Midwest Concrete. In 2017 the manufacturing sector of Blayney LGA:

- Generated $377.3 M in gross revenue (output);
- Imported $216.8 M in regional goods and services; and
- Contributed $114 M in valued added to the Blayney LGA economy.

Agricultural Industry Sector

The Blayney region has a strong agricultural component to its economy, including the production of beef, lamb, wool and lucerne. Livestock, including beef production, plays a predominant role within the Blayney Agricultural sector. In 2017 the agricultural, forestry and fishing sector of Blayney LGA:

- Generated $112.4 M in gross revenue (output);
- Imported $45.6 M in regional goods and services; and
- Contributed $43 M in valued added to the Blayney LGA economy.

It is notable that the construction industry sector of Blayney LGA produced equivalent output to the agricultural, forestry and fishing sector in 2017.

The gross value of agriculture production in the Blayney LGA was $47.2 M in 2015/16, which represents 0.36% of the gross value of agriculture production in NSW for that period[91]. Beef cattle production is the highest value agricultural industry in the Blayney LGA and accounted for 55% ($25.9 M) of the gross value of agriculture production in 2015/16[92]. Other agricultural industries include: wool (13%, $6.3 M), sheep and lambs for meat (10%, $5.1 M), milk (6.4%, $3 M, hay production (5.7%, $2.7 M) and cereals (5.5%, $2.6 M)[93]. This relative contribution of the different agricultural industries to gross value of agricultural production in Blayney in 2015/16, is comparable to contributions in 2010/11.

Tourism Industry Sector

Blayney has a range of tourism businesses and sites, including historical buildings, function centres, accommodation, farmers markets and other public events. The tourism industry in Blayney is experiencing significant growth, evidenced through increased patronage at local events e.g. Carcoar Running Festival and Millthorpe Markets, and occupancy rates at short-term accommodation establishments during these events. BSC has recently partnered with

[91] ABS, 2018b.
[92] ABS, 2018b.
[93] ABS, 2018b.

OCC and CC to form Orange360, a regional tourism initiative to market the regional area and grow the tourism industry sector.

In 2017 the tourism sector of Blayney LGA:

- Generated $19 M in gross revenue (output);
- Imported $45.6 M in regional goods and services; and
- Contributed $8.7 M in valued added to the Blayney LGA economy.[94]

The tourism industry in the Blayney LGA contributes an estimated $4.75 M in wages and salaries in the Blayney LGA, equivalent to 1.84% of all wages and salaries paid in the Blayney LGA.

5.4.7 Health and Wellbeing

Physical Health

Key indicators of health and wellbeing in the Blayney LGA based on information available through ABS and the NSW Public Health Information Development Unit (PHIDU)[95] show:

- In 2016, Blayney LGA had a high rate of volunteerism (24.2%) compared with 18.1% for NSW, which is consistent with feedback received from the local community during SIA consultation;
- In 2016, Blayney LGA had a greater proportion of people providing unpaid assistance to persons with a disability than NSW (12.6% compared to 11.6%);
- In 2014-2015 in the Blayney LGA, there were lower rates of total instances of assistance (transport, social support, respite care etc.) in comparison to NSW Age-standardised rate (ASR) per 1,000 of 52.5 in Blayney LGA compared to 61.2 in NSW);
- Modelled estimates (2014/2015) of people aged 18 years and over having one of four key health risk factors[96] show a higher rate of incidence in Blayney LGA (ASR per 100 of 89.0) compared to NSW (ASR per 100 of 78.2); and
- Modelled estimates (2014/2015) of people aged 15 years and over at risk of having fair or poor self-assessed health show a slightly higher rate of incidence in the Blayney LGA (ASR per 100 17.9) compared to NSW (ASR per 100 of 14.3).

[94] REMPLAN 2019, based on ABS 2016/2017 Tourism Satellite Account

[95] Torrens University Institute, 2017.

[96] Current smokers, high risk alcohol, obese, no or low exercise in the previous week.

Mental Health

Stakeholders consulted for the SIA described increasing rates of mental health issues in the Blayney LGA, partly attributable to the stress of coping with the drought, which directly affects the financial and emotional wellbeing of farming families and partly perceived to be attributed to the presence of the project.

The Drought Support Team of Western NSW Local Health District (LHD) provides landowners drought relief services to the Blayney LGA. This includes services targeting health and wellbeing. Services are also available through the Rural Adversity Mental Health Program (RAMHP) which works in parallel with the Drought Support team.

PHIDU estimates for 2014/15 indicate higher modelled rates of psychological distress in people aged 18 years and over, based on the Kessler 10 scale, in Blayney LGA than the NSW average (ASR of 12.2 compared with 11.0). Estimates of admissions for mental health related conditions in males and females for Blayney LGA were unpublished due to the small count.

5.4.8 Diversity and Vulnerability

Cultural and Ethnic Composition

Blayney LGA has a lower level of cultural diversity compared to NSW. In 2016, more than 85% of the population was born in Australia and more than 90% speak English at home. In comparison 65.5% of the NSW population was born in Australia and approximately 70% speak English at home.

Income Support

Analysis of income support indicators from the PHIDU for 2016[97] for the Blayney LGA show:

- A similar proportion of disability support pensioners (68.6%) in comparison to NSW (67.6%);
- A greater proportion of people receiving an unemployment benefit long-term (5.4%) in comparison to NSW (4.0%); and
- A greater proportion of people aged 16 to 24 receiving an unemployment benefit (4.9%) in comparison to NSW (3.0%).

Index of Relative Social Disadvantage

The ABS's Socio-Economic Indices for Areas (SEIFA) are composite indices of factors affecting socio-economic advantage and disadvantage, measured against an Australian benchmark index of 1,000.

[97] Torrens University Institute, 2017.

Table 18 details the SEIFA (Index of Relative Social Advantage and Disadvantage) scores for Blayney LGA relative to the LGAs of the RAA. A review of SEIFA scores indicates that:

- All areas in the RAA experienced relative advantage; and
- Cowra LGA experienced the least advantage, as reflected in income and unemployment indicators.

Table 18
SEIFA Ratings, 2016

Census Geographic Area	SEIFA Rating
Blayney LGA	965
Orange LGA	968
Bathurst LGA	973
Cabonne LGA	997
Cowra LGA	910

Source: ABS 2018a.

Prevalence of Social Issues

The BSC Housing Needs Analysis[98] identified a number of prevalent social issues. These social issues included:

- Homelessness encouraged by eviction; and
- Domestic violence incidents in the Blayney LGA.

The prevalence of domestic violence and homelessness in Blayney LGA was recorded as low in comparison to the NSW average[99].

5.4.9 Social Infrastructure Accessibility

The range of services and facilities available in Blayney LGA reflects its' proximity to the regional centres of Orange and Bathurst, and is consistent with the population size of Blayney and the broader LGA. Strong employment, education and family connections with Orange and Bathurst mean many residents access services and facilities in these larger regional centres.

A summary of the key services and facilities available in the Blayney LGA is presented in Table 19. Further and more detailed information on service demand and supply is presented in Appendix F.

[98] Housing Plus, 2018.
[99] Housing Plus, 2018.

Table 19
Summary of Service and Infrastructure Provision Blayney LGA

Service Area	Description
Health Services	Blayney LGA is located within the Western Health LHD. There are three major rural referral centres in the Western NSW LHD: Bathurst Hospital; Orange Hospital and Dubbo Hospital. Blayney Multipurpose Health Service (Blayney MPHS) is the public health service in Blayney LGA. The Blayney MPHS includes an emergency department, general hospital care, domiciliary care unit and a nursing home care unit. The emergency department is a nurse led service, that possess a camera service connection for triage 1 and 2. Blayney MPHS provides a total of 29 beds, of which nine are allocated for acute general medical concerns and 20 beds are high care permanent beds.
Emergency Services	Emergency services in the Blayney LGA include: • Blayney Ambulance Service; • Police – Chifley Local Area Command (LAC) with bases in Blayney, Millthorpe and Mandurama; • Blayney Rural Fire Service (RFS); and • A number of Rural Fire Brigades (RFB) which form part of the Canobolas Zone District RFS.
Community Services and Organisations	There is a number of community services and organisations operating across the Blayney LGA including Blayney Men's Shed, Blayney Meals on Wheels and Blayney Can Assist. The majority of these services are based out of Blayney township, are highly active in the Blayney community and are staffed by volunteers.
Children's Services	There are a small number of children's services in the Blayney LGA concentrated principally in Millthorpe and Blayney. These services include child care, after school care and preschool services. Consultation undertaken for the SIA indicated that child care and preschool services in Blayney township have capacity for one to two additional children however Millthorpe preschool is at capacity and has a waiting list. The existing child care available in the Blayney LGA is limited by the hours of operation and the available spaces for children. Traditional operating hours do not support the increasing number of shift workers residing in the Blayney LGA. A new child care centre is currently under construction in Blayney (Section 6.2.8).
Education Services	The Blayney LGA is well serviced with public primary schools and a private primary school located in Blayney. There is one high school – Blayney High School - located in the Blayney township. The proximity of Blayney to the regional centres of Orange and Bathurst and the presence of a number of private secondary schools in these locations combined with the provision of school bus services on key routes means many families in the Blayney LGA send their children to public and private secondary schools in Bathurst and Orange.
Recreation Services and Facilities	Within Blayney LGA there are a number of formal and informal sporting venues including CentrePoint Leisure Centre consisting of a heated indoor swimming pool and gym. A major equestrian facility is currently under construction at the Blayney Showgrounds. A new walking track is also currently under construction along the Belubula River in Blayney. Across the Broader Blayney LGA, there are a number of sportsgrounds, playgrounds and undeveloped reserves.

Service Area	Description
Commercial and Retail	Blayney and Millthorpe are the main centres for retail and commerce in the Blayney LGA. Millthorpe has a strong food and accommodation sector and is experiencing growing weekend demand from tourism. Blayney township has several larger business entities including: • Western White Linen; • Nestle Purina PetCare; • Sea Link Cold Food Storage; and • CVO Dewatering Plant.
Transport	Both Blayney and Millthorpe are located on the daily XPT train service to Sydney. Newman's provides: • Community bus service between Bathurst and Oberon and Blayney and Orange; and • A range of school bus services connecting communities within Blayney LGA with local public schools, and also private schools located outside of Blayney LGA in Bathurst and Orange. There is also local taxi service – Blayney Taxi Service.

5.5 PRIMARY ASSESSMENT AREA

This section provides a detailed description of the PAA with a focus on Kings Plains as the nearest community in proximity to the mine project area. It includes a discussion of settlement history, population, community values, health and wellbeing and landowners future aspirations. It draws on the findings of in depth SIA interviews conducted with residents across the PAA as described in Section 3 and documented in detail in Appendix D.

5.5.1 Geographic Location

The PAA includes all land within an approximate 2 km radius of the mine project area (Figure 5). An estimated 90 private residences are located within the PAA, the majority to the south of the mine project area along the Mid Western Highway and to the west along Guyong Road. The estimated population of the PAA is 230 people[100].

[100] ABS 2017b – 2016 ABS Meshblock counts (10056010000, 10149310000, 10149300000, 10115610000, 10116070000, 10116130000) have been used to calculate the estimated population of the PAA. The combined area of these Meshblocks is larger than the PAA and includes a total of 109 dwellings and 285 people. This indicates an average occupancy rate of 2.6 persons per dwelling. There are 88 dwellings in the PAA. Applying the rate of 2.6 persons per dwelling the population of the PAA is estimated at approximately 230 people.

The PAA can be divided into two discrete geographic catchments:

- The Kings Plains locality – consisting of all land to the south of the mine project area, including the Kings Plains settlement; and
- Guyong Road and surrounds – consisting of all land to the west and north of the mine project area i.e. Guyong Road, Vittoria Road and the Mitchell Highway.

The communities of these two catchments whilst articulating a similar set of values and aspirations, have different locational characteristics and population densities which mean they are likely to experience the potential social impacts of the project differently.

5.5.2 Local History and Settlement Patterns

This section describes the local settlement history relevant to the mine project area and surrounds and supplements the information presented in Section 5.3.

Early Settlement

George Evans explored the area known as Kings Plains in 1815[101]. The site for Kings Plains was set aside in 1828, and later established with the development of housing, a church and a school. During the 1820s, industry in the Blayney Shire consisted predominantly of government sheep and cattle stations with many farmers living in the Kings Plains locality. The development of Kings Plains plateaued as other townships of Blayney Shire expanded.

Mining and Industry

Gold fields were gazetted to the east of the mine project area, Kings Plains Goldfields, in the late 1850s. This mining occurred on Crown Land, and it wasn't until later in the nineteenth century that private land was opened up to gold mining leases within the Blayney Division under the *Mining on Private Lands Act 1894*[102]. A number of alluvial gold fields found along tributaries of the Belubula River were worked in the area surrounding Kings Plains in the 1850s and 60s, with some small-scale open pit and underground workings in the district[103], including within the mine project area. Hard rock mining at McPhillamys Hill began in 1888, with mining continuing sporadically over the next 50 years.

By the late 1890s, the press was calling it "a new rush" in the Kings Plains area in and around the claims made by Sherlock and others. By 1899, between 20 to 30 claims were reported to have been pegged out on McPhillamys land, and given the name "Sly Corner" (Albury Banner and Wodonga Express, 1899:29). However, by the early twentieth century gold production in the local area had declined.

[101] NSW Department of Planning, 2010.
[102] Landskape, 2019.
[103] French et al., 2015, pp. 2.

Transport

In 1902, W.H. Tom of Mylon, Vittoria, via Blayney, requested the construction of Dungeon Road which runs through the mine project area. In 1928, the Mid Western Highway a portion of which forms the southern boundary of the project area, was gazetted as a state highway, thus confirming the growing importance of the motor vehicle in connecting the western reaches of the state to the metropolises of the east. In the late 1990s early 2000s, the Mid Western Highway was realigned further north of the settlement of Kings Plains and Walkom Road.

Urban Settlement

With widespread drought from 1958-1968 and then again in 1982-83[104] a number of residents of the Kings Plains locality moved into larger townships in search of employment opportunities. Kings Plains school with its single classroom, closed in 1956. However, up until the late 1970s Kings Plains retained a shop, service station and a telephone exchange[105]. Federal and State election polling stations were also located in Kings Plains during this period[106].

The realignment of the Mid Western Highway at Kings Plains in the late 1990s early 2000s resulted in the subdivision of private land to accommodate the new road alignment and the release of government owned land back to the private sector following the completion of the realignment[107]. The release of residential land back following highway realignment facilitated an expansion in rural residential development in Kings Plains and an increase in population[108].

5.5.3 Kings Plains Locality

The Kings Plains locality can be broadly defined as the geographic area that extends from *Lynfern* homestead on the Mid Western Highway near Dungeon Road, east to Kellys Road and includes the settlement of Kings Plains on Walkom Road (Figure 5). The Kings Plains locality broadly aligns with the ABS geographic area of Kings Plains State Suburb (SS) (SSC12151). The Kings Plains SS encompasses the large majority of the mine project area.

The mine project area is predominantly located within the Kings Plains locality. People residing in the Kings Plains locality who participated in SIA interviews self-identified as Kings Plains residents. The Kings Plains locality had an ERP in 2016 of 132 people and 44 dwellings[109]. Settlement across the Kings Plains locality consists of a combination of large acreages and smaller lifestyle blocks.

[104] ABS, 1988.
[105] Kings Plains resident, 2018 pers. comm.
[106] Kings Plains resident, 2018 pers. comm.
[107] Kings Plains resident, 2018 pers. comm.
[108] Kings Plains resident, 2018 pers. comm.
[109] ABS 2017b - Based on 2016 ABS Meshblock counts for the Meshblocks of 10056010000, 10116130000 and 10116070000. The combined area of these three Meshblocks is larger than the

The majority of land owned by Regis in the PAA is located within the Kings Plains locality. The majority of land owned by Regis is currently tenanted and/or leased for agricultural purposes (cattle grazing). A grass airstrip is located on one of the Regis owned properties in the south western corner of the mine project area and outside the mine disturbance footprint. It is understood that this air strip is identified by the Bathurst Soaring Club for unplanned landings and is one of a number of unplanned landing zones between Bathurst and Cowra.

The population of the Kings Plains locality includes a mix of retirees, young couples, families with young children and families with older teenage children. There is a low level of population mobility with many residents residing in the locality for more than 15 years.

Kings Plains Settlement

Kings Plains settlement is located immediately south of the southern boundary of the mine project area and is the closest settlement to the mine project area. Kings Plains settlement consists of the 19 private residences located in proximity to Walkom Road. At April 2019 Kings Plains settlement had an ERP of 45 people[110]. It consists of a combination of rural lifestyle blocks and larger rural landholdings. The Drayshed Nursery accommodation is located in the Kings Plains settlement on Kings Plains Road.

The population of the settlement of Kings Plains is a mix of retired couples, families and young couples. There are a number of primary and secondary aged children living in the Kings Plains settlement. Similar to the Kings Plains locality, the settlement of Kings Plains has a low level of population mobility with many residents residing in the locality for more than 15 years[111]. At least two families in the Kings Plains settlement have strong long-term family connections to the locality (i.e. intergenerational connections).

Within Kings Plains settlement, residential development is dispersed along Walkom Road. Kings Plains has no community buildings, other than the Kings Plains RFB and is not serviced by BSC services e.g. refuse collection or town water. Few buildings remain of the former township of Kings Plains. The Kings Plains RFB is located on Kellys Road approximately 3 km east of the Kings Plains settlement and is a focal point for Christmas celebrations by Kings Plains residents. The RFB was described by Kings Plains residents as the "*key entity that brings the community together*". The RFB responds to approximately six to eight call outs per year and Regis employees are members of the RFB.

Kings Plains locality and includes 56 dwellings and 173 people. This indicates a dwelling occupancy rate of 3.1 person per dwelling.

[110] ABS Census Data is not available for small areas such as Kings Plains. The population estimate provided is based on a combination of house counts from aerial photography interpretation and consultation conducted to date with residents.

[111] Based on the findings of SIA consultation.

The Waste to Resource – W2R business is located on the Mid Western Highway at the eastern end of the Kings Plains settlement and is approximately 300 m south east of the mine project area. Waste to Resource – W2R is a composting facility producing bulk commercial product and landscape supplies. The Drayshed Nursery and short-term accommodation is located on Kings Plains Road to the south of the mine project area within the settlement of Kings Plains. There is also one Air BNB business located in the Kings Plains settlement on Walkom Road.

During SIA consultation, existing residents described the residential location as attractive due to the availability and affordability of land, proximity to Blayney and accessibility to the nearby regional centres of Bathurst and Orange for employment and services.

Within the last five years at least five residential dwellings have been constructed in Kings Plains[112]. All land in the Kings Plains locality (including Kings Plains settlement) is zoned RU1 Primary Production. The provisions of the Blayney LEP limit further subdivision and residential development on the majority of the land in the Kings Plains locality due to minimum lot size requirements for RU1 zoned land. The minimum lot size for new residential development on RU1 zoned land under the provisions of the Blayney LEP is 100 ha.
The Blayney LEP contains provisions for existing dwelling entitlements. Section 4.2A of the Blayney LEP includes a requirement that land ceases to be an existing holding if an application for development consent is not made in relation to that land within 5 years after the commencement of the Blayney LEP. The Blayney LEP was approved in 2012. Recent residential development activity in the Kings Plains settlement is therefore likely to be related to the timeframe established in Section 4.2A of the Blayney LEP.

Some residents of Kings Plains settlement currently reside in temporary accommodation on their land while they wait to commence or complete the construction of a permanent residential dwelling(s). With respect to these residents, Section 4.2A (5) of the Blayney LEP contains a provision that permits the erection of a dwelling house or dual occupancy on RU1 zoned land where it is intended to replace the existing dwelling house or dual occupancy.

Population and Demography

The Kings Plains locality broadly aligns with the ABS geographic area of Kings Plains SS. The small settlement of Kings Plains is wholly located within the Kings Plains SS. Table 20 presents selected characteristics of the Kings Plains SS and the comparative area of Blayney LGA. Table 20 highlights a number of differences between the population of the Kings Plains SS and surrounding Blayney LGA. Specifically, the population of Kings Plains SS has a significantly higher median age than the Blayney LGA, significantly higher weekly household income and significantly lower monthly mortgage repayments.

[112] Records provided by BSC Planning Department in April 2019.

Table 20
Selected Characteristics of Kings Plains SS 2016 Census

Selected Social Indicator	Kings Plains SS[1]	Blayney LGA
Population	117	7,257
Males (%)	52.1	49.8
Median Age	48	42
Average children per family[2]	2.3	2.0
Average household occupancy rate	2.6	2.5
Median weekly household income	$1,781	$1,227
Median monthly mortgage repayments	$1,153	$1,500
Median weekly rent	n/a	$220
Average motor vehicles per dwellings	2.5	2.1

Source: ABS 2018
Notes:
1. ABS Geography – SA1 1107621.
2. For families with children.
3. Due to the population size of Kings Plains, limited information has been provided (ABS 2018a).

Values and Aspirations

The findings of SIA consultation informed an understanding of the values and aspirations of residents of the Kings Plains locality, principally the settlement of Kings Plains. Many Kings Plains residents have a strong sense of identity and during SIA interviews, the majority of residents identified as Kings Plains locals, not Blayney, Bathurst or Orange residents.

Kings Plains residents have a strong attachment to place and sense of community characterised by the following indicators:

- People can rely on one another for help;
- Neighbours regularly speak to each other;
- The community is generally harmonious;
- People can work together when there is a serious problem (e.g. bushfire);
- Community is deemed safe; and
- Community can celebrate together.

Some of the values and aspirations of the Kings Plains residents identified during SIA interviews are illustrated in Diagram 3. Kings Plains residents' value that their "*neighbours are close, but not too close*", that "*there is a real sense of community*" as "*people look out for each other*" and that the area is "*safe and friendly*". According to a number of resident's interviewed, Kings Plains is "*a group of people with collective interests - a peaceful lifestyle and a future in the location*".

The majority of residents of Kings Plains built or bought their home with the intention that it would be their "*forever home*"; they appreciate the views and describe Kings Plains as "*a great place to raise a family*".

Diagram 3
Values and Aspirations of the Kings Plains Community[113]



The cumulative results of SIA interviews with residents of the PAA indicate that residents within the PAA (not just Kings Plains) share a common set of values and aspirations. Residents to the west and north of the mine project area values similar aspects of their lifestyle and surrounds as the community of the Kings Plains locality i.e. privacy, peace and tranquillity, neighbours close, but not too close, dark skies and rural vistas. These values underpin the key concerns expressed by residents of the PAA in relation to the project.

Many Kings Plains residents and near neighbours to the west of the mine project area believe that the project does not align with their collective values and aspirations. This is evidenced in the establishment of the BHPG in 2018 by Kings Plains residents.

[113] A summary of findings from SIA Consultation undertaken by Hansen Bailey in 2018 and 2019 to inform the project SIA.

Community Cohesion

Community cohesion is an important community value. Being included in your community is vital to material and psychological factors that underpin well-being[114]. The findings of Round 2 SIA consultation (October 2018) showed evidence of strong community cohesion in the Kings Plains community i.e. low mobility and high rates of participation in community organisations e.g. Rotary or View Club. However, key findings from Round 3 SIA consultation point to changes in the cohesiveness of the Kings Plains community (and broader Blayney LGA). The findings of SIA consultation suggest this can be attributed to growing conflict specifically within the Kings Plains community, regarding the perceived benefits and impacts of the project, and the differing levels of project support.

Lifestyle

Residents of the Kings Plains locality describe their lifestyle as one of 'outdoors', hence the value placed on outdoor amenity. A number of residents are engaged in agricultural activities, and several are engaged in recreational and competitive equine activities. There are a number of shift workers (mining, manufacturing and transport) who reside in Kings Plains settlement and the broader Kings Plains locality.

Residents of the Kings Plains locality maintain strong connections to Blayney and other regional centres of Orange and Bathurst. A number of residents are members of Blayney groups and organisations including Rotary, View Club, Blayney Town and Village Association, Blayney Shire Local and Family History Group.

Natural Heritage

Natural features of social value to the residents of the Kings Plains locality and which contribute to sense of place include:

- Belubula River – The Belubula River is integral to local character in that it supports local agricultural livelihoods, recreational activities, scenic amenity and connection to local communities' history and Indigenous history;
- Vittoria State Forest (VSF) – Located on the north eastern boundary of the mine project area, the VSF is predominantly characterised by pine plantations and native forest[115], although Forestry Corporation of NSW has recently commenced logging of the VSF; and
- Rural vistas across undulating agricultural land.

[114] Stansfield and Candy, 2006.

[115] Forestry Corporation, 2012.

Historic Heritage

Historic heritage located in the PAA have been discussed in Section 5.2.3.

5.5.4 West and North of the Mine Project Area

Landowner activities to the west and north of the mine project area include livestock grazing (cattle, sheep and goats) and equine activities. The majority of homes are located on large acreages, with associated amenity including agricultural and farming uses, access to land for outdoor activities, an agricultural landscape, privacy, and a quiet rural environment. These landowners enjoy the rural vistas and views across the undulating landscape. A number of landowners have smaller lifestyle blocks and enjoy the relative isolation of the location coupled with the accessibility to the nearby centres of Blayney and Millthorpe. The Beekeepers Inn, a commercial honey factory, café and farm shop is located on the Mitchell Highway approximately 2.4 km north east of the northern boundary of the mine project area (Figure 5).

5.5.5 Residential Amenity

Residents of the Kings Plains locality and the broader PAA have high residential amenity attributable to a combination of low background noise, good air quality and high visual amenity. The *Visual Impact Assessment*[116] (VIA) (EIS Appendix S) provides a detailed description of the existing visual setting of the mine project area and the primary views of near neighbours.

The majority of primary views from within the PAA comprise undulating agricultural/ grazing lands with few distinctive peaks or high points characteristic of rural farming areas in this Central Western NSW. This existing visual character has high visual integrity in that it is a consistent landscape uninterrupted by development, industry or residential expansion. The overall character is one of gently undulating rural landscape with high visual amenity value.

5.5.6 Local Accessibility

Public transport does not service the PAA. A number of regular school bus services operate along Guyong Road, Vittoria Road and the Mid Western Highway with regular school bus stops, including one in Walkom Road at Kings Plains. All residents who participated in SIA interviews and had young children strongly valued the presence of the school bus service.

[116] Visual Planning and Assessment, 2019.

5.5.7 Health and Wellbeing

There is no statistical information available as to the health and wellbeing of the residents of the PAA. However, the findings of SIA consultation indicate:

- Many residents, particularly residents of the settlement of Kings Plains are experiencing significant stress and anxiety due to the uncertainty around the project, the extent they will be impacted and in particularly, impacts to property values;
- Project related stress and anxiety is affecting everyday life for residents and also relationships within families and between residents of the Kings Plains community; and
- Some residents of the settlement of Kings Plains have existing and significant health conditions. These residents expressed concern that the project may exacerbate pre-existing health conditions. Key issues of concern for these residents related primarily to dust and the perceived presence of harmful contaminants in the dust.

5.5.8 Rural Values

The presence of strong rural values across the PAA was highlighted through the findings of SIA consultation. These rural values include the:

- Protection of rural land;
- Protection of natural assets e.g. Belubula River and the natural springs; and
- Protection and enhancement of the rural way of life.

The findings of SIA consultation with near neighbours suggest residents of the PAA have a:

- Strong attachment to a specific vision of life in the PAA, which emphasises its rural character and amenity; and
- Strong sense of ‘resource hierarchy’ where water is the ultimate asset that must be protected. This is not surprising given the prolonged severe drought in the CW Region. The project is perceived as a threat due to competition for similar resources and the potential adverse impact it could have on water.

During SIA consultation, residents of Kings Plains in particular shared their personal history and place attachment to Kings Plains and its surrounds. During SIA consultation a number of residents identified attachment to other rural families in the locality. Many residents value the local knowledge of the long-term families in the Kings Plains locality. A number of residents of Kings Plains expressed an expectation that the project will result in the outmigration of a number of farming families from the Kings Plains locality due to property acquisition for the project. The potential loss of these families, some of whom have long standing connections to the Kings Plains locality was described by several Kings Plains residents as a significant

potential impact of the project. Several residents perceived that the loss of these families from the Kings Plains locality would adversely impact existing rural values, including social connectivity.

6 SOCIAL IMPACT ASSESSMENT

This section describes the predicted social impacts and opportunities associated with the mine development component of the project for the SAA and the PAA.

6.1 OVERVIEW OF APPROACH

Social impacts have been identified and assessed for the project social area of influence at two geographical scales, as defined in Table 8 (SAA; and PAA). This approach is adopted to clearly distinguish the spatial distribution of social impacts and opportunities. The assessment shows that the majority of impacts and the most significant social impacts accrue to residents in closest proximity to the mine project area i.e. residents of the PAA. The potential significant opportunities of the project accrue largely to the broader Blayney LGA.

The potential social impacts and opportunities occurring to the SAA are discussed first to provide context to the assessment of impacts for the PAA.

The predicted impacts and opportunities of the pipeline development component of the project are discussed separately in Section 10.

6.2 SECONDARY ASSESSMENT AREA

6.2.1 Access and Connectivity

The mine development will require the construction of a new access intersection on the Mid Western Highway. This will require some temporary changes to the local road network during construction. Potential traffic conflicts at the new access intersection for both light and heavy vehicles will be reduced given the provision of dedicated turn lanes on the Mid Western Highway.

The average total daily vehicle movements during peak construction will be approximately 432 movements including 10 heavy vehicle movements. This peak will only occur for two months during the construction phase. The vast majority of vehicle movements to and from the mine project area during the construction phase will be worker light vehicles and mini busses.

The mine development will require the closure or realignment of the portion of Dungeon Road that is located within the mine project area (Figure 2 and Figure 5). The social impacts associated with the closure of this road accrue primarily to the PAA. This impact is therefore discussed in Section 6.3.

The findings of the *Noise, Vibration and Blasting Impact Assessment*[117] (NVIA) (EIS Appendix L) indicate that blasting activities will not require the closure of the Mid Western Highway or local road networks in proximity to the mine project area.

Key management actions identified in the *Traffic Assessment* (TA)[118] (EIS Appendix Q) that address the impacts of any changes in access and connectivity include:

- Development of a Traffic Management Plan (TMP) prior to the commencement of the construction phase. The TMP will:
  - Be developed in consultation with RMS, BSC and CC;
  - Document the actions to be taken to manage the impacts of project related traffic, including construction and operations traffic; and
  - Specifically consider the management of access to the mine project area for the project workforce and include strategies and measures to manage the risks of driver fatigue, road safety hazards and driver behaviour.

6.2.2 Public Safety and Security

This section describes the public safety and security impacts associated with the mine development. Potential social impacts considered include:

- Road safety;
- Increased financial burden on LGAs for road maintenance;
- Public risk associated with:
  - Dangerous goods and hazardous chemicals (i.e. diesel, blasting materials, cyanide etc.) transport, storage and use in the mine development;
  - TSF failure;
  - Fly rock from blasting activities; and
- Workforce behaviour.

The first three items mentioned are discussed below. Issues associated with workforce behaviour are addressed in Section 6.2.4 as part of the assessment of community impacts.

[117] Muller Acoustic Consulting, 2019a.

[118] Constructive Solutions, 2019.

Road Safety

A large number of SIA consultation participants expressed significant concern in relation to the potential impact of the project on pedestrian and driver safety on local road networks, primarily due to:

- An increase in through traffic (light and heavy vehicles) in Blayney township;
- An increase in traffic volumes on Guyong Road;
- An increase in light and heavy vehicles on the Mid Western Highway; and
- Alignment of shift change over times with school bus services on local roads in proximity to the mine project area e.g. Guyong Road.

During SIA consultation, a number of participants also expressed safety concerns in relation to use of the Mid Western highway during periods of heavy fog. The local area, including the PAA, receives heavy fog in winter, particularly early in the morning when shift changeover times are likely to occur.

The mine development will result in an increase in light and heavy vehicle movements on the local road network. The TA[119] (EIS Appendix Q) describes the estimated construction and operations phase traffic movements, including both light and heavy vehicle movements. The TA includes calculations of forecast background traffic volumes on the surrounding road network for the 15 year project life. The findings of the TA indicate that combining these background traffic volumes with the expected project related traffic results in a minor increase to traffic on the surrounding road network. The Mid Western Highway, Great Western Highway Guyong Road and Vittoria Road have sufficient capacity to accommodate the estimated cumulative background and project related traffic for the 15 year project life.

Crash data, specifically data for the Mid Western Highway, Guyong Road and Vittoria Road, was analysed for the TA (EIS Appendix Q). Analysis indicates that the number of crashes reported is minor given the volume of traffic using these roads. No repetitive or reoccurring accident patterns were identified and it is therefore considered that the reported crash history in the vicinity of the project does not indicate any areas of concern within the road network.

The majority of oversized and over mass heavy vehicle (HV) deliveries will occur during the construction phase. These oversized and over mass HV deliveries will be conducted in accordance with requirements of the National Heavy Vehicle Regulator and arrangements addressed in the TMP.

Several school buses operate along the Mid Western Highway, Walkom Road, Guyong Road, and Vittoria Road during morning and afternoon school times (7:30am to 9:00am and 3:30pm to 4:45pm). The school buses stop at informal locations along these roads to pick up and drop

[119] Constructive Solutions, 2019.

off passengers. (i.e. side road intersections and property entrances). Transport for NSW operates a bus service between Blayney and Bathurst along the Mid Western Highway multiple times per day and there are no bus stops in the vicinity of the mine project area.

The following strategies are proposed to avoid and minimise the potential for road safety incidents associated with the mine development:

- When required, provision of bus service for the construction phase workforce from Blayney and potentially also Orange and Bathurst to the mine project area;
- Regis will encourage the operations phase workforce to car-pool for shifts to reduce project related traffic on the local road network;
- Worker shift changeover times will occur before and after school bus morning and afternoon travel times. There are no bus stops on the Mid Western Highway in the vicinity of the proposed access to the mine project area;
- Workers that do not live adjacent to Vittoria Road and Guyong Road or where an alternative route to the mine project area would take significantly longer, will be required to use an alternate route to the project area;
- All contractors and subcontractors based in Orange LGA and Cabonne LGA will be contractually required to use the alternate route to the mine project area. Buses used to transport workers will also use this route;
- Truck advanced warning signage will be installed 300 m in advance of the intersection to the mine project area in both directions along the Mid Western Highway;
- The permitted routes and time restrictions for oversize vehicles, which may include either night-time or daytime deliveries, will be determined in consultation with RMS and documented in the Construction Environment Management Plan and Operations Environment Management Plan before construction commences. RMS will decide on the oversize vehicle routes and travel times for the project on a case by case basis in accordance with its policy for oversize vehicle movements within key transport routes; and
- A comprehensive TMP, as described in Section 6.2.1 and the TA (EIS Appendix Q) including:
  - A driver code of conduct that will outline rules to be followed within the mine project area and the surrounding road network. The code will encourage driving in a considerate manner at all times and respect for the rights of others to use and share the road space. All drivers will be trained in and provided with a copy of the code during their workplace inductions to the mine project area. Failure to comply with the code of conduct may result in disciplinary action and for serious and repeat offences, removal from the mine project area; and
  - Measures to reduce the impact of project related traffic on Vittoria Road and Guyong Road.

Financial Burden of Road Maintenance

SIA consultation participants expressed concern that the BSC and CC may experience additional financial burden due to the cost of maintaining local roads impacted due to the addition of project related traffic, particularly heavy vehicles.

As there will be no haulage of ore from the mine, heavy vehicle impacts due to the mine development will be minimal. Heavy vehicle movements required for the mine development are limited to those required during the construction phase and regular deliveries during the operations phase.

Regis will enter into a VPA with BSC for the project. Financial contributions made through the VPA will be available for BSC to use for road maintenance activities.

Public Risk

Social, Environmental and Economic Costs of a Cyanide Incident

Many stakeholders expressed strong objection and a sense of fear in relation to the use of cyanide in the mine development. This objection and fear was associated with the risk of an adverse cyanide incident e.g. unplanned release on land, and the potential environmental, social and economic implications of the incident event either within or outside the mine project area.

The transport, storage and use of cyanide on-site is described in the EIS[120] in Chapter 2 (project description) and Chapter 18 (hazard and risk). Cyanide and other reagents and dangerous goods will be transported in accordance with the *Australian Code for the Transport of Dangerous Goods by Road & Rail*[121]. The *Preliminary Hazard Analysis*[122] (PHA) (EIS Appendix R) carried out for the project considered the transport of reagents to site. A qualitative assessment of the risks to the public, property and environment associated with the transport of hazardous materials including cyanide (due to risk of vehicle accident and fatility) found the risk level with control measures in place to be medium (as low as reasonably practicable). The risk associated with the storage of hazardous materials was found to be low (tolerable) in accordance with AS/NZ ISO 31000:2018 *Risk Management Guidelines* which classes “tolerable” as the lowest risk category.

[120] EMM, 2019.

[121] NTC, 2018.

[122] Risk Mentor, 2019.

The following commitments are made to minimise public risk associated with the transport and storage of hazardous materials:

- Explosives will be stored in a magazine facility designed to meet the separation and design requirements in *AS2187.2 2006 Explosives – Storage, Transport and Use*. Sodium cyanide will be stored in accordance with the International Cyanide Code; and
- A hazardous materials management plan will be prepared which will describe the measures that will be implemented to ensure the safe handling, storage and transportation of hazardous materials used onsite.

Social and Economic Costs of a TSF Breach

The majority of participants in SIA consultation expressed concern in relation to the potential environmental, economic and social implications of a TSF wall breach. The frequency with which this issue was raised and the strong concern expressed by stakeholders can be attributed in part to recent local and international incidents relating to TSFs. In 2018 the CVO in Blayney LGA experienced a partial TSF wall failure and in January 2019 a tailings dam at the Córrego do Feijão iron ore mine in Brazil suffered a catastrophic dam wall failure.

A specific *Tailings Risk Assessment* was carried out for the project by Risk Mentor (2019) and is documented in Appendix F of the EIS. This risk assessment considered risk of TSF failure. A qualitative assessment of the risks to the public, property and environment associated with the TSF found the risk level with controls applied was low. The TSF has been designed to operate effectively and efficiently, and in consideration of the requirements of the NSW Government. It has been designed by suitably qualified and experienced engineers (ATC Williams), with the design also peer reviewed by experts in the field (EIS Appendix F). The design of the TSF is in accordance with relevant Australian National Committee on Large Dams (ANCOLD) Guidelines including ANCOLD's *Guidelines on Tailings Dam Planning, Design, Construction, Operation and Closure*[123], and the numerous NSW Dams Safety Committee (DSC) guidelines that are relevant to the project. A key input into the selected design criteria for the TSF is the assessed consequence category, which has been prescribed by the NSW DSC, in accordance with *DSC3F Tailings Dams*[124]. Assessing the consequence category of a storage in accordance with DSC3F requires estimation of the potential severity of damages and loss, and the possible size of the 'Population at Risk', should failure occur.

To ensure a conservative TSF design, the highest consequence category of 'Extreme' was assigned, and the design of the TSF developed accordingly. This highest ranking, and therefore the application of the most conservative design criteria, is also a reflection of the recognition by Regis that significant concerns are held by the community relating to the TSF. A further comprehensive *Consequence Category Assessment* will be required as part of the

[123] ANCOLD, 2012.
[124] NSW DEC, 2012.

detailed design of the TSF, which will include a dam break study/model for the tailings run-out and flood flow impacts. Notwithstanding, the TSF design report[125] notes that the conceptual designs provided in the EIS would not materially change should the consequence rating change to a lesser Consequence Category. Regis has also indicated that based on the concerns for the community, they would maintain the standards for an Extreme Consequence Category.

Further information on the TSF design and operation, including the associated safety program is described in EIS Appendix D and in EIS Appendix F.

Blasting Activities

Few residents raised concern in relation to the potential for fly-rock from blasting activities to impact the safety of road users on the Mid Western Highway. The PHA[126] (EIS Appendix R) included an assessment of the risks associated with the presence of explosives on site. The risk assessment concluded that the presence of explosives on site are considered to constitute no credible threat to public safety off site. In addition, the risk to public health and safety due to fly-rock from blasting is considered to be low due to the distance from the proposed blast area and the high level of accuracy in detonation control that can be achieved using modern blasting practices.

The potential offsite health and safety risks associated with fly-rock will be minimised by:

- Undertaking smaller scale blasts initially to collect data to validate calculated blast emissions and to develop preliminary blast emission site laws;
- Maintaining a blast monitoring log to provide a traceable system of documentation in case of incident and to enable blasting activities to be adapted; and
- Refinement of blasting practices in line with outcomes of initial blasts and production blast monitoring outcomes.

[125] ATC Williams, 2019.

[126] Risk Mentor, 2019.

6.2.3 Access to and Use of Ecosystem Services

Ecosystem services (ES) are the direct and indirect benefits provided to humans through ecosystems. The Millennium Ecosystem Assessment[127] framework identifies ecosystem services within four categories:

- Provisioning ES, such as food and water;
- Regulating ES, such as flood and disease control;
- Supporting ES, such as nutrient cycling; and
- Cultural ES, such as spiritual, recreational and cultural benefits[128].

This section describes the scope of the mine dependency on ES and the potential impact of the mine development on access to and use of ES for the broader Blayney community. Section 6.3.3 describes access and use of ES by near neighbours within the PAA.

Mine Dependency on Ecosystem Services

This section describes the mine dependencies on ES and the direct drivers of ecosystem changes that may result in a decline in access to valued ES for residents of the SAA.

To a large extent, design measures have been put in place to avoid reliance by the mine development on local ES in order to minimise pressure on resources in the locality. As a result, the only ES for which mine development dependencies have been identified is groundwater (provisioning ES). The mine development will require water for a number of activities including; processing plant water supply and haul road dust suppression. This water will be primarily provided through the water supply pipeline in the long-term, which will supply approximately 55% of average annual inflows to the mine project area. The remainder will predominately be supplied via the capture of rainfall/runoff, which will provide approximately 40% of the average annual demand.

During the initial construction phase and prior to the commissioning of the pipeline, water will be derived predominately from rainfall and runoff captured in accordance with Regis' harvestable rights entitlement. In the event of a shortfall in water supply during construction, water resources will be appropriately managed by reducing haul road dust suppression water demand by the use of dust suppression agents, or by investigating alternative water supplies, such as establishing onsite production bores and trucking water to site. There will also be water incidentally captured within the mining area and rainfall runoff from disturbed areas. The *Surface Water Assessment*[129] (SWA) (EIS Appendix J) describes the water balance for the mine development. Importantly in relation to ES, the water management system has been

[127] Millennium Ecosystem Assessment, 2019.

[128] Department of the Environment, Water, Heritage and the Arts 2009.

[129] HEC, 2019.

designed so that clean water from upstream catchments flowing into the mine project area will be diverted around disturbed area and back into the downstream catchment.

Community Access to and Use of ES

ES represent the intersection of the natural and human environment. During SIA consultation participants of the broader community identified a number of benefits they obtain from the surrounding ecosystem, relevant to the mine development. These benefits include:

- Access to water for agricultural purposes obtained via a combination of naturally occurring springs, surface water flows in the Belubula River and groundwater; and
- Enrichment, reflection, recreation and aesthetic experience generally associated with the rural environment and the Belubula River.

Table 21 summarises the ES accessed by the broader community and relevant to the context of the mine development. The key sources of potential impacts on broader community access to and use of ES relevant to the mine development, include:

- Change in land use from agriculture to active mining; and resulting changes in visual character;
- Land disturbance and resulting loss of vegetation; and
- Impacts to water quality and quantity – surface water, groundwater and natural springs.

Table 21
Ecosystem Services in the Secondary Assessment Area

ES Category	Service	Example	Drivers of Change associated with Project
1. Provisioning	Water supply for agricultural use	• Stock watering from the Belubula River • Agriculture is a key land use	• Impacts on surface water and groundwater quality and quantity • Change in land use (i.e. from agricultural land) within the mine development area
2. Culture	Aesthetic Value	• Cultural value placed on landscapes and landmarks in the area	• Land disturbance, loss of vegetation and change in land use
	Recreation Value	• Fishing in the Belubula River • Use of VSF	• Impacts on surface water quality and quantity

Impacts to access and use of Provisioning ES

One of the key findings of the SIA consultation was the value residents of the Blayney LGA (including near neighbours) place on access to water, and in particular the Belubula River. The use of the Belubula River water by landowners for agricultural operations (primarily stock watering) is widespread downstream of the mine project area. During SIA consultation downstream landowners expressed concern that the project will reduce the quantity and quality of water in the Belubula River directly impacting existing agricultural operations and productivity. The Blayney Fishing Group expressed concern that the mine development may adversely impact fish stock in the Belubula River and Carcoar Dam, which in turn could impact recreational fishing focussed on the Belubula River. Further, the quality of water to be brought in via the pipeline and the potential for this water to contaminate existing surface water flows was identified by many residents, including downstream landowners, as a significant area of concern.

The findings of the SWA and the *Groundwater Assessment* (GWA)[130] (EIS Appendix J and EIS Appendix K) indicates that the impact of the mine development on surface water flows in the Belubula River will not be significant for downstream landowners. The project is designed to be a no discharge site with water captured, used, produced or brought into the mine project area contained. As such there is minimal risk that the water brought in via the pipeline will adversely impact the quality of groundwater or surface water outside the mine project area.

The design of the water management system for the mine development has been optimised to minimise disruption of and to avoid discharge of proess affected water to surface water systems.

In relation to the Belubula River, the findings of the SWA and the GWA (EIS Appendix J and EIS Appendix K) indicate that:

- The impacts on surface water and groundwater as a result of the project are predicted to be minimal and impacts to downstream water users are predicted to be minor.
- Upstream of the Tributary A confluence, a 15% reduction in baseflow to surface water (ie the Belubula River) in the local area is predicted to occur during and after mining. However, under existing pre-mining conditions baseflow is predicted to contribute only around 5% to the overall surface water flows in this area.

[130] HEC, 2019 and EMM, 2019c.

- Downstream of Tributary A, there is no change in groundwater discharge or river leakage predicted to occur during and after mining.
- At maximum disturbance, flows in the Belubula River below the Mid Western Highway and above Carcoar Dam are expected to range between at least 637 ML/yr and 1,402 ML/yr during periods of low rainfall. During these periods of low rainfall when downstream users are most reliant on water within the Belubula River, groundwater discharge as baseflow in the Mid Western Highway area is predicted to remain unchanged from current conditions.
- A temporary reduction in the inflow to Carcoar Dam (4%) will occur as a result of construction and operation of the mine development. Permanently, following mine-closure and rehabilitation, the reduction in flows will be much smaller (0.5% reduction). This level of change is expected to be within the current natural variability in catchment conditions.
- Groundwater levels will decline in a localised area surrounding the open cut mine. The Aquifer Interference Policy[131] (AIP) requires that landholder bores affected by greater than
  2 m drawdown as a result of the mine development are subject to 'make good' provisions however, there are no third party bores with a predicted drawdown in excess of 2 m.

Regis has developed a comprehensive management framework to avoid any impacts on the Belubula River and its associated catchment values (EIS Appendix J and EIS Appendix K). This framework includes:

- Incorporation of additional safeguards for seepage management into the design of the TSF (EIS Appendix D);
- Installation of a dedicated groundwater monitoring network for the life of the project to:
  - Provide an early indication of any potential impact to existing users outside the mine project area; and
  - Monitor for early warning of potential seepage from the TSF; and
- Installation of seepage interception bores downstream of the groundwater monitoring network to operate as backup seepage collection points to intercept any potential seepage before it progresses further into the catchment.

Importantly with respect to any potential seepage from the TSF, the GWA (EIS Appendix K) found that at the rate the TSF seepage is predicted to migrate underground (approximately 50 m in 100 years) by the time it could reach the Belubula River (i.e. hundreds of years post-mining), the chemistry of the seepage water will have altered significantly by hydrogeochemical reactions and by dilution (with groundwater and surface water) that it will

[131] NSW Office of Water, 2012.

be essentially undetectable from the river water and/or within relevant ANZECC[132] (2000) guidelines.

Notwithstanding this, recognising existing sensitivities around water access, and in order to provide greater certainty to downstream landowners, Regis has provided a proposal for downstream surface and groundwater monitoring to downstream landowners. This approach will enable downstream landowners to remain informed of any changes in downstream water quality and quantity as a result of the project. Regis at this point understands that there are eight landholders plus BSC located along the Belubula River, between the mine project area and Carcoar Dam. Four landholders and the BSC have agreed to participate in the monitoring program, a further three landholders are in discussion with Regis regarding participation and one landholder has declined.

Impacts to access and use of Cultural ES

Some residents of the Blayney LGA expect that project induced changes to the natural environment within the mine project area will degrade the cultural services they derive from the surrounding ecosystem. These people indicated any adverse changes in the beauty or aesthetic value of the Belubula River and the locality of the mine project area would impact resident use and enjoyment of the Belubula River, Carcoar Dam and the natural environment within the mine project area.

As described above, the findings of the SWA and GWA (EIS Appendix J and EIS Appendix K) indicate that the impact of the mine development on surface water flows in the Belubula River will not be significant. The risk of potential changes to the water quality of the Belubula River and Carcoar Dam is expected to be minimal as the mine is designed to be a nil-discharge mine. Consequently, there is minimal likelihood of the mine development adversely impacting access to and use of the Belubula River for the broader community.

During SIA consultation a number of participants in SIA consultation (residents of the broader Blayney community) attributed aesthetic value to:

- Bushrangers Hill and the stand of vegetation on McPhillamys Hill within the mine project area; and
- The visibility of these features from the Mid Western Highway.

The mine project area does not include the area referred to as Bushrangers Hill, therefore no mining activity will occur in this locality and the project will not impact Bushrangers Hill. The mine development will result in the disturbance of land on McPhillamys Hill. However, some existing vegetation (specifically canopy trees) and a vehicle and work free area will be

[132] Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ)

maintained on the McPhillamys Hill on the lower external faces as the mine progresses deeper, thus protecting the aesthetic value of these locations.

The VSF adjoins the north eastern boundary of the mine project area and is valued for its environmental, forestry, apiarian, recreational and scenic properties. The mine development is proposed outside of the VSF and will not result in any direct impacts to the activities undertaken within the VSF. The VSF is used by the commercial apiarian industry as a location for hives. The impact of the mine development on commercial apiarian activities is discussed in Section 6.3.3. Anecdotal information indicates that it is also used periodically by local walking groups. The Forestry Corporation of NSW has recently commenced commercial logging of part of the VSF. Therefore, the project is unlikely to have any significant impact on the use or value of the VSF.

As part of the Biodiversity Offset Strategy, Regis is seeking to establish a biodiversity stewardship site to compensate for the residual impact to biodiversity values of the region as a result of the project. The presence of a biodiversity stewardship site may present an opportunity for Regis to involve local organisations and/or school students (e.g. Blayney High School (BHS)) in an environmental monitoring project.

6.2.4 Culture

This section describes the predicted impacts of the project on Aboriginal cultural values and historic heritage values. The impact of the project on rural values and rural way of life is described in Section 6.3.4.

Aboriginal Cultural Values

The mine project area is located within the area identified as the traditional country of the Wiradjuri People. The cultural values of the Wiradjuri People relevant to the mine project area are described in the CHA[133] for the mine development (EIS Appendix P).

As described in Section 5.3.1, Aboriginal people of the CW Region are concerned about any development that might impact upon Aboriginal heritage and other values on land that is traditionally theirs. Any development upon, or disturbance of land is contrary to principal Aboriginal beliefs regarding land, its values and its inherent cultural significance[134].

The mine development will result in the total disturbance of twenty-three Aboriginal cultural heritage sites and the indirect or inadvertent disturbance of a further ten Aboriginal cultural heritage sites, disturbance due to their proximity to proposed mine components [135]. The identified Aboriginal cultural heritage sites within the mine project area are comprised of small

[133] Landskape, 2019.
[134] Landskape, 2019 pp. 10.
[135] Landskape, 2019.

scatters or isolated finds of stone artefacts. The findings of the CHA (EIS Appendix P) indicate that the Aboriginal cultural heritage sites located within the mine project area are not of high scientific significance and do not have particularly high social or cultural value.

Despite these findings, SIA consultation with a local Wiradjuri Elder indicated concern for the cumulative loss of connection to country which is resulting from local and regional changes in land use and tenure.

The surveys undertaken for the CHA (EIS Appendix P) indicate that the types of Aboriginal cultural heritage sites within the mine project area that may be impacted by the mine development generally comprise part of a region-wide distribution of very small Aboriginal open occupation sites with disturbed stone artefacts of low scientific significance. Given the low scientific significance of the identified Aboriginal cultural heritage sites, the cumulative effect that may result from the mine development is considered to be low, and will be mitigated by the ongoing program of archaeological recording/salvage recommended within the CHA (EIS Appendix P).

Regis is committed to involving the local Aboriginal community as integral participants in the management of Aboriginal cultural heritage values in the mine project area. Regis will continue to involve the registered Aboriginal stakeholders and any other relevant Aboriginal community groups or members in matters pertaining to the mine development. In particular, the recording, collection, curation, storage and replacement of Aboriginal objects must occur with the invited participation of local Aboriginal community representatives.

Historic Cultural Heritage

No concerns were raised during SIA consultation in relation to the impact of the project on historic cultural heritage located within the mine project area. A few residents of the Kings Plains locality did raise concerns in relation to the potential impacts of the project (particularly blasting) on historic homes in the locality e.g. *Lynfern.*

There are no listed historical heritage items in the mine project area. A number of historical structures located outside of the mine project area are listed on the Blayney LEP, as discussed in Section 5.2.3.

The findings of the CHA (EIS Appendix P) indicate that historical cultural heritage of the project area comprises twenty-three historical cultural heritage sites. These sites comprise historic dwellings and dwelling ruins, mining sites (shafts, an adit, a survey marker tree), domestic and pastoral refuse dumps, small bridges and pastoral sites (sheds, stockyards), primarily dating to pastoral and mining activities of the second half of the 19th century. Eight locally-significant historical cultural heritage sites are located within the proposed direct disturbance footprint for the mine development component of the project and four locally-significant historical cultural heritage sites may be subject to indirect disturbance or inadvertent direct disturbance due to their proximity to the proposed mine development.

The findings of the CHA (EIS Appendix P) indicate the identified historical cultural heritage do not meet thresholds of State-significance. This is with the exception of one site, MGP H23, which has been identified as possibly having some cultural values at a state level, although further research is required to confirm this is the case. However, some of the sites have been assessed as locally significant, and possess features both individually and collectively that is evidence of important historic economic and industrial activities and themes in the local region. These sites will be archivally recorded prior to development related impacts. The survey marker tree identified will be salvaged prior to being impacted, and preserved as an example of this site type within an historic gold mining landscape. This presents an opportunity for Regis to partner with local historians to develop and record an oral history of the locality.

A number of near neighbours raised concern about the potential impact of blasting activities on off-site buildings of local heritage significance. The NVIA (EIS Appendix L) indicates that blasting associated with the mine development will be below the relevant building criteria at all items of identified local heritage significance (Section 5.2.3) in proximity to the project. The project will therefore have no impact on items of identified local heritage significance located outside of the mine project area.

6.2.5 Population Change

This section describes the anticipated population and demographic changes likely to be experienced in the Blayney LGA during the construction and operations phases of the project based on the scenario's described in 3.3.3 (Table 10 and Table 11) and the operations phase workforce residential location assumptions presented in Table 7.

Construction Phase

The construction phase is predicted to result in a temporary and medium-term (estimated 12-18 months) increase in population of the Local Area, predominantly within the Blayney township. Due to the short duration of the project construction phase, the transient nature of construction work and the proximity of the project to neighbouring regions with skilled construction workforces it is unlikely that families will accompany construction workers to the Local Area for the project.

The construction phase for the mine development is anticipated to result in an influx of around 223 workers to the Blayney LGA at peak construction under Scenario 1 and around 346 workers under Scenario 2. More than likely, the number will be less due to constraints on accommodation availability in the Blayney LGA and resulting dispersal of the workforce to neighbouring centres e.g. Bathurst and Orange.

Under a worse-case scenario where all 223 workers or 346 workers reside in the township of Blayney, this is equal to a temporary increase of 7.5% (Scenario 1) or 11.7% (Scenario 2) in the 2018 ERP of Blayney. Under both scenarios the predicted population increase is significant and has the potential to give rise to temporary changes in the Blayney community. These issues are discussed in Section 6.2.7.

Accommodation availability will be the primary driver of any project related increase in temporary population of Blayney. Accordingly, Regis will seek to control the number of NLHs temporarily residing in the Blayney LGA, and in particular Blayney through the CWAS as described in Section 6.2.4.

Operations Phase

Table 22 shows the size of the operations phase NLH workforce under assessment scenario's 1 and 2, and the likely final residential location of these NLHs for each scenario.

Table 22
Assumptions - Likely Final Residential Location of NLHs – Operations[1]

Residential Location	Scenario 1 – Preferred Project Arrangement				Scenario 2 – Alternative Arrangement			
	LHs		NLHs		LHs		NLHs	
Blayney LGA	25%	65	8%	20	20%	52	16%	42
Orange LGA	25%	65	6%	16	20%	52	12%	31
Bathurst LGA	15%	39	6%	16	10%	26	12%	31
Cabonne LGA	10%	26	0%	0	5%	13	0%	0
Cowra LGA	5%	13	0%	0	5%	13	0%	0
Total	80%	208	20%	52	60%	156	40%	104

Source: Regis provided data, 2019.
Note:
1. Data used is the annual average workforce numbers.

Under each scenario around 20 NLHs (Scenario 1) and 42 NLHs (Scenario 2) are anticipated to move to the Blayney LGA. Assuming each worker brings their family and that their average household size is similar to that of Blayney (i.e. 2.4 people per household) then the following additional population is anticipated:

- Under Scenario 1 – 48 people, equating to 1.5% of the existing population of Blayney; and
- Under Scenario 2 – 101 people, equating to 3.4% of the existing population of Blayney.

It is anticipated that the majority of NLHs relocating to the Blayney LGA will choose to reside in Blayney township or nearby Millthorpe.

The benefits of this additional permanent population for the community is described in Section 6.2.7.

6.2.6 Access to Housing and Accommodation

This section considers the impact of the project on existing housing market conditions and the supply of short-term accommodation in the Blayney LGA. The impact assessment includes consideration of the workforce accommodation demands associated with both the mine development and the pipeline development. The primary driver of project impacts on the housing market and short-term accommodation provision during all phases of the project is the number of NLHs, as it is the NLHs who will require accommodation.

Impacts have been assessed for two different hiring scenarios for each phase of the project, as described in Section 3.3.3 and summarised in Table 23.

Table 23
NLH Scenario's by Project Phase

Project Phase	Number of Non-Local Hires	
	Scenario 1 – Preferred Project Arrangement	**Scenario 2 – Alternative Arrangement**
Construction Phase	319	442
Operations Phase	52	104

Source: Regis provided data, 2019.

Construction Phase Accommodation Demand

Under Scenario 1, an estimated 319 rooms of accommodation will be required for the construction phase workforce at peak construction (Table 23). Under Scenario 2 an estimated 442 rooms of accommodation will be required. The majority of these rooms will be required within the Blayney LGA, and in particular Blayney as the closest residential location to the mine project area.

Operations Phase Accommodation Demand

Table 24 shows:

- Estimates of the expected final residential location of the operations phase NLH workforce and the percentage of employees expected to reside in each of those areas; under Scenario 1 and Scenario 2; and
- The total number of units of accommodation required to accommodate the NLH workforce and their families at Year 2 (commencement of operations).

The primary assumptions underpinning both scenarios are:

- All NLHs will settle within the Local Area, including NLHs sourced from Lithgow LGA; and
- The NLH workforce will generally be evenly distributed across the LGAs of Blayney, Orange and Bathurst.

Table 24
Predicted Total Demand for Dwelling Units by NLHs, by Location – Operations[1]

Residential Location	Scenario 1 – Preferred Project Arrangement		Scenario 2 – Alternative Arrangement	
	Proportion NLHs (%)	Number	Proportion NLHs (%)	Number
Blayney LGA	40	20	40	42
Orange LGA	30	16	30	31
Bathurst LGA	30	16	30	31
Total	100	52	100	104

Source: Regis, 2019.
Note:
1. Data used is the annual average workforce numbers.

Under Scenario 1, an estimated 52 dwelling units136 will be required for the operations phase NLH workforce based on annual average workforce demand (Table 24). This includes 13 workers who currently reside in Lithgow LGA.

Under Scenario 2 an estimated 104 dwelling units will be required. This includes 11 workers who currently reside in the Lithgow LGA.

The number of dwelling units required will match the number of project operations phase NLHs. This includes a conservative assumption that each employee (and where applicable their family) has the opportunity to be housed in a separate dwelling. More than likely some share accommodation will be utilised by employees who are single.

Table 24 shows that:

- Under Scenario 1, the project would directly generate demand for up to 52 dwelling units in the Local Area of which 20 dwelling units would be required in the Blayney LGA; and
- Under Scenario 2, the project would directly generate demand for up to 104 dwelling units in the Local Area of which 42 dwelling units would be required in the Blayney LGA.

[136] One dwelling unit is equal to a dwelling house, townhouse, apartment or equivalent.

Within the Blayney LGA, Blayney township would likely experience the greatest demand of housing, equivalent to the majority of the 20 or 42 dwellings under each scenario.

Construction Phase Impacts

The accommodation arrangements for the construction workforce have been described in Section 2.2.6. The construction phase workforce will be accommodated in a combination of the following options within the Local Area:

- Short-term accommodation e.g. hotels and motels;
- Private rental accommodation; and
- Regis owned housing within the PAA.

Short-Term Accommodation

Across the project life, the construction phase is predicted to have the greatest impact on short-term accommodation provision in the Local Area, particularly in Blayney LGA. This section discusses the impact of the construction phase on short-term accommodation under the two local hire scenarios described in Table 23.

The construction phase is predicted to result in a temporary and medium-term (estimated 12-18 months) increase in demand for short-term accommodation in the Local Area regardless of the NLH scenario. Under both scenarios, the majority of demand is likely to be felt in the townships of Blayney and Millthorpe, due to their proximity to the mine project area. Sustained demand for short-term accommodation in the Blayney LGA has the potential to adversely impact the local tourism industry sector by reducing accessibility to short-term accommodation for visitors to the LGA.

During SIA consultation, a number of participants described the prevailing accommodation conditions in Blayney when the Cadia East Project was constructed. Participants highlighted the use of the Blayney caravan park as an 'accommodation village', the dramatic reduction in availability of the private rental accommodation and significantly high demand for short-term accommodation. The construction phase of the Cadia East Project commenced in parallel with a significant push by the Millthorpe community to increase tourism. Discussions with representatives of the MVC highlighted the significant demand for short-term accommodation in Millthorpe during this construction period and the negative impact this had on local efforts to grow the tourism industry sector. MVC participants indicated that the supply of short-term accommodation available to tourists during this period was highly constrained.

Based on the findings of the short-term accommodation survey conducted for the SIA (Appendix B), there are approximately 170 rooms of short-term accommodation available across the Blayney LGA, the majority of these rooms are located in hotels and motels within Blayney and the villages (Section 5.4.5). Accommodation operators surveyed indicated varying occupancy rates across the year. Almost all operators surveyed indicated repeat bookings for particular events e.g. Bathurst 1000, B2B Bike Ride.

There is an insufficient supply of rooms in short-term accommodation in the Blayney LGA to meet the accommodation demands of the construction phase (under both scenarios) without adversely impacting the local tourism industry.

Private Rental

The construction phase workforce will also draw on private rental accommodation during the construction phase. More than likely contractors will rent three and four-bedroom rental properties in order to accommodate multiple workers at the one time. As the construction phase workforce is temporary, workers normally do not bring their partners or family to their place of work. This means that one construction worker can generally be accommodated in each bedroom within a house.

Table 25 shows the estimated demand generated by the construction phase workforce for private rental and short-term accommodation across the Local Area assuming:

- 96 NLHs associated with the pipeline development are accommodated in short-term accommodation in Bathurst and Lithgow LGAs;
- 50% (85) rooms of short-term accommodation in Blayney LGA are available for use by the workforce; and
- The majority of NLHs associated with the mine development will seek to reside in close proximity to the mine project area e.g. Blayney township.

Table 25
Estimated Demand for Rooms of Accommodation – Construction

Accommodation Type	Rooms of Accommodation	
	Scenario 1 – Preferred Project Arrangement	**Scenario 2 – Alternative Arrangement**
Short-term accommodation in Bathurst and Lithgow LGAs (rooms)	96	96
Short-term accommodation in Blayney LGA (rooms)	85	85
Dwellings (3 bedrooms)	46	87
Total accommodation demand	319	442

The supply of private rental accommodation in Blayney, Millthorpe and neighbouring Bathurst and Orange is described in Appendix F. There is currently fewer than five rental properties available in the Blayney LGA. Over the last ten years, rental vacancy rates in Blayney have fluctuated significantly, peaking at 7% (~30 properties) in 2014. The current rental vacancy rate in Blayney is approximately 1%. Given the current lack of available private rental accommodation, the small supply of residential housing stock, and the likelihood that private rental accommodation supply will remain limited into the foreseeable future there is insufficient

private rental accommodation in the Blayney LGA to meet the demands of the project under either scenario.

Analysis of the housing market in Blayney (Section 5.4.5 and Appendix F) highlights the relative affordability of the housing market and the attractiveness of the location to lower income households. There is a trend of households moving away from the regional centres of Bathurst and Orange in search of more affordable rental accommodation. Anecdotally there have been reports of a recent influx of lower income households to Blayney seeking affordable rental accommodation, hence the current low rental vacancy rates.

Construction phase workforce accommodation demand (under both scenarios) has the potential to result in the displacement of low-medium income households from existing rental options in the Blayney LGA. Experience in other mining communities across Australia (i.e. Muswellbrook, Singleton, Moranbah) suggests that landlords may shift existing low rent tenants out of private rental accommodation and increase weekly rents in an effort to capitalise on the demand generated by the project. It should be noted that there is also evidence to suggest an increase in the number of digital platforms facilitating short-term letting arrangements in urban and regional locations e.g. Air BnB and Stayz, can also have an adverse impact on the availability and affordability of private accommodation in some locations[137]. A review of various short-term letting platforms indicates the presence of a large number of properties in the villages of the Blayney LGA including Millthorpe and Carcoar.

Impact Summary

The combination of short-term accommodation options and private rental availability in the Blayney LGA suggests that it does not have the capacity to meet the construction workforce accommodation demands under either scenario assessed. During the construction phase it will be necessary for a portion of the NLHs to seek accommodation in areas outside of the Blayney LGA such as Bathurst and Orange. Both regional centres are located within a one hour commute of the mine project area.

As discussed in Section 5.4.5 and Appendix F there are a large number of short-term accommodation options available in the neighbouring regional centres of Orange and Bathurst, with more than 1000 rooms of short-term accommodation available (Appendix F). Occupancy rates in Orange are around 70% and in Bathurst 55%. Further, there are more than 200 rental properties available in these regional centres (Appendix F). Rental vacancy rates in these locations are only slightly higher than Blayney, however the pool of available rental properties is significantly larger. This indicates that the Orange and Bathurst LGAs have capacity to accommodate a portion of the construction phase workforce for the project.

[137] Crommelin, L., Troy, L., Martin, C. and Parkinson, S. 2018; Odea, 2019.

Management Actions

A Workforce Accommodation and Management Framework (Section 7.3.3) has been developed for the project. This framework includes a commitment to the preparation of a Construction Workforce Accommodation Strategy (CWAS) prior to the commencement of the construction phase to manage the impact of construction workforce accommodation demand. The CWAS will seek to facilitate the coordinated placement of the workforce in short-term accommodation throughout the Blayney LGA and neighbouring LGAs to ensure adequate supply of short-term accommodation remains available to the local tourism industry sector across the construction phase. Informed through ongoing housing market monitoring and engagement with local real estate agents, the CWAS will also seek to manage the demand for private rental accommodation in the Blayney township and redirect supply to alternative locations.

Specifically, the CWAS will:

- Demonstrate how accommodation demand will be managed during periods of high demand e.g. key regional events and long weekends;
- Document an approach to informing local accommodation providers of project schedule and workforce accommodation demands;
- Facilitate coordinated placement of the workforce in short-term accommodation throughout the Blayney LGA; and
- Contain a monitoring framework that incorporates 'triggers' for decisions about additional accommodation options e.g. redirection of project workforce to larger centres of Orange and Bathurst if accommodation shortages are identified within the Blayney LGA.

In addition to the CWAS Regis will:

- Focus on securing local contractors during the construction phase, to reduce the size of the NLH workforce;
- Monitor local and regional housing market activity in the period prior to construction to inform the CWAS, and make changes to the workforce accommodation strategy, as necessary to manage potential impacts;
- Engage further with Orange360 and accommodation providers in Bathurst and Orange LGAs to confirm occupancy rates and availability in short-term accommodation options in these locations;
- Seek to encourage the NLHs associated with the pipeline development (estimated 96 workers under both scenarios) to reside in the Bathurst and Lithgow LGAs to reduce pressure on short-term accommodation providers and the private rental market in Blayney;
- Reduce workforce demands during periods of high regional accommodation demand e.g. Bathurst 1000, to free up short-term accommodation for the tourism industry sector;

- Provide Orange360 with the construction and operations phase schedule to enable Orange360 to remain informed of potential short-term accommodation supply during peak periods e.g. during regional events;
- Following commencement of operations, provide Orange360 with the long-term maintenance shutdown schedule for the mine, and where necessary ensure alignment of shutdown periods outside of periods of high accommodation demand e.g. Bathurst 1000;
- Communicate with larger operating companies such as Purina, CVO and SeaLink to understand any expansion/reduction in services that may impact short-term accommodation availability in Blayney during the construction phase, and take necessary action through the CWAS and in coordination with these companies to minimise any adverse impacts.
- Undertake further engagement with Housing Plus and other relevant housing support services to identify suitable actions to offset potential short-term impacts on low to medium income households in the Blayney LGA; and
- Establish joint meetings with representatives of other Major Projects or existing significant operations e.g. CVO in relation to any expansion work regarding management and monitoring cumulative impacts to the Blayney housing market.

The project also presents an opportunity for the BSC to consider innovative means to increase the supply of short-term accommodation in the Blayney LGA during the construction phase to ensure project economic benefits accrue to the area. This could include the development of an accommodation facility similar to that which operated during the construction phase of the Cadia East Project, or alternative mechanisms such as changes to town planning requirements to facilitate the provision of additional, albeit temporary accommodation options.

The potential cumulative impacts of the project on the supply of short-term accommodation and private rental accommodation in Blayney LGA is discussed in Section 6.3.7.

Operations Phase Impacts

Short-term Accommodation Impacts

Any NLHs associated with the operations phase will require short-term accommodation at the commencement of their employment as they look for suitable accommodation. It is expected that these employees would ultimately transition out of the short-term accommodation market and into a purchased home or a long-term rental. Given the anticipated size of the operations phase NLH workforce in comparison to the construction phase NLH workforce, and the supply of accommodation in the Local Area, the impact on short-term accommodation provision in Blayney LGA and across the Local Area is predicted to be low.

Housing Market Impacts

Direct project induced housing demand in the Local Area is estimated at 52 dwellings under Scenario 1 and 104 dwellings under Scenario 2 and includes:

- 20 dwellings in Blayney LGA under Scenario 1; and
- 42 dwellings in Blayney LGA under Scenario 2.

There are currently 14 residential properties for sale in Blayney and five in Millthorpe. The supply of residential properties is insufficient to meet the project demand under either scenario, and projected residential growth to 2036 (~200 households) in the Blayney LGA.

Land development activity in Blayney LGA is described in Section 5.4.5. Growth in residential land in the Blayney LGA has focussed principally on two large lot residential areas - the Browns Creek Road area to the west of Blayney and the Forest Reefs Road area to the west of Millthorpe[138]. Of note is the lack of new residential blocks in Blayney in the last ten years. BSC has taken significant steps to address the shortage of residential blocks in Blayney, culminating in the recent release of 14 residential blocks for development.

The continued development of residential land in Blayney over the next 2 years is required to ensure that suitable accommodation is available for the operations phase workforce. This will also be crucial to ensuring Blayney captures any potential project economic and social benefits.

The key issue for consideration is the need for BSC to support the timely release of land for residential development. The BSC has recently commenced a review of the *Blayney Shire Settlement Strategy*[139] to identify potential areas for growth.

To assist BSC in ensuring adequate residential land is made available to meet project related housing demands in addition to the demands from the broader community, Regis will:

- Keep the BSC informed of the project schedule, any changes to the size of the project workforce and anticipated recruitment periods. Regis will proactively engage with the BSC both prior to the commencement of the construction phase and throughout all phases of the project to enable the BSC to make informed decisions regarding availability of land and housing to meet project generated demand; and
- Work with BSC and industry to monitor mining industry workforce size, local housing demand and supply, housing prices and affordability.

[138] Dicker 2019 pers. comm.

[139] Blayney Shire Council, 2012.

Under either workforce scenario, the project will increase demand for housing in the neighbouring regional centres of Orange and Bathurst. The characteristics of the housing market in each of these locations is presented in (Appendix F). There is ample supply of housing in these locations to accommodate the predicted workforce accommodation demands. Given the size and characteristics of the housing markets in these locations (Appendix F) together with reasonable small size of the anticipated demand (between 20 and 42 dwellings in each location), the impact of the operations phase on the housing market in Orange and Bathurst is considered low.

6.2.7 Community, Character and Liveability

Community

Construction Phase

During SIA consultation a few participants expressed fear and concern that the project would result in an influx of temporary workers that would adversely impact the community of Blayney. This concern can be attributed to the experienced impact of the construction phase of the Cadia East Project in 2011, during which more than 1,000 temporary workers were accommodated in and around the Blayney LGA. Traditionally, Blayney has been a close community where people feel very safe, and community members observe social norms and participate in local community events. Blayney residents indicated that during the construction of the Cadia East Project large numbers of construction workers frequented licensed premises in town and there were occurrences of anti-social behaviour at these locations.

According to a number of participants in SIA consultation, the following impacts could arise as a result of an influx of temporary workers to Blayney:

- Perceived reduction in personal safety;
- Perceived increase in anti-social behaviour; and
- Potential for tension between the temporary workforce and permanent residents due to a lack of social integration.

The impact of temporary workforces on regional communities was explored at depth through the 2012 House of Representative Inquiry[140] into fly-in fly-out workforce practices (the Inquiry). The Inquiry considered a range of potential social impacts of temporary workforces including:

- Impacts to community image and social cohesion;
- Creation of an ‘us versus them’ mentality;
- Impacts to liveability and in particular considerations of safety; and
- Connectivity and engagement within communities.

[140] House of Representatives, 2013.

The Inquiry found that a large influx of non-resident workers can give rise to permanent disruption to the social fabric and feeling of a town. The influx of a temporary population can give rise to negative impacts on the safety, image and amenity of communities.

The following measures were identified through the Inquiry to mitigate the impacts of temporary workforces:

- Provide opportunities for temporary workers and residents to come together and break down some of the prevailing 'us versus them mentalities';
- The development of corporate volunteer programs to help improve relationships between temporary workers and community residents. It was noted that many temporary workers who are highly skilled and would have a lot to offer in positions like men's sheds; and
- Requiring employees to sign social contracts that link to employment and specify a standard of behaviour required by the affected community and company.

As described in Section 6.2.5, under a worse-case scenario where all 223 NLHs construction workforce reside in the township of Blayney, this is equal to a temporary increase of approximately 7.5% in the 2018 ERP of Blayney. This is a significant temporary population increase which will have a temporary impact on the Blayney community.

To manage the behaviour of the workforce and to minimise the impact of the temporary workforce on the Blayney community, Regis will:

- Focus on securing local contractors during the construction phase, to reduce the size of the NLH workforce;
- Seek to encourage the NLHs associated with the pipeline development (estimated 102 workers) to reside in the Bathurst LGA to reduce the size of the temporary workforce present in Blayney;
- Develop a CWAS to manage the demand for private rental accommodation in Blayney township and redirect supply to alternative locations e.g. the regional centres of Bathurst and Orange;
- Establish a strong expectation in the workforce regarding behaviour. This will include the implementation of a workforce code of conduct to manage workforce behaviour both on and off the mine project area;
- Seek the support of key stakeholders in the Blayney community for the establishment of a Local Liquor Accord to support the safe and enjoyable use of licensed venues and entertainment venues in Blayney;

- Initiate and support community activities which provide opportunities for NLHs and residents to come together and experience rural values;
- Encourage all construction workers to volunteer in the Blayney LGA and neighbouring LGAs where they are temporarily residing;
- Discourage the wearing of high-viz clothing in restaurants and pubs in Blayney; and
- Plan regular toolbox talks with the workforce that focus on workforce behaviour in the community.

Operations Phase

Regis will require all personnel to permanently located to the Local Area for the operations phase of the project. Operations phase personnel migrating to the Blayney LGA from other areas are likely to include a high proportion of couples and families. During operations, the project would make positive contributions to community cohesion at the Blayney LGA level by:

- Providing a place of work and long-term employment for local residents, supporting them to stay locally;
- Increasing the pool of working age and young residents with capacity to support community activities;
- Potentially increasing the number of family households and interactions between families; and
- Investing in local community development through the VPA and Regis corporate donations and sponsorship program, including facilitation of social connections between project workers and their families.

An influx of population into an existing town or locality means that both the existing and new residents need to adjust to their new neighbours and community, and the differing expectations that each group may hold about the other. The incoming population may well be different to the existing community in a number of ways.

For both groups, there are a number of ways of assisting the other. For the incoming residents, information about their new community and its services is important, as well as welcome programs to help integrate new workers and their families. For existing residents, well-structured and timely information about the project, its likely workforce characteristics and their social and housing needs is also crucial. Encouraging social bridging between the existing and incoming populations is crucial.

To this end, Regis will take the following actions to assist new residents to integrate into the Blayney community:

- Collaborate with the BSC and industry in the immediate region to source or produce the following information, projects and policies:
  - Provision of information for incoming residents, regarding their new community, region, facilities and services;
  - Welcoming events or programs for new residents;
  - Information for existing residents regarding the project, it's likely workforce characteristics and their needs; and
- Initiate and support community activities which provide opportunities for new residents and existing residents to come together and experience rural values.

Impacts to Rural Character of the LGA

A number of participants in SIA consultation expressed concern that the mine development may detract from the rural character of the Blayney LGA. Some residents of the Blayney LGA expressed concern that the proximity of the mine development to the Blayney township and the increased presence of a permanent mine workforce would lead to real and perceived changes in the character of the Blayney township. A small number of participants in SIA consultation expressed an expectation that the mine development would reduce the 'journey experience' for tourists arriving in Blayney via the Mid Western Highway.

<u>Visual Impacts on Character</u>

The mine development is located approximately 8 km from the Blayney township. Mining has a strong history in the Blayney LGA. Many of the towns of the Blayney LGA owe their existence and growth to the early gold mining industry and more recently the CVO. The existing character of Blayney is shaped not only by the agricultural setting and the heritage style buildings in town, but also by the Nestle Purina factory and existing quarries on the northern town access road and the industrial estate and showgrounds on the Mid Western Highway to the east.

The VIA[141] (EIS Appendix S) prepared for the mine development included consideration of the impact of the mine development on views into the site from the Mid Western Highway and from the key locations in Blayney e.g. Church Hill Rotary Lookout.

[141] Visual Planning and Assessment (VPA), 2019.

The findings of the VIA[142] (EIS Appendix S) indicate that:

- The WRE and open cut activities on McPhillamys Hill will be visible at increasing proximity from various locations on the Mid Western Highway when travelling east towards Blayney. In such views, the open cut hill and WRE will be prominent in some locations;
- The workings on McPhillamys Hill will be visible from the Mid Western Highway, but views will change as the ore is mined and the hill progressively becomes lower; and
- Whilst views will be available from the Mid Western Highway when travelling east, Sturgeon's Hill west of the open cut hill, Bushranger Hill and spurs and ridges further north, will screen views until the view is adjacent to the site and to the immediate south of the mine project area.

The VIA[143] (EIS Appendix S) describes the treatments to be applied to the mine project area to reduce views into the mine project area from the Mid Western Highway. With the implementation of these treatments, active mining areas and infrastructure will be largely concealed from view when travelling along the Mid Western Highway. The primary mitigation measure incorporated into the design of the project in this regard is the scheduling of the construction of the southern face of the WRE at the start of the project life, during Years 1 to Year 4 of the project. Once constructed, this southern face will form a bund behind which mining activities will operate, shielding works from view on the highway.

Character Impacts associated with presence of an increased mine workforce

The industry sector with the highest employment in the Blayney LGA and the Blayney township is the gold ore mining sector with 179 people (5.7%) and 70 people (6.4%) respectively. This suggests the character of Blayney has already been shaped to some extent by mining activities. The operations phase of the project is predicted to result in the addition of between around 40 and 100 new residents (between approximately 20 and 40 workers and their families) to the Blayney LGA. The social benefits of this additional population i.e. potential for increases school enrolments, increased patronage at community events and increased participation in sporting activities will far outweigh any potential negative impacts on the character of the township.

The Blayney township is likely to experience a small increase in through traffic as a result of the operations phase, as workers head towards Orange and Cowra during shift change over. The increase in traffic is likely to cause minor disruption to local pedestrian and vehicle traffic in Blayney. However, the potential positive economic benefits of this through traffic for Blayney and the broader Blayney LGA are likely to outweigh the very minor negative impacts increased traffic may have on the character of Blayney.

[142] VPA, 2019.

[143] VPA, 2019.

Volunteerism

It is possible that the project may benefit volunteering in the Blayney LGA and broader RAA in the following ways:

- The potential for additional volunteers as the population grows; primarily through workers' partners and children;
- The introduction of a wider range of skills from the new population to add diversity to volunteering efforts; and
- The potential for mining and resource companies to assist in resourcing volunteer organisations by supporting the release of employees for emergency service activities or providing days off for workers to volunteer e.g. Newcrest's *CVO Good Onya! Program*.

Three Regis employees are active members of the Kings Plains RFB, and a further two employees are active members of the Springside RFB.

However, the project has the potential to adversely impact rates of volunteerism in Blayney LGA, in the following ways:

- Increased demands on the range of volunteer services from the new population;
- The shift patterns of mining employment may impede the ability of employees to be involved in community activities and take on volunteering roles; and
- Employees' shift patterns may also place particular strains on family members who may also be then less able to contribute their time as volunteers.

While the shift pattern arrangements of mining projects may play a role in reduced volunteering, the possible future decline of community participation may also be related to a broader issue of a cultural shift towards greater individualisation and less participation in communities nationwide.

Regis is committed to supporting the participation of the operations phase workforce in volunteer roles across the Blayney LGA and the RAA. Employee policies that enable emergency services personnel to be released from duties to attend emergency calls and to perform crucial volunteer actions will be developed for all phases of the project.

6.2.8 Access to Services and Facilities

This section discusses the impact of the project on service and facility provision in Blayney LGA and accessibility to these services for the resident population. The project will place additional demands on existing services and facilities. However, local investment facilitated through the project e.g. the VPA, will support improvements in and possible expansion of existing service in the Blayney LGA.

Health and Emergency Services

Consultation with health and emergency service providers in the Blayney LGA did not identify any existing and significant limitations to service provision that would need to be considered in the SIA.

Construction Phase

The town of Blayney is expected to experience a sharp and temporary increase in demand for health and emergency services due to the presence of a sizeable construction workforce (i.e. up to 346 personnel based on Scenario 2) in town. During SIA consultation, health services personnel noted the increased demand for services experienced during the construction phase for the Cadia East Project.

It can be expected that the construction workforce will generate regular demand for local general practitioner (GP) services due to minor illnesses, injuries and/or prescription renewals. Any increase in demand for GP services has the risk of reducing access for existing local residents and increasing appointment wait times. As at May 2019, appointments were available at the Blayney Family Health Practice within one or two days.

During SIA consultation a small number of participants perceived that the construction workforce would have unique health needs that would place additional demands on specific health services e.g. mental health services. Participants noted that these services are already experiencing high demand due to the impact of drought.

The construction workforce will also draw on resources at the Blayney MPHS as the closest hospital facility to the mine project area. More than likely, increased presentations to the Blayney MPHS emergency department will result in a noticeable increase in workload for existing staff. The Blayney MPHS provides a total of 29 beds, of which nine are allocated for acute general medical concerns and 20 beds are high care permanent beds. The emergency department is a nurse led service, that possesses a camera service connection for triage 1 and 2. There is some potential for these services to be stressed by a substantial increase in demand associated with the project construction workforce, which could result in longer waiting times for existing residents.

As noted in Section 5.4.9 and Appendix F, Blayney township provides a base for police, ambulance and fire services, however policing services are directed out of Bathurst and the Chifley Police advised that construction of mining projects typically results in an increase in demand for police services (particularly with respect to traffic policing and oversize load escorts), this would increase demand on police resources.

The following strategies are proposed to reduce the potential impact of the construction workforce on health and emergency services provision in Blayney LGA and ensure existing residents have ongoing access to these services:

- Project on-boarding should ensure that construction phase personnel are:
  - Adequately informed of the range and capacity of health services available in Blayney LGA, service opening hours, and the correct action to take in an emergency and non-emergency situation;
  - Aware of the need to take care of routine health requirements in their home communities and mitigate demands on local services;
- Early development of protocols and agreements between Regis and local health and emergency services to help ensure that project demand is anticipated and potential impacts are appropriately managed in agreement with service providers;

- Development of ongoing consultative arrangements between Regis and Chifley Police LAC to ensure relationships are in place to support emergency responses; and
- Ongoing communication with Regis, Blayney MPHS, the Blayney Health Council and Blayney emergency service providers to monitor demand and anticipate and respond to changes in the cumulative context (as necessary).

Operations Phase

During operations, Regis will focus on securing a locally based residential workforce. Based on the project workforce distribution scenarios (Section 2.2.4) the project operations phase is anticipated to result in a direct permanent population increase in Blayney LGA of:

- 48 people (20 new households) under Scenario 1; and
- 101 people (42 new households) under Scenario 2.

The level of population increase associated with Scenario 1 is unlikely to result in substantial impact on service accessibility for existing residents or impact the capacity of health services. Some increase in service demand may be experienced under Scenario 2, however it will be substantially less than that experienced during the construction phase. Population increases in the order described are not expected to result in a significant increased demand for police services and other emergency services during operations.

Permanent population increases in the nearby centres of Orange and Bathurst will also be small (approximately 38 people) and would have a negligible impact on health service provision and emergency service provision in these localities.

Regis will develop an emergency services protocol to mitigate demands on local services during the operations phase of the project. The development of this protocol will involve

engagement with Blayney Police, Ambulance and Rural Fire Services, as well as other regional commands.

The management strategies described previously for the construction phase will also be applied during the operations phase.

Education Services

Construction Phase

As the majority of the project's construction workforce is expected to be non-local personnel accommodated in the Blayney LGA and the neighbouring LGAs, it is anticipated that the NLHs will not be accompanied by family. Thus, increased demands on education or childcare services in Blayney or other local towns are not expected.

Operations Phase

The increase in new local residents associated with the operations phase workforce is expected to contribute to demand for childcare, school enrolment places and training services, and other community services. Families[144] with children represent approximately 40% of the Blayney LGA households, so this percentage has been used to estimate the number of children and young people who may require childcare or education (Table 26).

Table 26
Estimated Number of Family Households and Children – Operations Phase

NLH Scenario	Local Area			Blayney LGA		
	Total Additional Households	Families with Children	No. of Children[1]	Total Additional Households	Families with Children	No. of Children[1]
Scenario 1	52	21	42	20	8	16
Scenario 2	104	42	84	42	17	34

Notes:

1. Assumes 2 children per household

Table 26 shows that the operations phase of the project is anticipated to directly attract to the Blayney LGA around:

- Eight family households with children, and around 16 children under Scenario 1; and
- 17 family households with children, and around 34 children under Scenario 2.

[144] Couple family with children.

Primary and high school enrolments generated in Blayney LGA by the incoming population are likely to be shared between a number of schools including Blayney and Millthorpe Public Schools, St Joseph's Catholic School in Blayney, BHS and private secondary schools in Orange and Bathurst. A disproportionate demand on any one school is unlikely due to the number of existing school facilities in the Local Area (Appendix F).

Regis will provide advice to the Regional Director of the NSW Department of Education (DE) to assist the DE in planning for increased enrolments in the Local Area.

The project will also generate demand for childcare services across the Local Area. Consultation undertaken for the SIA indicated that childcare and preschool services in Blayney have capacity for one to two additional children and services in Millthorpe are at capacity and has an established waiting list. Whilst project generated demand for childcare services is likely to be spread across several childcare centres in the Local Area, the five new households in Blayney LGA may generate demand for childcare services which existing operators may not be able to service.

The construction of a new childcare centre has recently commenced in Blayney and is due to open in late 2019. The new centre will offer 53 additional child care places catering for ages 0-6[145]. The addition of this child care service will significantly improve accessibility to childcare services for the existing population and will also assist the incoming population associated with the project.

Community Services

Construction Phase

Non-local construction personnel may access community facilities in Blayney and Millthorpe, such as sporting grounds and licensed venues e.g. hotels. Venues are likely to welcome the extra patronage, however, management of the number of personnel using venues at one time may be required to ensure local residents are not discouraged from using local venues. This will be addressed as part of the Workforce Code of Conduct for project personnel.

Construction phase demand for sport and recreation services and facilities provided by Blayney LGA is expected to be negligible, given that typical construction shift times would be 12 hours.

The construction phase workforce may increase demand for community support services such counselling services and financial planning services. Regis will support access to counselling services for its employees and will encourage its contractors to provide assistance services to contract workforces.

[145] Circle Early Learning, 2019.

Operations Phase

The Blayney LGA has a broad range of community, cultural, recreational and community support services (Section 5.4.9 and Appendix F), provided by the public and private sector. Services likely to be utilised by the incoming permanent project workforce include libraries, sport and recreation services, children's services e.g. playgroups, community organisations such as Men's Shed and Rotary, and family support services.

Under Scenario 1 the population influx associated with the 20 new households (around 48 people) is unlikely to result in any significant increase in demand for community services and facilities within the Blayney LGA. The population influx under Scenario 2 (around 101 people) is likely to increase demand for some community services. However, more than likely, the addition of the population (under Scenario 1 or Scenario 2) will support improvements in service provision, as it may lead to an increase in the available pool of volunteer labour in the Blayney LGA. Additional population, particularly children will contribute to the sustainability of existing services and facilities, particularly sporting groups and children's activities.

Council Services

Construction Phase

Sustained use of short-term accommodation services, restaurants and licensed venues in the Blayney LGA by the workforce may increase demand for commercial waste disposal services. BSC may be required to undertake forward planning for the delivery of waste services.

Operations Phase

Project-induced demand for services provide by BSC is part of the overall demand generated by households associated with the project. Regis will negotiate a VPA with the BSC as part of the project approvals process. The VPA will include financial contributions from Regis to assist with improvements to existing infrastructure and/or development of new infrastructure in the LGA. Funds provided through the VPA are expected to substantially offset project-induced demand for BSC services and facilities, and to contribute to community development.

6.2.9 Labour Market Impacts

The project is expected to have a number of benefits and impacts on the labour market in the Blayney LGA. This section addresses the following aspects:

- Employment generation;
- Indigenous employment;
- Labour supply; and
- Labour draw.

Employment Generation

The direct and indirect employment opportunities associated with the project are described in the *Economic Impact Assessment*[146] *(*EcIA) (EIS Appendix DD) and Section 2.2.3. The following section discusses the direct employment opportunities associated with the mine development.

Construction Phase

The project's construction phase will provide significant opportunities for personnel with specialised construction skills.

Preliminary project planning indicates an estimated:

- 60% (an indicative 367 FTE roles) of the peak construction phase roles on the mine development will be filled by existing residents of the Local Area; and
- 40% (an indicative 223 FTE roles) of the peak construction phase roles on the mine development are expected to be filled by residents residing outside the Local Area and the CW&O Region.

Of the 367 FTE locally based construction phase roles on the mine development, preliminary workforce planning indicates:

- An estimated 105 FTE roles (29%) will be filled by existing residents of the Blayney LGA; and
- The remaining 262 FTE roles are expected to be filled by residents of the neighbouring LGAs of Bathurst, Cabonne, Cowra, and Orange within a safe daily driving distance (Section 2.2.4).

These potential employment numbers are for the Year 1 of the project. As the construction and operations phases overlap in Year 1 (Section 2.2.1) these numbers include some operations phase employees.

For the pipeline development, preliminary workforce planning estimates:

- 20% (an indicative 24 FTE roles) of the of the construction phase roles are expected to be filled by existing residents of the Local Area, noting that for the pipeline development the Local Area includes Lithgow LGA.; and
- 80% (an indicative 96 FTE roles) of the construction phase roles are expected to be filled by people residing outside the Local Area and to a large extent outside of the CW Region.

[146] Gillespie Economics, 2019.

Regis approach to promoting employment and contract opportunities during the construction phase of the project involves contractual arrangements with its major construction contractors to include requirements to engage with locally-based (LGAs of Blayney, Orange and Bathurst) construction companies and other businesses who could supply project construction, to maximise their participation in project supply opportunities.

Operations Phase

The operations phase will require an estimated annual average workforce of 260 FTE personnel during Year 2 – Year 11, and an estimated peak workforce of 320 FTE personnel around Year 4 and Year 5.

An estimated 80%[147] (208) of operations phase roles are expected to be filled by residents of the Local Area. The remaining 20% (52) of operational phase roles are expected to be filled by people residing outside of the Local Area.

Of the 208 local roles:

- An estimated 65 roles are expected to be filled by existing residents of the Blayney LGA; and
- The remaining 143 roles are expected to be filled by residents of the neighbouring LGAs of Bathurst (65 roles), Cabonne (26 roles), Cowra (13 roles), and Orange (65 roles) (Section 2.2.4).

Of the estimated 52 FTE NLHs, the majority will be sourced from outside of the CW&O Region, with the exception of a small number (~13) likely to be drawn from the Lithgow LGA.

Indirect Employment

The findings of the EcIA[148] (EIS Appendix DD) indicate the mine development will generate the following annual flow-on employment opportunities in the EcIA region:

- 950 jobs during Year 1 of the construction phase; and
- 543 jobs during the Operations Phase.

Indigenous Employment Opportunities

Many Indigenous people experience greater difficulty securing long-term, sustained employment due to a number of generational, cultural, social and/or emotional barriers. Whilst the Blayney LGA has a small number of people who identify as Aboriginal and Torres Strait Islander (ATSI) (266 people), the neighbouring LGAs of Orange, Bathurst and Cowra have significantly higher ATSI populations (2,556, 2,244 and 984 people respectively).

[147] Based on annual average workforce of 260 FTE.

[148] Gillespie Economics, 2019.

Regis will define specific objectives to support and encourage the development, growth and enhancement of relationships with Indigenous people. These objectives will be executed via the IPP to be prepared for the construction and operations phase of the project. Regis will engage with representatives of the OLALC to ensure workplace training meets Aboriginal people's needs and engages them. Regis will work with representatives of the Wiradjuri people to improve cultural awareness and understanding and find better ways to engage with local Aboriginal people, particularly Aboriginal women.

To maximise access to employment for local Indigenous residents, Regis will use the following 'accessible recruitment' practices:

- Promotion of opportunities through Indigenous community leaders, existing Indigenous employment agencies and organisations;
- Promotion of available services to assist Indigenous candidates in preparing their applications and supporting documentation; and
- Preliminary advice at the interview stage regarding Regis employment policies which address employee entitlements, the employee assistance program, workplace health and safety, fatigue management, alcohol and drug management and anti-discrimination matters.

Labour Supply

The labour supply in the Blayney LGA and neighbouring LGAs of Bathurst, Cabonne, Cowra and Orange is described in Section 5.4.6 and Appendix F. Blayney LGA has a highly constrained labour market, with a relatively small labour force, low unemployment and a corresponding small pool of unemployed labour. These labour market constraints are reflected in the estimates of local hires from the Blayney LGA for both the construction and operations phases of the project. Blayney LGA can only absorb a small number of the construction phase and operations phase jobs created directly by the project. Further anlaysis of labour market data (Section 5.4.6) shows that the Blayney LGA is a significant importer of mining workers, reinforcing labour market constraints for the project in the LGA.

The majority of the construction and operations phase workforces will be drawn from outside the Blayney LGA in the neighbouring LGAs of Orange, Bathurst, Cowra and Cabonne, with a small portion also drawn from Lithgow. Bathurst and Orange LGAs each have a significantly large labour force and a sizeable pool of unemployed labour. Outside of the Blayney LGA and with the exception of the Cowra LGA, all LGAs within the Local Area have unemployment rates equal to or below the CW&O Region of 5.2%.

Additional labour will also be drawn from outside the CW&O Region.

The impact of the project on local labour supply will be influenced by the potential demand for local hires and the number of flow-on jobs generated in the Blayney LGA and Local Area by

the project. Regis has committed to employing as many local residents of the Blayney LGA as possible. However, the company acknowledges it will need to monitor project labour demands and any potential adverse impacts on the non-mining sector, particularly business operators in Blayney and government and non-government social service providers (Section 6.2.10). Regis will aim to remain informed of labour market changes and will adjust local hire numbers accordingly.

Regis is developing a Local Content Plan (LCP) and Indigenous Participation Plan (IPP) to encourage the participation of local and under-represented groups in the project's workforce and supply chain. Regis representatives recently attended the Orange Police Citizens Youth Club (PCYC) to present to a group of young Indigenous people about the potential project employment opportunities. Regis will continue to engage with the Orange PCYC and similar organisations in relation to supporting Indigenous employment on the project.

The LCP will provide a detailed analysis of identified existing local enterprise and the skills / education base of local residents. Wherever possible, project supply and workforce requirements will then be 'matched' with existing capabilities in the local community. The plan will also identify strategies to build local capacity where this is lacking, or does not meet project needs. This may involve training, mentorship, recruitment and development programs which focus on local and regional communities as a first priority.

To increase the employment opportunities for local residents in the Blayney LGA, particularly students at BHS, there is an immediate need to develop pathways to construction and mining. Regis has already engaged in discussions with NSW TAFE in Orange regarding the provision of mining skills training to support the project.

Similarly, the IPP will map details of existing Indigenous businesses and identify regional 'pockets' of potential Indigenous labour supply (e.g. those areas with high levels of Indigenous unemployment). The IPP will aim to identify particular job positions and supply work packages that will be targeted for the inclusion of Indigenous people, and appropriate training and development programs will be outlined to support this objective.

Regis is committed to optimising local labour supply to the project wherever feasible. The local content and project recruitment planning processes will give due consideration to the following actions:

- Preparation of a targeted Recruitment and Training Strategy for the project;
- Provision of a range of employment opportunities – potentially including school based traineeships, apprenticeships, graduate programs and mature aged placement programs;

- Offering part-time and/or flexible employment opportunities where practicable to encourage a higher rate of labour force participation, especially in relation to disadvantaged groups;
- Exploring opportunities to support the establishment of mining related skill development programs at BHS; and
- Exploring opportunities related to mentoring and career development services to BHS to promote employment and career development pathways in the mining industry.

Labour Draw

There is a risk that the project could displace other economic sectors, particularly tourism, the agricultural sector, and government services, by taking up a sizeable portion of the employed and unemployed labour pool during both construction and operation, and through inflationary impacts on wages, trades and services. This impact is likely to be most significant during the construction phase due to the size of the project workforce and the likely capital expenditure during the construction phase. The construction phase of the project is likely to draw on the labour pool associated with a range of trades including mechanics, electricians, welders and labourers.

It is difficult to predict how many people currently working in other industry sectors in the Blayney LGA and RAA will move to new occupations in the mining and resource sector as a result of the project. This sentiment echoed during SIA interviews with a number of small business operators from Blayney, who consider that the mining industry with its higher wages is able to attract existing skilled and experienced employees away from their current jobs in the Blayney LGA. Such anecdotal evidence is also prevalent in nearby mining regions of Upper Hunter Shire, Muswellbrook and Singleton LGAs, where there have been reports over a long period of the difficulty of the non-mining sector to attract and retain appropriately skilled and experienced staff.

The nearby regional centre of Mudgee has experience dealing with the impact of tightening labour market conditions due to expansion of the local mining industry. The following trends were noted in Mudgee during a period of tight labour market conditions between 2010 and 2012:

- As the mining sector expanded, it attracted an increasing number of the existing labour force into the sector. This had the effect of driving wage competition between industry sectors within competing export industries;
- The attractiveness and relative availability of high wages in the resource sector further increased labour force participation in the Mid-Western Regional Council LGA; and

- Labour, and in particular skilled labour shortages, were evident in Mudgee during this period of growth and when combined with other pressures such as rising accommodation costs began to impact on the capabilities of businesses to benefit from the resource sector and the ability of the services industry to deliver services[149].

The project has the potential to adversely impact labour supply in the non-mining sector in the Blayney LGA. Regis will monitor local labour supply and adjust local labour recruitment practices and rates accordingly. Regis will support the local provision of education and training opportunities in the non-mining sector through community initiatives. Additional opportunities in the Local Area e.g. partnerships with NSW TAFE will be investigated as project planning progresses.

6.2.10 Economic Impacts and Opportunities

Direct and Indirect Economic Impacts

The EcIA[150] (EIS Appendix DD) has estimated the direct economic impacts of the project for the regional area. The region for the EcIA includes the LGAs of Bathurst, Blayney, Orange and Cabonne which is where the majority of workforce and project procurement will be drawn from The region excludes the LGAs of Cowra and Lithgow as it is anticipated that only a very small proportion of the workforce will be drawn from these locations. The region defined in the EcIA is therefore different from the RAA defined in the SIA.

<u>Construction Phase Impacts</u>
The project will result in significant economic benefits at the regional and state level. The total average annual impact of the peak year of construction (Year 1) on the regional economy is estimated at up to:

- $531 M in annual direct and indirect regional output or business turnover;
- $218 M in annual direct and indirect regional value added;
- $114 M in annual direct and indirect household income; and
- 1,289 direct and indirect jobs.

The introduction of the construction phase workforce will generate significant indirect economic benefits over that 12-18 month period to the LGAs of the RAA, particularly in flow-on spending by those employees in the local area, particularly on accommodation, food, leisure and recreation and personal services.

[149] Hansen Bailey, 2015.
[150] Gillespie Economics, 2019.

The geographic spread of this spending is difficult to determine, and will depend on where each employee resides during that time and their personal preferences for travelling to different centres for various products and services. Further detail regarding the construction phase indirect economic impacts are provided in the EcIA (EIS Appendix DD).

It is however acknowledged that the majority of the construction workforce will not reside permanently in the Blayney LGA, so the long-term indirect economic benefits of their incomes will not be absorbed in the Blayney LGA.

Operations Phase Impacts

The total annual impact of an average year of operations on the economy of the RAA is estimated at up to:

- $492 M in annual direct and indirect regional output or business turnover;
- $272 M in annual direct and indirect regional value added;
- $67 M in annual direct and indirect household income; and
- 788 direct and indirect jobs.

Assuming that future employees residing in the Local Area are already employed and that job vacancies created by these people filling the construction and mining positions remain unfilled, the incremental disposable wages accruing to the region is $4.8 M during Year 1 (the peak year of construction) and between $7.6 M and $12.9 M during the operations phase. This is equivalent to 136 direct FTE jobs during the peak year of construction and between 89 direct FTE jobs per annum during operations. This is a minimum estimate as it assumes full employment and no in-migration of labour.

Flow-on spending by the operational workforce in the region will produce significant indirect economic benefits to the LGAs of Blayney, Bathurst, Cabonne and Orange, whether that workforce are local hires continuing to live in the Local Area, or will be new residents as a result of being NLHs. Further detail regarding the indirect economic impacts of the operations phase of the project are provided in the EcIA (EIS Appendix DD).

Despite the outcomes of the EcIA demonstrating significant economic benefits for the broader region, many residents of the Blayney LGA remain concerned that the economic and social benefits of the project will not accrue to Blayney LGA and will instead accrue to nearby Orange and Bathurst LGAs.

Benefits for Local Businesses

As detailed in the EcIA[151] (EIS Appendix DD), quantification of economic benefits to the Blayney LGA is difficult due to the size of the economy. However, the Blayney LGA would benefit from a share of expenditure associated with the construction and operations phases of the project e.g. for construction services and supplies, transport support services, professional, scientific and technical services and food and accommodation services. The extent to which business in the Blayney LGA benefit from this expenditure will be constrained by the size and capability of businesses. However, investment will support long-term sustainability of existing local businesses and may create opportunities for the expansion or establishment of new businesses.

During both the construction and operation phases, it is anticipated that direct supply opportunities will be available to businesses based in the Blayney LGA and adjoining LGAs. Indirectly, the construction workforce is also likely to provide a temporary but substantial stimulus to the health and vitality of local retail, accommodation, and other commercial enterprises.

In addition to the preparation of an LCP and an IPP (as described in Section 6.2.7), Regis will progress the following actions to support the participation of local businesses in the project supply chain:

- Engage in early and clear communication with local business owners regarding potential procurement opportunities, Regis expectations of suppliers, and general requirements for tendering;
- Conduct workshops in the Blayney LGA for local suppliers, notifying suppliers of required products and services;
- Develop a supply chain register for the project that categorises interested businesses from Blayney LGA, the RAA, the CW&O Region and across the State;
- Advertise contracting opportunities in a transparent and equitable way, and give due consideration to local suppliers where suitable local capacity exists;
- Conduct a business capability audit of Blayney businesses to understand range of potential services, business willingness and readiness to participate in project procurement opportunities and to identify potential initiatives to support capacity building across local businesses;
- Assist business support services to deliver training programs to local businesses to develop capacity and capability in the tendering process; and
- Host a schedule of discussions with local business operators on topics that support business participation in procurement.

[151] Gillespie Economics, 2019.

Regis use of local business during the operations phase will be monitored through the Regis supply chain register. Indirect business benefits associated with the operations phase are expected to be generated for hospitality and other local commercial services. Local businesses may also benefit from the project's employment and training opportunities, which encourage a small number of new households (and therefore potential employees) to live in Blayney LGA and contribute to the sustainability of existing businesses.

During SIA consultation a number of business owners raised concerns that businesses in the Blayney LGA may miss out on contract opportunities, through a lack of:

- Information about the opportunities available; or
- Capacity to competitively tender for works.

Risks identified by stakeholders included:

- Businesses missing out on the potential business opportunities; and
- Over-investment by businesses in the expectation of winning high value project contracts, which do not materialise.

There is also a risk that people may embark on new business ventures based on contracts with the project but then see the business fail early, as many small businesses do, particularly once project contracts have been completed. There are many examples of this, particularly in regional areas, where locally based companies working on large projects have faced difficulties as major contracts ended. This can happen because of poor cash flow management, false expectations of winning other work or contractual disputes with contractors.

Regis will engage in open and honest communication with local business owners throughout the project approvals process regarding the project schedule and anticipated workforce size, fluctuations in workforce size, and the anticipated number of local employees to ensure local businesses clearly understand the timing and scope of likely business opportunities associated with the project.

Impacts on Economic Diversity

Several stakeholders raised concerns during SIA consultation that the project will reinforce the Blayney LGAs dependency on mining as a source of revenue for the Blayney LGA. In 2018 the GRP of Blayney LGA was estimated at $661 M, supported principally by the mining, manufacturing and agriculture industry sectors. As described in Section 5.4.6 the mining industry sector contributed more than 40% of the total output of the Blayney LGA in 2015.4.68. This is despite the relatively small number of local residents from Blayney LGA actually employed in the mining sector. The project will significantly increase the total mining sector output in the Blayney LGA for the duration of the operations phase.

The operations phase of the project will result in an increase in the number of people employed in the mining industry sector in the Blayney LGA further bolstering this sector of the economy, potentially detracting or drawing labour from other sectors. In 2016, there were 727 people employed in mining jobs located in the Blayney LGA. In 2016, there were approximately 210 people living in Blayney LGA and employed in the mining sector. At peak operations (Year 4 and Year 5) the project workforce is anticipated to represent around a 44% (320 people) increase in the number of people directly employed in the mining industry sector in the Blayney LGA. This suggests the mining industry sector may become one of the top industry sectors of employment in the Blayney LGA during the project's operations phase.

This increased specialisation can result in both positive and negative impacts. The increased reliance on the mining sector may lead to increased vulnerability to economic oscillations in this industry. However, the specialisation of the Blayney LGA economy in mining allows for greater economies of scale and therefore higher productivity in mining and related sectors.

Regis acknowledges the potential impacts of the project on other sectors of the economy, particularly with regards to labour demand. Regis will continue to monitor labour force demand and dynamics, in consultation with BSC. Projects that support the economic diversity of the Blayney LGA may be suitable for funding through voluntary community initiatives, acknowledging the valuable contributions other industries in the Blayney LGA make to the economic stability of the LGA.

Inflationary Pressures

Discussions with stakeholders revealed a concern regarding the potential for inflationary pressures from higher wages and the cost of goods and services creating economic hardship for locals not involved in the project. This is a common issue with large projects, where increased buying power by one party raises prices, creating a negative impact on the local community which cannot match the resultant increases. A number of communities across Australia have experienced such impacts in the past decade including both Darwin and Gladstone, due to the construction of Liquefied Natural Gas infrastructure, and Moranbah, Singleton and Muswellbrook due to the simultaneous development and or expansion of mining projects.

There are a number of low-income households in the Blayney LGA, with the majority located in Blayney. There are also a large number of elderly households. These households are at most risk of experiencing economic hardship as a result of the project. Inflationary pressure is likely to drive up residential rents in Blayney. An increase in rent for existing rental properties will cause significant distress to low-income and elderly households.

The EcIA (EIS Appendix DD) has assessed the impact of the project on income levels in the region. Increased regional demand for labour as a result of the project could potentially result in some increased pressure on wages in other sectors of the economy. The magnitude and duration of this upward wages pressure would depend on the level of demand for additional

labour, the availability of labour resources in the region and the availability and mobility of labour from outside the region.

The potential for inflationary pressure can be reduced by encouraging greater geographic dispersal of the construction phase workforce. Measures to disperse the construction phase workforce and manage demand for private rental accommodation have been discussed in Section 6.2.4.

Impacts on Other Sectors of the Economy

In addition to direct economic impacts, it is expected that the project could also have both positive and negative impacts on other (non-mining) sectors of the economy, noting that with the exception of Blayney and Cabonne LGAs, mining industry activity in the LGAs of the RAA is a relatively small percentage of GRP and employment. The economy of the Blayney and Cabonne LGAs is already influenced by the presence of mining activity and expansion or contraction in the mining industry sector.

The positive impacts of the project for other sectors of the economy relate to the potential for:

- Production-induced flow-on employment in the services sectors, building and construction sectors, wholesale/retail trade sectors, mining sectors, manufacturing sectors and transport sectors;
- Consumption induced flow-on employment in services sectors, wholesale/retail trade sectors and accommodation/cafes/restaurants sectors; and
- Businesses that can provide the inputs to the production process required by the project and/or the products and services required by employees to directly benefit from the project by way of an increased economic activity.

The potential negative impacts relate to:

- The creation of a “two stream” economy where the mining sector and related industries grow at a rapid rate, but the rest of the economy grows at a slower pace. This has the effect of creating economic winners and losers within a single economy;
- The competition for labour from the mining sector may mean that other sectors of the economy have difficulty retaining or recruiting appropriate levels of staff, particularly given the comparatively high wages of the mining sector;
- The demand for training in mining related skills sets has the potential to divert the focus from non-mining related skills training;

- The increase in the number of mining and resource projects in the social area of influence could negatively affect the 'image' that the area currently portrays to attract tourists; and
- The increased demand for short-term accommodation for workers and their families could limit the availability of short-term accommodation for visitors.

As described above, the cumulative effects of the expected mining and resources projects in the SIA Study Area are likely to have a far larger impact on these issues than the impacts of the project alone.

Impacts to Agricultural Industry Sector Productivity

Changes in Agricultural Production

The mine development could result in a reduction in regional economic activity associated with a reduction in land available for agricultural activity; from the direct disturbance of land, biodiversity offset area and the purchase of surface water and groundwater water access licences, and hence a reduction in demand for inputs to agricultural production.

The main impact of the mine development on agricultural resources will be the removal of grazing livestock from the disturbance footprint during the life of the project. The *Agricultural Impact Statement* (AIS)[152] (EIS Appendix I) estimated that the carrying capacity of the project area will be reduced by 10,064 dry sheep equivalents during the life of the mine. This is equivalent to a reduction in total income of $406,193 per annum.

This level of reduction in output was modelled by Gillespie Economics (2019) using the Sheep, Grains, Beef and Dairy Cattle sector of the input-output model of the regional economy. The magnitude of the reduction in income was found to be very small and inconsequential to the regional economy and agricultural support industries.

As such, the mine development is expected to have a low impact on agricultural productivity in the Blayney LGA.

[152] Sustainable Soils Management, 2019.

Notwithstanding, Regis will undertake the following actions to support agricultural productivity in the Blayney LGA and maximise the amount of land within the mine disturbance area that can be returned to a productive agricultural use:

- Land owned by Regis and located outside the disturbance footprint will be leased for ongoing livestock grazing. To date, the majority of land has been leased back to the original owner. Consequently, the land management practices occurring on land outside the mine disturbance area will generally be the same as when the property was privately owned; and
- Mine site rehabilitation where the primary objective of the rehabilitation strategy for the mine project area is to return disturbed land to a condition that is stable, non-polluting, and supports the proposed post-mining land use, which is a mixture of grazing of improved pasture and woodland areas.

Impacts to Supporting Businesses

Agricultural activity in the Blayney LGA is supported by a range of general and specialist infrastructure and services including:

- The Central Tablelands Livestock Exchange (CTLX), located 10 km south-west of Blayney. The CTLX is the main livestock sales centre for the Central Tablelands area which includes the LGAs of Orange, Blayney, Bathurst, Oberon, Molong, Canowindra and Cowra[153]. In 2018 there were 442,868 sheep and 163,993 cattle sold through the CTLX[154]; and
- Business operations in Blayney that provide agricultural support services including machinery sales and service; farm supplies (animal health, seed, fertiliser, chemicals, fencing materials), stock and station agents, veterinary practices, agricultural consultants and professional services (legal and accountancy).

The mine disturbance area accounts for less than 1% of the land currently used for agriculture across the Blayney LGA. Consequently, the reduction in the demand for agriculture support services available in Blayney as a result of the project will be negligible.

6.2.11 Effects on Agricultural Livelihood

The project will have no direct impact on privately owned agricultural land within the SAA. As previously discussed in Section 6.2.3, a number of downstream landowners expressed concern that project induced changes in the quality and quantity of water in the Belubula River could adversely impact downstream agricultural operations. The impacts on surface water and groundwater as a resut of the mine development are predicted to be minimal and impacts

[153] Blayney Shire Council, 2018b.

[154] Meat and Livestock Australia, 2019.

to downstream water users are predicted to be minor. For this reason, the mine development is not predicted to have any significant impact on agricultural operations downstream of the mine project area. This potential impact was discussed in Section 6.2.3, which includes a discussion of the relevant actions to avoid and mitigate any potential impacts

6.2.12 Distributional and Intergenerational Equity

The Blayney LGA will incur a broad suite of impacts and a range of benefits from the project. The distribution of the economic costs and benefits of the project are discussed in the EcIA (EIS Appendix DD). The impacts and opportunities of the project may accrue disproportionately to certain groups of the Blayney LGA population. These impacts and benefits have been discussed in the preceding sections, with further assessment in Section 6.3. Regis will experience sustained economic benefits over the life of the project, and the State and Federal governments will receive economic benefits in the form of royalties and taxes.

The distribution effects of the mine development arise from a number of sources including the:

- Environmental and social impacts of the project such as air and noise pollution, changes in sense of place, loss of amenity and changes in way of life; and
- Economic and employment benefits of the project.

The groups that benefit from the mine development are not necessarily those who incur the costs of the initiative, for example:

- Residents in closest proximity to the mine project area may experience changes to their way of life, including the use and enjoyment of their property (Section 6.3.2) due to the potential impact of the project on residential amenity. These neighbours are unlikely to experience any tangible benefits from the project; and
- Accommodation providers and other businesses in Blayney will likely experience financial benefits from the project due to the construction workforce accommodation demands, construction phase investment and ongoing procurement during operations.

The groups within the Blayney LGA likely to incur the costs of the project include:

- Near neighbours (estimated 88 dwellings) to the mine project area, but in particular residents of the Kings Plains locality (estimated 44 dwellings) at varying degrees (as described in Section 6.3);
- Low-income households in private rental accommodation. These households may be impacted during the construction phase of the project;

- Wiradjuri People, noting the Wiradjuri People may also benefit from the project; and
- Small business owners who experience labour draw.

Groups likely to experience benefits from the project include:

- Regis;
- Wiradjuri People who may benefit from direct and indirect employment opportunities;
- Short-term accommodation providers and rental property owners across the Local Area who may benefit from increased demand for accommodation primarily during the project construction phase;
- Business owners within the Blayney LGA and neighbouring LGAs who may benefit from project supply change opportunities;
- Community organisations and sporting groups in the Blayney LGA who will benefit from the additional population, potential growth in the volunteer labour pool and potential increased participation in community and sporting activities;
- The potential mine workforce and their families;
- People involved in the agricultural industry who choose to supplement their income by working at the project;
- All levels of government; and
- Broader Blayney community due to:
  - Increased economic vitality and infrastructure investment made possible through the VPA; and
  - Potential increases in the permanent resident population which will support sustainability of businesses and services, and contribute to community vitality.

6.3 PRIMARY ASSESSMENT AREA

This section discusses the potential social impacts and benefits of the mine development for residents of the PAA. During SIA consultation residents of the PAA raised many and varied issues in relation to the project. The assessment presented below focusses on the social impacts that pose the greatest risk.

6.3.1 Access and Connectivity

The mine development will require the closure or realignment of the portion of Dungeon Road that is located within the mine project area (Figure 2 and Figure 5). Dungeon Road is a local road that is not bitumen sealed and provides access to two private properties and several Regis owned properties as well as the mine project area. Dungeon Road is approximately 9.3 km long and joins the Mid Western Highway in the south and Vittoria Road to the north.

The existing access to the mine project area is via Dungeon Road. The existing Dungeon Road will be permanently closed to the public at the commencement of the construction phase and will likely remain permanently closed unless the road is realigned outside of the mine disturbance footprint.

The road closure will occur approximately 550m north of the Mid Western Highway at the southern end (at the boundary of the mine project area) and approximately 1.2 km south of Vittoria Road at the northern end (at the boundary of the mine project area). The road closure is expected to have no impact on access to the two private properties located at the southern end of Dungeon Road as their access to Blayney or Bathurst via the Mid Western Highway will remain unchanged.

Regis has acquired all properties at the northern end of Dungeon Road that have access to the mine project area from Dungeon Road. There are two Regis owned dwellings on these properties. Both dwellings are located outside the mine project area and will likely remain tenanted for the long-term. The presence of tenants in these properties means that Dungeon Road will remain open for the 1.2 km between the mine project boundary and Vittoria Road. Access for these properties east towards Bathurst will remain unchanged, although, access to the south on Dungeon Road towards Blayney be impacted. However, an alternative route with a similar travel time is available via Vittoria Road and Guyong Road. The alternative route is via bitumen sealed roads, whereas Dungeon Road is an unsealed gravel road. The condition of Dungeon Road means that Guyong Road is a more attractive route to travel between the two highways. Guyong Road, unlike Dungeon Road is serviced by a school bus route.

The findings of consultation with local residents indicate that Dungeon Road is used by a few local residents to access Vittoria Road and the Mitchell Highway in the north. One near neighbour to the mine project area expressed concern that the closure of Dungeon Road will reduce their enjoyment of the local area, as the road is used for recreational pursuits e.g. cycling and running. Other near neighbours expressed concern that the change in Dungeon Road will impact social connectivity with the leaseholder located within the mine project area.

Background traffic counts undertaken to inform the TA (EIS Appendix Q) for the project measured annual average daily traffic movements on Dungeon Road in 2017 at 32 movements of which 22% were heavy vehicle movements and likely associated with activities at the mine project area.

Access via locked gates will be maintained on Dungeon Road for emergency vehicles, environmental monitoring, mine inspections or in the event that an incident at the new site access restricts access to the site for emergency services, the workforce or for deliveries of equipment and stores.

Dungeon Road will also be used to provide temporary access to the mine project area for construction vehicles while the main site access intersection is under construction (estimated timeframe of around six months). This may result in temporary and short-term delays on the Mid Western Highway as heavy vehicles access Dungeon Road. During this period, all construction activities will be undertaken during daytime hours only. Dust mitigation strategies such as the use of water trucks will be implemented to minimise potential amenity impacts to the two remaining residents on Dungeon Road.

Regis will introduce measures to encourage workers traveling to the mine project area from within the Orange and Cabonne LGAs to use an alternative route via Millthorpe Road to Blayney, then along the Mid Western Highway to the proposed access to the mine project area, rather than using Guyong Road. Additional actions to manage the social impacts of changes in accessibility and connectivity include advanced notification to all landowners in the PAA of the timing of Dungeon Road closure or realignment.

6.3.2 Amenity of the Surrounds

This section describes the potential impacts of the mine development on the aesthetic value and amenity of the locality surrounding the mine project area. The concept of amenity is "*wide and flexible" [155].* According to Preston (Telstra Corporation Ltd v Hornsby Shire Council)[156]:

> "*Some aspects of amenity are practical and tangible…….Other aspects of amenity are intangible and subjective…..Amenity may embrace the effect of a place on the senses and the residents' perception of the locality."*

The expansion of mining activity in close proximity to towns and villages has contributed to a range of social impacts including a reduction in residential and rural amenity. The more common drivers of amenity change include noise and dust emissions from mining activities and changing visual character[157].

As described in Section 5.3, the mine project area surrounds include approximately 90 rural and rural residential properties, as well as the VSF. The majority of these near neighbours anticipate tangible and adverse changes in amenity specifically acoustic amenity, air quality, and visual amenity as a result of the mine development. Near neighbours anticipate that the mine development will result in changes to existing amenity during both the day and the night, particularly during the construction phase when the southern amenity bund is being constructed. Residents of Kings Plains expect to experience a reduction in the use and enjoyment of both indoor and outdoor spaces due to amenity impacts.

[155] Telstra Corporation Ltd v Hornsby Shire Council [2006] NSWLEC 133 at 190.
[156] Telstra Corporation Ltd v Hornsby Shire Council [2006] NSWLEC 133 at 190.
[157] Franks et al., 2010.

The following sections describe the predicted impacts to amenity based on the findings of the EIS technical studies for noise and blasting, air quality and visual.

Acoustic Amenity

The findings of SIA consultation indicate that the majority of near neighbours, particularly those in Kings Plains expect to experience noise from the mine development as a detraction from the quiet rural amenity of the area, regardless of the compliance with noise criteria. One of the key findings of the SIA consultation undertaken with near neighbours is the value placed on the outdoor way of life and the associated amenity. Family life is strongly oriented to the outdoors either for recreation or business purposes e.g. agricultural operations.

Background noise monitoring conducted for the mine development confirms the noise environment at existing residential receivers in proximity to the mine project area can be best described as 'rural' i.e. one that has an acoustical environment that is dominated by natural sounds, having little or no road traffic noise and generally characterised by low background noise levels.

The results of the NVIA[158] (EIS Appendix L) are summarised below and provided in Appendix L of the EIS. It should be noted that Round 3 SIA consultation presented the outcomes of the preliminary noise modelling which indicated significant noise exceedances in the Kings Plains locality. At this time near neighbours expressed extremely high concern regarding project impacts on a range of valued attributes including rural amenity, way of life and property values. In light of the outcomes of this engagement Regis has made significant schedule changes to the construction phase and operations phase to reduce the predicted severity of the noise impacts. The following sections discuss the findings of the revised noise modelling.

Construction/Site Establishment Phase

For the purposes of modelling noise impacts, the project construction phase, during which construction activities will be undertaken during the daytime only, extends for the first six months from project commencement. The construction activities considered in the assessment include the development of the temporary site access via Dungeon Road, clearing and grubbing the open cut mine area and ROM pad. Construction of other mine infrastructure such as the TSF, dams and water storage, processing, crushing and screening plant, administration, maintenance areas, haul roads, bunds and hard stands will progress and are included as part of the operational noise assessment.

[158] Muller Acoustic Consulting, 2019.

The findings of the NVIA (EIS Appendix L) for this initial site establishment phase of the mine development indicate that:

- Daytime noise levels during the initial six month construction period are predicted to comply with the relevant noise criteria (referred to as 'noise management levels' in accordance with the EPA's *Interim Construction Noise Guideline* (2009)[159]) at all residential receivers, except for one house in Kings Plains (referred to as R17 in the EIS[160]). The exceedance at this location, is expected to be temporary and is directly attributable to the initial construction of the access road from the Mid Western Highway;
- No privately owned receivers are expected to experience sleep disturbance as a result of the construction phase. This is because construction activities will only be undertaken during the day period only; and
- No privately owned receivers would be considered "significantly noise affected' or "moderately noise affected" by construction activities undertaken during recommended standard day time hours.

Operations Phase

From month 7 onwards, when works will commence to be undertaken 24 hours per day, the mine is deemed to move into the 'operations' phase for the purpose of applying more conservative noise criteria. However, it is noted that during this time 'construction' activities will be continuing, including the construction and commissioning of the processing plant, which will be completed during the second year of the project.

The NVIA (EIS Appendix L) predicts that with the adopted noise mitigation measures, the largest impacts relating to noise will be in the first couple of years when the southern face of the waste rock emplacement is being constructed. Once construction of this landform is complete, mobile equipment will operate behind the bund, effectively shielding house in Kings Plains from noise and visual amenity affects.

The nearest residential receivers predicted to experience noise levels on occasion above the relevant noise criteria (referred to as the Project Noise Trigger Levels (PNTL)) are summarised below.

- Project Year 1 (from Month 7 onwards):
  - Noise levels are expected to exceed the PNTLs by 1- 2 decibels (dB) (i.e. negligible residual noise levels) at 16 houses in the Kings Plains locality; and

[159] Department of Environment and Climate Change, 2009.

[160] EMM, 2019.

  - Noise levels are expected to exceed the PNTLs by between 3-5 dB at 16 houses in the Kings Plains locality, who will therefore be entitled to voluntary mitigation upon request in accordance with the NSW Voluntary Land Acquisition and Mitigation Policy (VLAMP)[161].
- Project Year 2:
  - Noise levels are expected to exceed the PNTLs by 1- 2 dB (i.e. negligible residual noise levels) at 15 houses in the Kings Plains locality; and
  - Noise levels are expected to exceed the PNTLs by between 3-5 dB at seven houses in the Kings Plains locality.
- Project Year 4:
  - Noise levels are expected to exceed the PNTLs by up to 2 dB at six houses in the Kings Plains locality during the night time; and
  - Noise levels are not expected to exceed the PNTLs more than 2 dB at any receiver.
- Project Year 8 – No exceedances are predicted.

Therefore, it is predicted that exceedances of noise criteria will trigger voluntary mitigation rights during Year 1 and Year 2 of the project. Beyond Year 2, whilst exceedances are predicted, these exceedances will be within 2 dB of the relevant EPA criteria and are therefore considered to be negligible. No receiver's in other areas of the PAA will experience any significant, moderate or negligible noise related impacts.

In addition, the NVIA (EIS Appendix L) predicts that:

- Noise levels resulting from daytime and night-time cumulative traffic along the Mid Western Highway are predicted to comply with relevant criteria; and
- No private receivers are predicted to experience exceedances for the relevant sleep disturbance criterion during the night-time as a result of the mine development.

Should the project be granted approval, the development consent will specify landowners eligible for at-receiver noise mitigation. Potential at-receiver mitigation measures may include double glazing of windows and installation of air conditioning units. It should be noted that when these mitigation measures were initially discussed with Kings Plains residents during Round 3 SIA consultation, many residents were not supportive of these measures. These residents were concerned about the ongoing running costs associated with the air conditioners and indicated a preference for windows to remain open.

As discussed in Section 4.3.4, a number of near neighbours are sceptical of the EIS technical modelling results and question the reliability of the modelling results particularly where noise,

[161] NSW Government, 2018.

dust and water is concerned. Many near neighbours remain extremely concerned that noise from the mine development will be highly audible and disrupt the use and enjoyment of their properties, this is despite the findings of the noise modelling indicating this situation is unlikely to occur. Near neighbours also expressed some scepticism that noise levels, particularly during the construction of the southern amenity bund, could be effectively managed as described in the NVIA.

Despite modelling demonstrating a negligible increase in noise levels above the relevant EPA criteria from Year 2 onwards, near neighbours to the mine project area, including residents of Guyong Road and particularly Kings Plains residents will experience a change in noise levels during both the construction and operations phase, confined mainly to Year 1 and Year 2. This is primarily due to the introduction of the industrial noise source within an area currently experiencing low rural background noise.

The background noise level was determined from a series of noise monitoring results to be 36 dB in the Kings Plains catchment and 35 dB in the Walkom Road catchment. Modelling predicts that during daytime in Year 1 of the mine development some receivers in the:

- Kings Plains catchment will experience an increase in noise levels of between 7 dB and 9 dB; and
- Walkom Road catchment will experience an increase in noise levels of between 3 dB and 9 dB.

The NVIA (EIS Appendix L) identifies the recorded night time background noise level in the both the Kings Plains catchment and the Walkom Road catchment as 30 dB. Modelling predicts that during night time some receivers in the:

- Kings Plains catchment will not experience any change in noise levels, other receivers will experience an increase in noise levels during Year 1 and Year 3 of between 2 dB and 8 dB; and
- Walkom Road catchment will experience an increase in noise levels of between 2 dB and 8 dB in Year 1 and between 2 dB and 6 dB in Year 2.

As discussed in 4.3, based on SIA consultation the majority of residents of the PAA are generally not supportive of the project and are also not used to mining activity, given the absence of any existing mining activity in proximity to the PAA. This is likely to exacerbate the effects of noise impacts, and residents are likely to become annoyed with changes to the current rural background noise and find these changes unacceptable.

Mitigation and management measures proposed to reduce amenity impacts from noise include:

- Development of property-specific management plans in agreement with individual landowners within the Kings Plains locality. These management plans will incorporate tailored strategies e.g. installation of air-conditioning or double glazing, landscaping and screening, to reduce the impact of noise at the residence. Additional strategies for consideration include temporary relocation of residents to alternative accommodation during the construction phase and early operations when noise impacts and resulting disturbance are likely to be greatest.
- Undertake attended noise monitoring at regular intervals in Kings Plains and along Guyong Road to confirm compliance with noise criteria (EIS Chapter 10);
- Installation of a real-time monitoring device in Kings Plains with real time monitoring of noise and meteorological monitoring and forecasting capabilities. In the case of exceedances, construction and operations will be reviewed and measures implemented to work within compliance; and
- Proactive noise management at the mine development.

In addition to the measures identified above, during the operations phase Regis will:

- Provide suitable at receptor mitigation measures where prolonged exceedances of noise criteria are identified through attended noise monitoring; and
- Implement and communicate to near neighbours, a complaints and grievances system including policy and procedure to ensure that all near neighbours have access to a mechanism for reporting noise issues and a transparent process for the investigation and resolution of complaints.

However, even with the implementation of the measures identified above, a number of residents in the PAA will still experience an increase in background noise levels for a period of time throughout the life of the project. Depending on their level of sensitivity to the change this may impact the use and enjoyment of their own property.

Blasting and Vibration

Blasting will be undertaken during both the construction and the operations phases of the mine development. During operations, blasting may be undertaken up to once a day. Blasting activities have the potential for airblast overpressure impacts, vibration impacts, air emissions and production of fly rock. No exceedances of vibration and airblast criteria are predicted to occur at any private receiver, or at any item of local heritage significance in the vicinity of the mine project area. The findings of SIA consultation indicate that residents of the Kings Plains locality are worried that they may experience blasting as intrusive, and potentially alarming.

Blasting activities will impact the residential amenity of the Kings Plains locality, and to a lesser extent, areas to the north and west of the mine project area. During the initial construction phase blasting activities are likely to be highly disruptive to resident way of life. More than likely over time nearby residents will desensitise to the effects of blasting.

A number of Kings Plains neighbours also raised concern that valued stock, particularly horses are likely to experience blasting as alarming with potential impacts to stock health, but also human wellbeing if horses are being handled or ridden at the time of a blast. The NVIA (EIS Appendix L) indicates that blast effects resulting from the mine development are predicted to be well below the regulatory criteria and considerably lower than other sources of overpressure that horses or livestock are likely to be already subjected to such as lightning strikes.

Blasting will be carried out between the hours of 8:00 am to 4:00 pm, as recommended by the AQA, Monday to Saturday. Blasting will generally not be carried out on Sundays and public holdiays.

Mitigation and management measures proposed by Regis to reduce the impact of blasting activities on nearby residences, and in doing so minimise potential impacts to amenity include:

- Undertaking small scale blasts initially prior to full scale blasting to collect data to validate calculated blast predictions in the NVIA to develop preliminary blast emission site procedures for airblast overpressure and vibration;
- Undertake monitoring of all blasts and maintaining a blast monitoring log to assist in the design and optimisation of future events, planning and control of blasting emissions and to provide a traceable system of documentation in case of incident or complaint;
- The provision of blasting schedules in advance of blasting activities to:
  - Reduce uncertainty and enable near neighbours to plan accordingly;
  - Enable owners of stock to take the necessary actions to protect the health and wellbeing of stock; and
- The provision of assistance to private residences in the Kings Plains locality with stock to manage the initial impacts of blasting on stock. This may include temporary relocation of stock further away from the mine project area to enable stock time to adjust to the changed amenity conditions.

Air Quality

The findings of SIA consultation indicate that many near neighbours, including neighbours to the south and west of the mine project area have a highly emotive response to potential changes in air quality. These residents view a change in air quality due to the mine development as a detraction from the quality of the rural amenity of the area, a potential threat to human health and wellbeing, and a general annoyance. This is regardless of compliance

with air quality criteria and the established existing impacts of drought conditions on air quality in the locality.

The results of the *Air Quality and Greenhouse Gas Assessment* (AQA)[162] (EIS Appendix M) are summarised below.

The assessment of air quality impacts at nearby properties found that there are no privately owned properties that will be impacted by exceedances of air quality criteria. Therefore, there is no requirement for the implementation of actions in accordance with the provisions of the VLAMP.

Importantly, an investigation of best practice dust control measures was conducted as part of the AQA, and measures were iteratively added to the mine design where initial modelling of pollutant levels at the nearby residences were predicted to exceed criteria. Some key mitigation measures added include the use of dust suppressants in the water truck to increase the effectiveness of dust suppression on haul roads and limiting blasting to between the hours of 8am to 4pm to avoid any possible exceedances of relevant criteria relating to post-blast fumes.

Emissions of total suspended particulates (TSP), particulate matter less than 10 micrometres (µm) in aerodynamic diameter (PM_{10}), and particulate matter less than 2.5 µm in aerodynamic diameter ($PM_{2.5}$), oxides of nitrogen (NOx), hydrogen cyanide (HCN) and assorted metals and metalloids were estimated and modelled as part of the AQA.

The mitigation and management measures proposed by Regis to minimise any air quality changes in the PAA include:

- Implementation of procedures at the mine project area to minimise emissions from the combustion of diesel during the life of the project (e.g. use of low sulphur diesel fuels and lubricants, routine servicing of all equipment);
- Implementation of best practice control measures at the mine project area to control particulate matter emissions (e.g. enclosure of conveyors, watering of all unpaved haul roads, surface stabilisation to reduce wind erosion of exposed areas and overburden emplacement area);

[162] EMM, 2019b.

- Installation of a network of real-time monitoring devices at various locations to the south of the mine project area. This network will provide Regis with comprehensive upwind and downwind monitoring based on the dominant wind directions. In combination with data from the existing meteorological monitoring station and project-specific trigger conditions, the real-time monitoring network will be used to inform proactive management practices to prevent adverse impacts at sensitive receptors;
  - Recording of daily and annual average PM_{10} concentrations and monthly average dust deposition results and reporting of results in annual environmental management reports and through the project website; and
  - Progressive rehabilitation of disturbed areas and in particular the WRE.

To support the air quality monitoring network, an air quality monitoring plan will be developed for the project, documenting monitoring locations, monitoring methods and reporting responsibilities.

In addition to the measures identified above, across the project life Regis will:

- Provide the results of air quality monitoring on the project website; and
- Implement and communicate to near neighbours a complaints and grievances policy and procedure to ensure that all near neighbours have access to a mechanism for reporting air quality issues and a transparent process for the investigation and resolution of complaints.

Visual Amenity

There are residences located to the south and the west of the mine project area that overlook the site. There are also regional and local road overviews from these sectors. These areas have open views across cleared agricultural grazing lands to the hilly slopes within the site. Views of the mine project area from the north and east are limited. Visual connection and intervisibility between the site and mine development components and adjoining sensitive residential land use areas are strong, especially to the south at Kings Plains.

The mine project development will result in changes to the existing landscape within and surrounding the mine project area. These changes will occur initially through the commencement of construction and will change in extent and reduce in magnitude for many near neighbours as mining and rehabilitation activities progress. The mine development will permanently alter the landform and topography within the mine project area and following mine closure will leave new and permanent topographical features.

During SIA consultation, near neighbours expressed concern that the mine development would significantly alter views from their residences and that this would diminish the rural character of the area. This view was particularly prevalent amongst near neighbours to the immediate south of the mine project area in Kings Plains. Most of the houses in the Kings

Plains settlement face north towards the mine project area to take in the existing views, the northerly aspect and to naturally fit into the topography on the Kings Plain location.

A number of residents to the west of the mine project area along Guyong Road also noted the potential of the mine development to diminish the quality of their views and in doing so the rural character of the area. Guyong Road and the residences along the higher sections of the road have open views onto the western edge of the site. For the greater part, the westerly line of hills (Bushman's Ridge and Sturgeon's Hill) screen mine development components.

The VIA (EIS Appendix S) provides an assessment of the visual impact of the project on different catchments within the PAA including Kings Plains to the south, Dungeon Road to the south, Guyong Road to the north-west and the VSF and Pounds Lane to the east. The findings of the VIA (EIS Appendix S) for the mine development indicate, for:

- Areas to the south of the mine project area:
  - During construction and operations, residences to the south of the mine project area in the Kings Plains settlement will experience the greatest visual impact of all near neighbours;
  - Within the Kings Plains settlement, the visual impact during construction and operation of the project on residences will generally be high. Following rehabilitation, the visual impact will vary from high (due to the permanent presence of the waste rock emplacement, albeit re-vegetated) to low;
- Areas to the east of the mine project area:
  - Where there are views of mine components from rural residences to the east of the mine project area, the visual impact during construction will be high reducing to moderate as rehabilitation progresses;
- Areas to the north of the mine project area:
  - There will be no views to the mine project area from any rural residence in the northern view sector. Accordingly, there will be no visual impact.
- Areas to the west of the mine project area:
  - Residences to the west of the mine project area will experience a lower percentage impact to their primary view zone (i.e. the percentage of total view occupied by the mine development a lower impact generally due to distance from the project area) than residences to the south of the mine project area;
  - Micro topographic and vegetation conditions mean that only a small percentage of dwellings to the west will experience any visual impacts;

- The most significant impact is associated with the construction phase and for some residences to the west this visual impact is rated high. However, once the mine development progresses to the operations phase (and rehabilitation activities progress), the visual impact is predicted be moderate to low; and
- Residences to the west of the mine project area will experience more variation in the scale of impact due to distance from the mine project area and the presence of topography which assist in screening views of the mine development from that area.

Direct and Diffuse Lighting Impacts

During SIA consultation near neighbours also indicated a concern that night lighting could not only detract from the 'valued dark skies' but directly impact private residences, further diminishing amenity. The findings of the VIA (EIS Appendix S) in relation to direct lighting indicate that:

- Direct lighting impacts will occur up to completion of the southern amenity bund from the south-east to the north-west dependent upon direct line of sight to construction and operational activities; and
- Following completion of the bund, direct lighting impacts would continue to be experienced by receptors to the west and north-west with direct line of sight views to the ongoing operations within the mine development area.

Mitigation and management measures proposed by Regis to reduce the visual impact of the project and the diminished residential amenity will include:

- Visual treatments incorporated within the mine design, for example:
  - Maintaining existing vegetation (specifically canopy trees) and a vehicle and work free area on the open-cut hill on the lower external faces;
  - Implementing micro-topographic design to achieve more natural land form outcomes in relation to the waste rock emplacement area;
  - Planned and progressive rehabilitation of disturbed areas i.e. the WRE;
- Development of property specific-management plans with near neighbours who are predicted to experience a high visual impact.

According to the VIA (EIS Appendix S), light pollution and sky glow are currently limited to that created by Blayney township and Bathurst. Kings Plains and the residences around the mine project area generate insignificant light pollution resulting in dark sky night conditions and higher sensitivity to any changes. The findings of the VIA (EIS Appendix S) indicate that the visual impacts of diffuse lighting associated with the mine development would be significant compared to the low existing diffuse lighting levels. Diffuse lighting effects will be more widespread than direct lighting impacts due to the dome of the sky glow effect from the mine

operations at night. Atmospheric conditions, such as dust and local seasonal fog will intermittently exacerbate this impact. Local natural and constructed topographic features i.e. ridgelines, hills and southern amenity bund may shield some of the light emitted from the sources along the line of sight of the observer. Accordingly, diffuse lighting impacts will be experienced in varying degrees. It will be dependent upon location, shielding topographic features and distance from the mine project area.

To manage the visual impacts of diffuse and direct lighting, Regis will:

- Ensure all external lighting associated with the mine development complies with *AS 4282 – Control of the Obtrusive Effects of Outdoor Lighting*;
- Seek to minimise light spill through a range of operation procedures including positioning and aiming of lights, at lighting controls e.g. use of shielded fittings, restricting night lighting to the minimum required for operational and safety requirements; and
- Develop property specific-management plans with near neighbours who have the potential to experience a high impact from diffuse lighting.

Cognitive and Dynamic Landscape Impacts

The VIA (EIS Appendix S) also includes a dynamic landscape assessment that focuses on the perceptual and aesthetic characteristics of a landscape, including visual, sound, smell, touch/feel, preferences, associations and memories. It reflects people's perceptions as they move through the landscape. The findings of the dynamic landscape assessment (EIS Appendix S) indicate that the scale of impact of the mine development on the landscape, and the mitigation of those impacts in the context of existing land use patterns would create moderate to high dynamic landscape impacts during construction and operation. This is based on intensity and extent of visual and other perceptual experiences of the mine development in the context of existing landscape settings that include minor mining activity in the locality, sub region and more significant mining within the region. Such perceptions are likely to remain for a larger part of the operational phase, even when out of view, due to the complete knowledge set all members of the community have from information sessions and newsletters

The following management measures will be implemented by Regis to lower the dynamic landscape impacts:

- Reducing sensitivities through appropriate mitigation treatments and on/off site landscape treatments;
- Demonstrate responsible and thorough implementation of recommended mitigation strategies; and
- Continuing liaison and action with the community.

The findings of the VIA (EIS Appendix S) suggest that dynamic impacts will reduce as perceptual effects relating to operations, including visual effects are reduced.

Biodiversity Values

During SIA consultation some near neighbours identified a number of biodiversity values within and outside the mine project area which they consider make a significant contribution to amenity and resident's perception of the quality of the surrounds. These values primarily related to the presence and diversity of fauna particularly bird life which are in turn attributed to the presence of water and natural vegetation communities within and adjoining the mine project area. Some near neighbours expect that the mine development will lead to a reduction in the number and diversity of bird life primarily as a result of vegetation clearance and changes in existing surface water conditions.

The findings of the *Biodiversity Assessment Report*[163] (EIS Appendix N) for the mine development indicate that the mine development will result in the removal of 132.36 ha of native vegetation, 129.3 ha of which comprises habitat for native fauna, including habitat for the Squirrel Glider and 75.55 ha of which comprises habitat for Koala.

Numerous alternative designs have been prepared and evaluated for the mine development. This process has facilitated the development of a considered project design which will efficiently recover a highly valuable resource, while minimising environmental impacts and potential land use conflicts and delivering socio-economic benefits to the local and broader communities. The disturbance footprint originally proposed for the mine development was reduced by 118.8 ha to avoid and minimise biodiversity impacts, particularly impacts to White Box Yellow Box Blakely's Red Gum Woodland Endangered Ecological Community (EEC) and threatened species habitat.

Mitigation and management measures proposed by Regis to reduce impacts to biodiversity values are described in detail in the *Biodiversity Assessment Report*[164] (EIS Appendix N) and include the potential establishment of a biodiversity stewardships site. Regis has purchased land for the purpose of biodiversity offsets.

Summary of Predicted Impacts to Amenity

In summary, there is evidence in the form of noise modelling data, and outcomes of the visual assessment, to support the fact that the mine development will result in varying degrees of impact to the residential amenity of the Kings Plains settlement and to a lesser extent the amenity of the Kings Plains locality and near neighbours to the west and north of the mine project area.

[163] EMM, 2019c.

[164] EMM, 2019a.

The magnitude of the amenity impact on the Kings Plains settlement is likely to be most significant during Year 1 when land use change is dramatic, access to the mine project area is constructed, and construction of the pit and southern amenity bunds are progressed. Amenity impacts will continue into the operations phase, however progressive rehabilitation of the mine project area and the progression of mining activities will result in a reduction in noise emissions and improvements, and alleviate some views into the mine project area for residences to the south and west.

6.3.3 Access to and Use of Ecosystem Services

This section describes the impact of the mine development on the access to and use of ES in the PAA by near neighbours. ES represent the intersection of the natural and human environment. During SIA consultation some near neighbours identified a number of benefits they obtain from the surrounding ecosystem. These benefits include:

- Spiritual enrichment, reflection, recreation and aesthetic experience generally associated with the rural vistas, the peace and tranquility and the biodiversity values;
- Access to water for domestic and agricultural purposes – obtained via a combination of naturally occurring springs, surface water flows in the Belubula River or groundwater; and
- Livestock production due to presence of quality agricultural land.

Table 27 summarises the ES present in the PAA and relevant to the context of the mine development. The key sources of potential impacts on community access to and use of ES relevant to the mine development, include:

- Change in land use from agriculture to active mining and at the mine closure a return to rehabilitated agricultural land; and resulting changes in visual character;
- Disturbance to habitats and impacts to species;
- Impacts to water quality and quantity – surface water, groundwater and natural springs; and
- Changing amenity due to cumulative biophysical impacts associated with mining activities e.g. noise and air emissions, and blasting.

Table 27
Ecosystem Services in the Primary Assessment Area

ES Category	Service	Example	Drivers of Change Associated with Project
Provisioning	Water supply: domestic and agricultural Food: agricultural operations Food: apiarian activities	Stock watering from the Belubula River Agriculture is a key land use Use of vegetation within mine project area by bees for pollination purposes	• Impacts on surface water and groundwater quality and quantity • Reduction in area of agricultural land due to change in landuse from rural to mining • Vegetation clearance
Cultural	Aesthetic Value	Cultural value placed on landscapes and landmarks in the area	• Disturbance of land and creation of alternative topographic features • Disturbance to habitats and species • Noise and dust emissions impacting amenity • Impacts on surface water and groundwater quality and quantity
	Spiritual Values	Contemporary spiritual values associated with sense of place and 'awe' at the landscape	
	Recreation Value	Use of the VSF	
	Non-use value: Existence value	Species and habitat of high conservation value or concern	

Impacts on Provisioning ES - Water

Near neighbours do not have access to town water and are therefore reliant on a combination of groundwater, surface water and rainfall for amenity use and livelihood (cattle grazing). The Belubula River, associated tributaries, naturally occurring springs and groundwater provide both residential and stock water for the majority of near neighbours.

The impact of the mine development on access to surface water has already been discussed in Section 6.2.3. In relation to groundwater, the findings of the GWA (EIS Appendix K) indicate:

- Groundwater levels will decline in a localised area surrounding the open cut mine. The AIP requires that landholder bores affected by greater than 2 m drawdown as a result of the project are subject to 'make good' provisions however, there are no third party bores with a predicted drawdown in excess of 2 m.; and
- In relation to the springs, there is the potential for the reduced flows and occurrence of a couple of springs located outside of the project infrastructure areas but within the mine development area, with no impact predicted to springs located outside of the mine project area.

The findings of the GWA indicate that the impact of the mine development on groundwater water quantity in the PAA will not be significant for near neighbours who rely on groundwater sources.

As discussed in Section 6.2.3, Regis has developed a comprehensive management framework to avoid any significant impacts on the Belubula River and its associated catchment values (EIS Appendix K). Specific to groundwater, this framework includes:

- Incorporation of additional safeguards for seepage management into the design of the TSF (EIS Appendix D);
- Installation of a dedicated groundwater monitoring network for the life of the project to:
  - Provide an early indication of any potential impact to existing users outside the mine project area;
  - Monitor for early warning of potential seepage from the TSF; and
- Installation of seepage interception bores downstream of the groundwater monitoring network to operate as backup seepage collection points to intercept any potential seepage before it progresses further into the catchment.

Further, the AIP requires that if the project results in a groundwater level decline of 2 m or more at a landowner bore, Regis will enter into a 'make good' arrangement with the affected landowner. That is, Regis will be required to ensure that the landowner still has access to water of similar quality and quantity. It is noted however, that the groundwater modelling indicates this will not be required.

Impacts to agricultural operations

Potential impacts to agricultural operations within the PAA and broader SAA have been discussed in Section 6.2.10. The use of the Belubula River water for livestock and potential impacts of the mine development have also been discussed in Section 6.2.3. More prevalent within the PAA is the use of groundwater (bores) to provide water for livestock. Groundwater levels will decline in a localised area surrounding the open cut mine. The AIP requires landholder bores affected by greater than 2 m drawdown as a result of the project are subject to 'make good' provisions however, there are no third party bores with a predicted drawdown in excess of 2 m. The impact of the mine development on groundwater water quantity will therefore not be significant for livestock cultivation within the PAA.

Impacts to apiarian activities

Potential impacts to apiarian activities are associated with a loss of habitat on the mine project area as a result of vegetation clearance activities and potential reduction in surface water flows in the local area. The mine project area contains high altitude Yellow Box trees which flower later in the year than low altitude Yellow Box. These trees on the mine project area are understood to provide pollen for the bees managed by Goldfields Honey, a local honey manufacturer located at the Beekeepers Inn on the Mitchell Highway. The owners of the Goldfields Honey business indicated during SIA consultation that the presence of high altitude Yellow Box in proximity to the VSF where the beehives are located, means Goldfields Honey is able to produce a particular style of commercial honey throughout the year.

The *Biodiversity Assessment Report*[165] (EIS Appendix N) for the mine development states that the mine development will result in a reduction of just 1.68% in the extent of Box Gum Woodland within a 5 km radius of the mine project area. Given the foraging range for bees is a few kms the project will not result in a significant loss in foraging habitat for bees. A significant amount of Box Gum woodland in the northern part of the mine project area has been avoided by the design of the TSF.

Regis has met with the owners of Goldfields Honey and the Beekeepers Inn and is working with the owners to identify suitable measures to mitigate or offset any potential impacts to private business operations arising from the mine development.

Impacts to Cultural ES

A number of residents in Kings Plains strongly believe that the surrounding natural ecosystem adds value to their health and wellbeing and contributes significantly to the aesthetic value of the surrounds, their recreational experiences, and their own sense of place. This value added by the natural environment can be referred to as Cultural ES.

> *"Cultural services are the often non-material benefits people obtain from habitats and ecosystems through recreation, aesthetic enjoyment, 'inspiration' (the material for artistic inspiration, reflection and cognitive development) and 'awe' (whether interpreted as marvel at the emergent properties of natural processes, or as a sense of 'spiritual' wonder)."*[166]

Fish et al.[167] defines Cultural ES as

> "*a concept around which researchers and decision makers can understand ecosystems in terms of their life-enriching and life-affirming contributions to human well-being…"*

Some residents of Kings Plains expect that project induced changes to the natural environment within the mine project area will degrade the cultural services they derive from the surrounding ecosystem. These near neighbours indicated any adverse changes in the beauty or aesthetic value of the locality particularly the configuration of open space and agricultural land would impact:

- Resident recreational enjoyment of the outdoors; and
- The cultural significance of the landscape for residents, which in turn contributes to the identity of the Kings Plains locality.

[165] EMM, 2019a.
[166] Ecosystem Services, 2012.
[167] Fish et al., 2016.

Some near neighbours also assign spiritual values to the surrounding ecosystem and expect that the project will adversely impact these values.

Previous sections have captured the predicted impacts of the project on amenity, specifically the acoustic and visual environment as well as quality of the air and the natural environment. Given the nature and scale of the amenity changes anticipated across in the PAA across the project life, and the scope of the cultural services current residents derive from the surrounding ecosystem, it can be concluded that the project will give rise to changes in the ecosystem that in turn will impact access to and use of Cultural ES for some near neighbours. This has potential to result in impacts to health and wellbeing (as identified by some residents). These impacts are likely to be most significant for residents of Kings Plains, given proximity to the mine project area.

In considering the assessment of and study of cultural ES, Daniels et al.[168] highlights that: "*The capacity of a given ecosystem to contribute to a given service for a given stakeholder group may fluctuate, and social demands are also dynamic"*. This makes managing predicted impacts to Cultural ES access difficult. In the context of Kings Plains this means any change in the community structure and resident population could impact the scope of cultural ES considered to be impacted and therefore requiring management.

Actions to avoid and reduce the impact of the mine development on the ecosystem elements from which near neighbours derive cultural services will focus on:

- Managing impacts to amenity i.e. noise and dust (as discussed previously);
- Reducing views into the mine project area and where visibility exists, improving the visual quality by undertaking progressive rehabilitation;
- Avoiding and minimising impacts to the Belubula River, groundwater resources and naturally occurring springs;
- Supporting the participation of near neighbours and the broader community in aspects of rehabilitation, and mine closure planning; and
- Supporting and motivating public support for the protection of ecosystem aspects e.g. possible involvement of BHS in environmental monitoring activities.

6.3.4 Community

Community Cohesion

This section describes the predicted impact of the project and project related property acquisition activities on the community of Kings Plains as the closest settlement to the mine project area.

[168] Daniels et al., 2012.

Property Acquisition and Population Displacement

Regis has acquired all properties essential for the project to effectively manage the predicted environmental impacts, e.g. noise on neighbouring landowners. Minor population movements have occurred in the PAA as a result of these purchases. Regis currently owns 19 dwellings across 18 properties including two properties under option.

Of the 19 dwellings, at the time of purchase:

- Three were rental properties occupied by nine people;
- 14 dwellings were occupied by permanent residents; and
- Two dwellings had absentee owners and were generally used as weekenders.

The total permanent population of the 19 dwellings at the time of purchase is estimated at 25 people. At July 2019, a large number of the original residents remain connected with their properties, through either licensing the land or a tenancy agreement. An estimated 16 people remain in Regis owned dwellings, indicating the outmigration of nine residents to date. However, of these nine resident departures, only two are directly attributable to the project.

Six of the dwellings purchased are located within the mining lease area. A further ten dwellings are located within the mine project area, but outside the mining lease area and three dwellings are located outside of the mine project area. Subject to the receipt of Development Consent, further outmigration of existing residents from Regis owned properties will therefore occur.

Future Population Changes

Further loss of residents may occur in the Kings Plains locality:

- As a result of the departure of residents from Regis owned properties within the mine project area;
- As remaining residents experience the amenity changes resulting from the cumulative biophysical impacts of the mine development i.e. the combination of mine's intrusiveness noise levels, air quality impacts and visual amenity impacts;
- Some residents may choose to leave Kings Plains prior to the commencement of construction rather than live through the initial construction phase of the project when the noise impacts are anticipated to be greatest. Residents with existing and significant health issues may choose to relocate to avoid perceived exacerbation of health issues; and
- The potential future of residents in the Kings Plains locality may lead to changes in the social structure of the community. This is particularly relevant if departing residents were long-term residents with local knowledge and strong connection to the area.

The trend in the outmigration of residents from locations in close proximity to existing mining development is evidenced in a number of communities in NSW including Wollar in Mid-Western LGA and Tomingley in the Narromine Shire[169].

Potential new residents may be reticent to replace the original residents due to perceived or actual amenity impacts.

Residents of Kings Plains expressed a fear in relation to the future of their community. These residents expressed concern that the Kings Plains settlement might be permanently '*removed from the map'* as a result of the magnitude of project impacts.

Regis will progress the following actions to minimise the outmigration of population from the Kings Plains locality:

- Engage in and maintain transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS;
- Develop property-specific management plans in agreement with individual landowners within the Kings Plains locality. These management plans will incorporate tailored strategies e.g. installation of air-conditioning or double glazing, landscaping and screening to reduce amenity impacts of the project at private residences;
- Demonstrate to the surrounding community, an ability to develop the mine and comply with all necessary regulatory requirements; and
- Seek to make Regis owned housing, where located outside of the mine disturbance footprint, available for rent to existing residents of the Blayney LGA and the incoming workforce.

Rural Way of Life

The project has the potential to benefit rural landowners in the PAA including through the potential provision of employment opportunities as supplement to existing rural employment and service capacity improvements in the Kings Plains RFB and Canobolas Zone RFS. The project also has the potential to adversely impact rural values in the PAA, and in particular the Kings Plains locality. As described in Section 5.5 the rural way of life in the PAA is characterised by the presence of rural vistas, livestock (cattle) grazing, outdoor activities including equine activities and close social connections between residents. Family life in the PAA is strongly oriented to the outdoors either for recreation or business purposes e.g. agricultural operations. During SIA consultation a number of residents of the PAA indicated that they felt the project threatened existing rural values including the strong rural way of life.

[169] Based on an analysis of meshblock counts and media articles (ABS 2017b).

As all mining activity would be undertaken on land owned by Regis, there is no potential for the project to have direct impacts on rural farming practices. However as described in previous sections:

- The project will significantly alter the rural vistas present in the PAA;
- During night time operations lighting may be intrusive and reduce the effect of the dark skies (Section 6.3.2);
- Whilst noise and vibration related to the mine development is predicted to be compliant with regulatory limits (Section 6.3.2), noise associated with the mine development may be intrusive at times. The mine development will result in the introduction of a new and unfamiliar noise into the rural environment;
- Nearby residents, particularly residents of Kings Plains perceive that blasting is likely to be intrusive, and potentially alarming (Section 6.3.2). This is despite the development of blast design for the project that ensures blasting limits are adhered too; and
- The mine development has also led to conflict within the Kings Plains community with a perceived reduction in social cohesion (Section 4.2).

The change in land use from pastoral or agricultural to mining has the potential to adversely impact residents of the PAA, due to the presence of strong ties to the rural or farming way of life. Some residents may experience distress adapting to the changing land use in the PAA.

Changes in amenity may impact how people use their private properties. Residents engaged in equine activities expressed concern in relation to the potential for noise and blasting activities to disrupt equine activities. Many residents of the PAA interviewed for the SIA expressed concern that the project would detract from the dark skies, a valued rural attribute of the location. Sitting outside at night and star gazing was identified through consultation as a common and valued evening activity in the PAA.

A number of stakeholders expressed concern that project related property acquisition activities may erode social connections within the PAA, and in particular the Kings Plains locality as existing residents in purchase properties relocate. Into the future the project will likely result in the loss of at least one additional family, also with strong rural ties to the local area. A small number of stakeholders also expressed concern in relation to the extent to which Regis property acquisition activities to date have isolated some rural residents from existing social connections.

Measures to be implemented to minimise impacts to residential amenity, specifically visual amenity (including light intrusion) and noise have been discussed in Section 6.3.2. Measures to protect and enhance social connections within the Kings Plains community have also been discussed in the preceding section. Regis community engagement strategies and complaints and grievances framework will seek to ensure that any unanticipated impacts on the neighbouring resident's rural way of life are identified and addressed.

6.3.5 Health and Wellbeing

Physical Health

It is acknowledged that the potential cumulative health impacts of changes in air quality, water quality and noise levels have caused increasing concern in mining communities, particularly in the Upper Hunter Valley mining areas. Increasing focus is being given by State government to addressing these impacts at a regional level.

Air Quality

Potential air quality impacts as a result of dust emissions were one of a number of issues frequently raised by residents of the PAA during SIA interviews conducted for the project. Several participants raised concerns in relation to potential health impacts from dust emissions. Residents expressed concern regarding the potential for contamination of rainwater. The majority of residents in the PAA rely on a combination of bore water and rainwater for stock and household use. Residents expressed considerable concern that if dust from the mine project area settled on the roof of buildings, it would contaminate rainwater supply. There are also a number of residents living in Kings Plains who have significant health conditions that may be exacerbated by dust from the mine project area.

As previously discussed, residents' distrust both the air quality modelling data and the ability of Regis to successfully operate the mine development in compliance with development consent conditions. Subsequently near neighbours fear the physical health impacts of the project.

As discussed in Section 6.3.2, an AQA[170] (EIS Appendix M) was completed for the mine development. The AQA found that there are no privately owned properties that will be impacted by exceedances of air quality criteria. This criterion has been set by the NSW EPA in accordance with World Health Organization standards. Importantly, an investigation of best practice dust control measures was conducted as part of the AQA, and measures were iteratively added to the mine design where initial modelling of pollutant levels at the nearby residences were predicted to exceed criteria.

To address existing resident fears and perceived uncertainty in relation to the health impacts of dust emission, Regis has commissioned a Health Impact Assessment (HIA), to be completed in parallel with the project approvals process. The findings of the HIA will be communicated to all residents of the PAA once complete.

[170] EMM, 2019b.

Mental Health

As identified during SIA consultation, a number of residents within the PAA, particularly Kings Plains described that they are experiencing elevated levels of stress and anxiety due to uncertainty in relation to a range of project factors including:

- Whether the project would proceed;
- The mine life;
- The potential impacts and the extent to which they might be impacted;
- The ability of Regis to suitably manage or control the impacts;
- The opportunity for property acquisition and/or compensation; and
- The potential impact on property values and saleability of property in the locality in the event that residents seek to relocate during the approvals process or following determination.

Anxiety is the most common mental health condition in Australia[171], and can have a temporary or prolonged effect on a person's quality of life and day-to-day functioning. Whilst most people can cope well with a certain level of stress and anxiety, there is potential for stress related to the project to affect individual and family wellbeing. In the CW&O Region, drought has been a particular driver of anxiety and has strained the emotional resources of many local farmers.

The primary strategy to manage resident stress and anxiety in relation to the project is for Regis to engage in and maintain transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS.

During EIS exhibition, Regis will:

- Ensure all residents of the PAA and other key stakeholders are made aware of the EIS exhibition period and have timely access to expert consultants to discuss the findings;
- Undertake tailored consultation with residents of the PAA to ensure all residents are informed of the nature and magnitude of predicted impacts at their private property; measures to manage and or mitigate predicted impacts; and opportunities for compensation or property acquisition;
- Offer to meet with downstream landowners to discuss the EIS findings; and
- Offer to meet with the BHPG to discuss the EIS findings.

During the project approvals phase Regis will ensure all near neighbours remain informed of the progress of the project approvals process, opportunities to participate and any changes to the project description arising.

[171] Beyond Blue, 2018.

Sleep Disturbance

SIA consultation identified that a number of residents of the PAA, and in particular Kings Plains are engaged in shift work employment e.g. mining and transport services. These residents raised concerns in relation to the potential for noise from the project to cause sleep disturbance during the day and at night.

A sleep disturbance assessment was conducted as part of the NVIA (EIS Appendix L). The findings of the NVIA indicate that noise levels are compliant with the relevant criteria at all sensitive receivers.

6.3.6 Personal and Property Rights

Property and Property Values

Damage to Private Property

A qualitative assessment of potential vibration impacts was completed as part of the NVIA (EIS Appendix L). This assessment concluded that no exceedances of vibration and airblast criteria are predicted to occur at any private receiver, or at any item of local heritage significance in the vicinity of the mine project area. The NVIA (EIS Appendix L) establishes the level of explosives that could be used in the mine development (i.e. the maximum instantaneous charge (MIC)) so as to ensure overpressure and vibration levels would remain within the criteria at all nearby residences and heritage buildings. This MIC will then become an operating rule for the site. Measures to manage the impacts of blasting outside of the mine project area are described in the NVIA (EIS Appendix L) and summarised in Section 6.3.2.

Property Values

One of the issues raised most frequently by residents of the PAA during SIA consultation was the potential for project to impact property values. Many residents were concerned about property values because they did not have superannuation and their property and associated land is their superannuation. Residents of Kings Plains expressed concern that the project may have already adversely impacted both property values and the level of buyer interest in the location. A number of residents in Kings Plains cited the example of a property currently for sale in Kings Plains which is understood to have been on the market for many months and has had little market interest. Residents of Kings Plains were concerned that if they wanted to move from the location due to the impacts of the project they:

- Would be unable to sell their property; or
- The value they received for the property would be well below market value and insufficient to buy a new property in an alternative location with similar attributes.

The relationship between mining and property value is inextricably linked. There are a range of factors that can influence property prices. These factors include characteristics of the property, attributes of the neighbourhood and environmental characteristics of the surrounds.

The impact of the project on surrounding property values is considered in the EcIA (EIS Appendix DD). The EcIA includes a cost benefit analysis that estimates the impact of amenity changes (noise, air and visual) via the partial property value impacts using hedonic pricing.

In some circumstances mining and the creation of employment is likely to increase median dwelling prices, as well as increase median property prices. Whilst ongoing uncertainty exists in relation to project approval, the value of property located in proximity to the mine project area may experience a drop from pre-project values. During this period there are likely to be fewer buyers interested in available properties in the Kings Plains locality and these properties may take longer to sell. The financial burden of any decline in property values rest with the existing property owners. Future property owners are unlikely to experience financial loss as a result of the project as these losses will have already occurred. As the project is a greenfield development, it is likely that neighbouring property values will have to adjust to the presence of the mine. Impacts on way of life and property values are likely.

The primary action Regis can take to minimise long-term impacts on neighbouring property values is to demonstrate to the public that noise and dust emissions can be confined to the mine project area with negligible impacts on neighbouring properties. Establishing good neighbour relations and demonstrating through action that Regis is a good corporate citizen will be integral to minimising the impact of the project on property values.

6.3.7 Infrastructure and Services

Rural Fire Brigade

The project will have both positive and negative impacts on the Canobolas Zone of the NSW RFS and the Kings Plains RFB. Positive impacts relate to the potential increase in the pool of volunteers available to both services and the financial and in-kind support likely to be provided directly by Regis and indirectly through community projects potentially funded through VPA. The negative impacts relate to the increased risk of incidents and accidents as a consequence of the increase in population, particularly from an increase in road usage and accidental ignition e.g. cigarette disposal.

The project is likely to have a positive impact on rates of volunteerism in the Kings Plains RFB RFS due to the presence of the workforce. There are already project employees who volunteer for the Kings Plains RFB and the Springside RFB.

To support the Canobolas District and Kings Plains RFB, Regis will:

- Establish a protocol with the Canobolas District for the provision of unimpeded access to the project site for the delivery of RFS services;
- Establish a protocol with Canobolas RFS for the use of site mining/earthmoving equipment during emergency incidents e.g. bush fires on site, or at a nearby site;

- Support the Kings Plains RFS to be adequately resourced (human resources) and equipped for fire-fighting;
- Encourage employee policies that enable emergency services personnel to be released from duties to attend emergency calls and to perform crucial volunteer actions;
- Participate in the Canobolas Zone Bushfire Management Committee to remain informed of activities; and
- Provide a copy of the Fire Management Plan for the mine development to the Canobolas Zone RFS.

Recreation Infrastructure

A grass airstrip is located on one of the Regis owned properties in the south western corner of the mine project area and outside the mine disturbance footprint. It is understood that this air strip is identified by the Bathurst Soaring Club for unplanned landings and is one of a number of unplanned landing zones between Bathurst and Cowra. Regis will liaise with the Civil Aviation Safety Authority and the Bathurst Soaring Club in relation to the use of the facility during the project life.

6.4 CUMULATIVE IMPACTS

6.4.1 Introduction

Cumulative impacts are defined by Franks et al.[172] as the *successive, incremental and combined impacts of one, or more, activities on society, the economy and the environment*.

This section describes the cumulative impacts of the project. The discussion focusses on two main types of cumulative impacts[173]:

- Sink impacts i.e. the impacts arising from project activities such as air and noise emissions. These impacts tend to be more local; and
- Source impacts i.e. cumulative impacts arising from the use of the same resources as other industries (e.g. housing, labour and agricultural land). Unlike sink impacts, source impacts can extend across ill-defined spatial extents.

The key determinants of cumulative social impacts in the local and regional context relevant to the mine development include:

- The number and residential status of additional people staying temporarily or living in the region as a result of major projects;
- The size and distribution of the economic investment;

[172] Franks et al., 2010.

[173] Franks et al., 2010.

- The quantity of rural agricultural land to be taken out of production and allocated for mining or related land uses; and
- The extent of financial dependency on resource sector investments held by individual councils i.e. BSC has a significant existing financial dependency on VPA payments from existing mining operations.

There are also existing and naturally occurring processes that increase the community's sensitivity to impacts i.e. the presence of prolonged drought.

6.4.2 Potential Cumulative Impacts

Table 28 provides a summary of the key potential cumulative social impacts associated with the project, the phase in which the cumulative impact is likely to occur and the key driver(s).

Table 28
Summary of Potential Cumulative Social Impacts

Potential Cumulative Impacts	Project Phase	Key Driver
Reduced productivity in the local agricultural industry	Life of Mine	Loss of productive agricultural land
Sustained reliance on a single industry for economic growth and infrastructure provision	Life of Mine	Multiple VPAs with mining industry
Temporary shortage of short-term accommodation impacting non-mining sector e.g. tourism industry	Construction Phase	Increase in temporary workforce in the Local Area
Short-term cumulative shortage of private rental accommodation	Construction Phase	
Temporary increase in demand for health and emergency services	Construction Phase	
Temporary changes in community cohesion	Construction Phase	
Short-term labour draw from the non-mining sector and non-mining sector impacts to productivity	Construction Phase	Increased demand for labour generated by multiple construction projects
Sustained impacts to residential amenity for near neighbours	Life of Mine	Changes in the biophysical environment outside of the mine project area

Reduced Productivity in the Local Agricultural Industry

The mine disturbance area accounts for less than 1% of the land currently used for agriculture across the Blayney LGA. The main impact of the mine development on agricultural resources will be the removal of grazing livestock from the disturbance footprint during the life of the

project. The AIS[174] estimated that the carrying capacity of the mine project area will be reduced by 10,064 dry sheep equivalents during the life of the mine. This is equivalent to a reduction in total income of $406,193 per annum.

This level of reduction in output was modelled in the EcIA (EIS Appendix DD) using the Sheep, Grains, Beef and Dairy Cattle sector of the input-output model of the regional economy. The magnitude of the reduction in income was found to be very small and inconsequential to the regional economy and agricultural support industries.

As such, the mine development is expected to have minimal cumulative impact on agricultural productivity in the Blayney LGA.

Reliance on a Single Industry

The project represents the addition of a second major resource operation in the Blayney LGA. LGA employment in the mining industry sector and the economic contribution of the mining industry sector to local economic output will both increase substantially during the construction phase of the project as a result of the cumulative impact of the project and CVO.

The BSC and the broader Blayney community experience significant economic benefits as a result of the VPA with Newcrest for the CVO and the value of a special rates variation. BSC will enter into a VPA with Regis for the project. Regis will also be required to make significant rate payments to the BSC. The BSC and the broader Blayney LGA will then be the beneficiaries of two significant streams of income both of which originate from the mining industry. The project will therefore reinforce the Blayney LGA's existing economic reliance on the mining sector. However, the largest injection of economic benefit will occur during the 12 to 18-month construction phase. Once the operations phase commences the number of Blayney LGA residents employed in the mining sector will reduce. This will occur due to a reduction in job numbers between the construction phase and operations phase.

Housing and Short-Term Accommodation

Section 2.1.5 indicates the project may commence construction within a similar timeframe to future work proposed by Newcrest at the CVO. It is unclear from available information where Newcrest would source and/or accommodate its construction workforce. More than likely a large proportion of its construction personnel would be drawn from outside the Local Area from broader NSW and potentially other states (based on the experienced demand generated by the Cadia East Project). Assuming this is the case, the majority of incoming construction personnel associated with CVO would seek to reside as close as possible to these activities, likely in Orange and to a lesser extent Blayney.

Short-term accommodation options in the Blayney LGA were used to meet the workforce accommodation demands of the Cadia East Project. However, this was largely due to the

[174] Sustainable Soils Management, 2019.

significant size of the construction workforce associated with the Cadia East Project i.e. estimated 2000 workers. Despite this, given the relatively small supply of short-term accommodation options in Blayney LGA, and the anticipated workforce accommodation demands associated with the mine development, any additional, even small increase in demand for short-term accommodation on top of project related demand, is likely to have a cumulative impact on:

- Short-term accommodation supply and access for the non-mining sector e.g. tourism industry; and
- The cost of rental accommodation in Blayney LGA.

Short-Term Accommodation Supply

There is no information available as to the accommodation arrangements for the construction workforce associated with activities at CVO, however during the Cadia East Project contractors booked out entire hotels and motels in Orange, and temporary workforce accommodation was provided at the Blayney caravan park to meet workforce accommodation demands.

There is no approved temporary workforce accommodation facility located within the Blayney LGA. The anticipated accommodation demands of the project construction workforce are described in Section 6.2.5. The assessment indicates that the project workforce has the potential to take up all available short-term accommodation in the Blayney LGA during the construction phase of the project. Consequently, it is almost certain that if the construction phase of the project aligns with future construction phases at CVO, then the combined workforce accommodation demand will have a cumulative impact on short-term accommodation supply in the Blayney LGA. More than likely this will result in the displacement of the non-mining sector, including tourists from any short-term accommodation options in the Blayney LGA. There are numerous events that occur in Blayney LGA and neighbouring Orange and Bathurst LGAs that draw large numbers of tourists to the CW Region during the year. Any sustained reduction in the availability of short-term accommodation during these key events has the potential to impact event patronage.

Rental Housing

Even a small cumulative increase in accommodation demand will have some flow-on effects to the local housing market, particularly to the supply of rental properties. This is because of the size of the private rental market in Blayney LGA. It is almost certain that if the construction phase of the project aligns with future construction phases at CVO, then the combined workforce accommodation demand (even in circumstances where the demand generated by CVO is small) will have a cumulative impact on the availability of private sector rental accommodation in the Blayney LGA.

More than likely, this will result in the displacement of low-income households from cheaper private rental accommodation in the Blayney LGA as landlords chase higher yielding rents from the mining sector. This is particularly relevant to the Blayney township which has recently experienced an increase in demand for housing from low-income individuals and families.

A Workforce Accommodation and Management Framework (Section 7.3.3) has been developed for the project. This framework includes the preparation of a CWAS to address cumulative housing impacts.

Labour Draw

The cumulative project context may also lead to competition for construction labour and skills both locally and regionally, and contribute to a greater influx of non-local hires that will affect (temporarily) the population gender balance and community character. These impacts will require careful monitoring in the lead up to and throughout the project's construction period

The temporary increase in labour demand resulting from the cumulative project context will also drive significant demand for temporary construction labour. The size of the workforce associated with future construction work at CVO is unknown, however given the nature of the work the workforce is anticipated to be sizeable. During SIA consultation a few local businesses cited a number of negative impacts that arose due to labour draw during the construction phase of the Cadia East Project. Any significant increase in labour demand in Blayney LGA has the potential to result in labour draw from the non-mining sector e.g. agriculture, technical and trade services reducing productivity and impacting service delivery. This is because Blayney has a small pool of labour and a very small pool of unemployed labour.

Community Cohesion

The temporary increase in population resulting from the cumulative project context may have a temporary impact on population gender balance, community character and cohesion in Blayney LGA. A number of participants in SIA consultation highlighted some changes in the community that occurred during the construction of the Cadia East Project.

The influx of temporary population to Blayney has the potential to influence local community perceptions of safety with an increase in occurrence of antisocial behaviour frequently perceived by residents as associated with an influx of mine workers. There is potential for local people to feel alienated from local venues (such as pubs) due to the presence of large numbers of non-local workers.

Regis will work with Newcrest (and other relevant stakeholders) to coordinate activities and workforce management programs that minimise the impact of the temporary workforce on the community of Blayney.

Services and Facilities

The potential cumulative increase in temporary population in Blayney may also give rise to an increase in demand for medical services, broader health services and emergency services. There is potential for cumulative impacts on health services (i.e. demand for GPs and hospitals) and emergency services, which would need to be monitored.

6.5 MINE CLOSURE

6.5.1 Overview

The project has an anticipated life of 15 years inclusive of up to four years of mine closure and rehabilitation works. The mine life is relatively short in comparison to other mines located in the RAA (i.e. CVO). Given anticipated mine life, mine closure planning will need to commence early in the life of the project. This section considers the social implications of mine closure for near neighbours and the broader Blayney LGA.

As discussed in Section 5.3, the community of Blayney LGA has experience in managing and responding to the sudden and unplanned closure of major industry and economic contributors. Historically, reduced industry output and industry closure within the Blayney LGA has driven change in the social fabric of the community and structural change in the economy. More recently, a cycle of growth and contraction in existing industries e.g. CVO has influenced local population size and community structure.

6.5.2 Context

Mining projects have the potential to create social impacts across all project phases e.g. from exploration through to final decommissioning, as communities adapt to change. There is an increasing community and regulatory focus on the social, cultural and economic impacts of mine closure, largely resulting in increased awareness of potential negative social impacts[175]. Early consideration and planning for mine closure can contribute to reducing negative social impacts associated with mine closure and in turn can contribute to increasing potential benefits. For example, excessive dependency on a mining operation by a local community can be minimised and managed through the design of mine infrastructure and the support of community investment programs.

Current mine closure literature points to a need for integrated mine closure and consideration of potential final land use scenarios during initial mine design acknowledging that the design can have major implications for closure options in the future[176]. Integrated mine closure is a

[175] Owen and Kemp, 2018.

[176] Lamb and Coakes, 2012; Taylor, 2015; Costa, 2015.

dynamic and iterative process that takes into account environmental, social and economic considerations at an early stage of mine development[177].

There are limited case studies and research that demonstrate the social challenges associated with mine closure in Australia. This is primarily because there are few documented mine closure experiences and a lack of positive benchmarks on social closure[178]. There is a clear need to understand the social impacts of closure and to plan alternatives for local and regional longer-term development.

Whilst expectations with respect to closure are shaped by the populations' perceptions about the distribution and durability of the benefits derived from the mine, these expectations can be managed through the implementation of mine closure strategies. Early planning can reduce the risk of negative impacts occurring at closure, whilst also laying the foundation for post-mine opportunities[179]. A robust approach to mine closure planning considers community impacts and relevant mitigation strategies in both the lead up to mine closure and during mine closure[180].

Applying the SIA framework to mine closure is relevant when planning for closure. Both profiling the community and scoping the issues associated with closure is necessary to determine the risk of potential impacts and opportunities of mine closure. According to Lamb, K and Coakes, S (2012) a best practice approach to assessing the socio-economic impacts of mine closure involves a suite of tools that can be used at an operational level to assess the status of key community assets and capitals and in determining a community's sustainability when facing closure of a nearby mine[181]. A review of current and available mine closure literature confirms that these tools include:

- Community sensitivity analysis;
- Town resource cluster analysis;
- Multi-criteria analysis;
- Stakeholder mapping and values mapping; and
- Community needs assessment[182].

Throughout each of the tools a participatory process, whereby both the community and industry sectors participate in the closure process to help define the company's' social closure

[177] ICMM, 2019.
[178] CSRM (2014), op. cit., pp. 13.
[179] Taylo,r 2015. op. cit.
[180] Lamb and Coakes, 2012. op. cit., pp. 627.
[181] Lamb and Coakes, 2012, op. cit., pp. 627.
[182] Lamb and Coakes, 2012. op. cit., pp. 627; Costa 2015. op. cit., pp. 6.

strategy, is encouraged[183]. By including communities of interest in the planning and decision-making process a level of respect, trust and transparency is shared. Tools such as multi-criteria analysis can also assist in decision making and selection of potential closure options that may be more acceptable for consideration in closure planning[184].

6.5.3 Mine Closure Potential Impacts and Opportunities

The potential socio-economic impacts and opportunities associated with project closure (including decommissioning of the pipeline) are described in Table 29. Noting that the pipeline development has been initially designed with a 50+ year life. The only decommissioning planned relates to the isolation of water into the raw water dam.

Table 29
Potential Mine Closure Impacts and Opportunities

Category	Potential Impacts and Opportunities[185,186]
Economy	• Extensive job changes or loss and subsequent impacts such as financial stress due to lack of income • Reduced household incomes and increased welfare dependence • Decreased economic activity and economic diversification in the local area • Reduced local business diversity due to changes in local expenditure arising from a reduction in direct mine contributions and local spend from employees • Local population decline with flow on effects to residential property values • Residential property market adjustments • A shift in available employment opportunities from mining to other industries such as tourism, services, government and agriculture • Divestment from mine-owned and leased land and resulting impact on rates payable to BSC.
Services and Infrastructure	• Reduced government funding for services in an area due to population decline leading to a loss of staff and service diversity • Increased demands on community organisations and local social services and rising costs of essential services (e.g. fuel, power, telecommunications and water) • Fewer education and training options • Potential declining enrolments in local schools
Health and Wellbeing	• Stress and fear may arise due to uncertainty about the future of the mine and the community, and expectations regarding the impacts that will occur

[183] ICMM, 2019.
[184] Costa, 2015. op. cit., pp 6-8.
[185] CSRM, 2014.
[186] URS, 2013.

Category	Potential Impacts and Opportunities[185,186]
Population Demographics and Community	• Population and demographic change in host communities and nearby towns, including reduction in population retention • Changes in community structure and social connectedness if mine employees move from the local area • Reduced corporate investment in community development programs • Adjustments to local business, social infrastructure, communities and public governance arrangements

6.5.4 Mine Closure Strategy

Regis will undertake a mine closure SIA for the project approximately five years prior to the envisaged closure date. Regis is committed to actively planning for mine closure throughout the life of the mine and to adapting this planning as the local context requires. The mine closure SIA will draw on relevant national and international standards, as well as conventional social assessment practice, to refine an appropriate research design.

Table 30 outlines a preliminary scope of work for the completion of a mine closure SIA for the project. The scope described seeks to enable the identification of potential mine closure impacts and strategic options for Regis to plan for management of these impacts. The scope presented is derived from a review of mine closure literature, and in particular CSRM (2014). Stakeholder engagement is a fundamental component of the mine closure process and an integral to the successful execution of all elements described in Table 30.

Table 30
Preliminary Scope of Work - Mine Closure SIA[187]

Preliminary Scope of Work
1. Prepare an updated socio-economic baseline of the Blayney LGA
2. Understand the extent to which the project has acted as a platform for change within the Blayney LGA and the implications mine closure will have on the LGA and where relevant the broader region
3. Understand and define community expectations, priorities and concerns in respect to the closure of the mine
4. Determine the economic contribution the mine has made to the Blayney LGA and CW Region since commencement of construction
5. Understand the scope of formal and informal commitments made by Regis to the Blayney community over the life of the project e.g. VPA
6. Identify and describe the socio-economic opportunities and impacts of Regis presence within the community

[187] Derived from CSRM 2014, pp. 43.

Preliminary Scope of Work
7. Identify and where possible quantify the predicted social and economic impacts of mine closure on the directly affected communities e.g. near neighbours, Blayney and Blayney LGA
8. Identify practical and actionable recommendations that can help Regis to manage community relations in the lead up to mine closure and beyond
9. Identify opportunities, challenges and potential mechanisms to mitigate social impacts associated with mine closure and enhance opportunities
10. Through engagement with key stakeholders and the broader community, explore and define sustainable legacy opportunities for the mine and pipeline for Regis and key stakeholders that optimise social return on investment

To support the mine closure process, it is recommended that Regis investigate, develop and incorporate social closure goals and impact management strategies into the McPhillamys Gold Mine Closure Plan. Once decommissioning and closure is underway, closure planning strategies and programs should be monitored to provide opportunities for adaptive management. An established monitoring program should evaluate the change process and facilitate learnings for the future.

7 MANAGEMENT, MONITORING AND REPORTING

7.1 INTRODUCTION

This section describes the approach to the management, monitoring and reporting of social impacts for the project, and includes a:

- Description of the mitigation measures incorporated into project design to avoid social impacts and minimise the magnitude of predicted impacts;
- Description of the key tools to be developed to manage potential social impacts;
- Set of management frameworks to address key areas of impact and to support the implementation of management actions; and
- Description of the approach to impact monitoring, reporting and review.

7.2 ACTIONS TO AVOID AND MITIGATE

7.2.1 Project Design

Iterative project planning, informed by the baseline studies described above and a range of other related technical studies e.g. NVIA (EIS Appendix L), VIA (EIS Appendix S), has allowed a range of social impacts to be avoided and others to be minimised throughout the life of the project.

The following specific actions have been taken in the design of the project and the final site layout to avoid and minimise potential social impacts:

- Assessment of multiple site access options in order to improve road safety outcomes;
- Inclusion of the pit amenity bund and southern amenity bund in project design to minimise amenity impacts to the Kings Plains locality;
- The siting of the mine infrastructure area between existing topographic features to achieve screening from many sensitive external view locations;
- Exclusion of all areas of Biophysical Strategic Agricultural Land (BSAL) from the mine disturbance area to minimise loss of agricultural land and limit impacts to the agricultural industry sector;
- Avoiding the disturbance of approximately 118.8 ha of vegetation due to project layout changes. In particular, the extent of the TSF was reduced (through the use of additional embankments in the north) to reduce the disturbance of Box Gum woodland.
- Maintaining existing vegetation (specifically canopy trees) and a vehicle and work free area on the open cut hill on the lower external faces;
- Timely construction and implementation of progressive WRE rehabilitation during mining operations to reduce visual effect levels;

- Re-scheduling of the construction of the WRE from the original planned north to south progression, to a south to north progression, so as to improve noise levels in Kings Plains. This change was made so as to ensure that mobile equipment will be working behind the emplacement, rather than the active face being towards the residences to the south, as would be the case if the emplacement progressed north to south;
- Inclusion of a commitment to use dust suppressants in the water truck, which will significantly increase the effectiveness of watering haul roads in reducing dust emissions;
- All exposed conveyors and the fine ore stockpile will be covered;
- Real time noise and meteorological monitoring will be implemented to enable proactive management of operations such that noise and dust limits are adhered to; and
- Implementation of micro-topographic design in the final landform development to achieve more natural land form outcomes in relation to the WRE.

7.2.2 Key Management Tools

Table 31 outlines the key tools to manage the potential social impacts of the project and enhance potential opportunities. Additional actions described in Sections 6 will support the implementation of these management tools.

Table 31
Summary of Key Management Actions

Actions	Description
VPA	Regis has commenced negotiations with BSC in relation to the development of a VPA for the project. The core components of the VPA are likely to include: • A one-off financial payment to BSC on the granting of the development consent; • Annual financial payments to BSC for the life of project from the commencement of construction; and • A one-off financial payment to BSC for any required road upgrades.
Corporate Volunteer Strategy	Regis will develop a Corporate Volunteer Strategy to encourage the workforce to participate in community organisations and activities. The strategy will position volunteering as an asset that is supportive of the vision and aspirations of the Blayney LGA community and supported by Regis.
Stakeholder Engagement Plan (SEP)	Regis will prepare a SEP for the construction phase and the operations phase of the project. The SEP will provide the framework for ensuring all relevant stakeholders, and in particular residents of the PAA remain informed of key project activities and the project schedule.
Project CCC	The Project CCC will continue to operate for the life of the project. The Project CCC's key role will be to foster dialogue between Regis, the community and key stakeholders regarding the project. The CCC will aim to provide community members with a voice, and will give Regis a structured process for addressing community interests and concerns.

Actions	Description
LCP	Regis will prepare a LCP for the construction and operations phases of the project. The LCP will be developed to align with the Australian Government's Australian Industry Participation Plan and to encourage local business participation. Regis is maintaining a register of local businesses interested in project procurement opportunities. The LCP will include an assessment of local contractor capabilities and a detailed analysis of existing local enterprise and the skills / education base of local residents. Wherever possible, project supply and workforce requirements will be matched with existing capabilities in the local community. The LCP will also identify strategies to build local capacity where it is lacking through workforce recruitment and training models focused on local and regional communities. To support the LCP, Regis will participate in industry events to engage industry stakeholders and local businesses and facilitate capacity building.
Recruitment and Training Strategy	Regis will prepare a Recruitment and Training Strategy (RTS) for the project. The RTS will consider a range of employment options to encourage a higher rate of local labour force participation. The strategy will target disadvantaged groups through initiatives such as part-time and/or flexible employment and mature aged placement programs. These initiatives will provide an opportunity to increase labour force participation rates and, combined with employment training and economic investment initiatives, will lead to an increase in the local skill capacity and potentially increase the number of local hires over time as underground mining progresses. Regis is committed to maximising the creation of employment opportunities for young people in the Blayney LGA. This will include engagement with BHS and key training providers such as TAFE NSW in the aim of further defining and improving available training resources and capacity in the provision of apprenticeships, training programs and skill development opportunities.
Construction Workforce Accommodation Strategy	A detailed CWAS will be developed following project determination. The strategy will be prepared in consultation with BSC, Orange360, key accommodation providers and where necessary proponents of existing or new major projects in the Blayney LGA. The strategy will: • Demonstrate how the construction phase workforce will be accommodated across the Local Area; • Demonstrate how workforce accommodation requirements will be managed during periods of high demand e.g. during key regional events such as Bathurst 1000; • Document the approach to informing accommodation providers of predicted project workforce accommodation demands including anticipated timing; • Enable the coordinated placement of the workforce in tourism accommodation throughout the Local Area; and • Keep key stakeholders informed of predicted project accommodation demands across the construction phase.
IPP	Regis will prepare an IPP for the project in consultation with the OLALC, the BLALC and other relevant stakeholders. The IPP will map details of existing Indigenous businesses and identify regional 'pockets' of potential Indigenous labour supply (e.g. those areas with high levels of Indigenous unemployment). The IPP will aim to identify particular job positions and supply work packages that will be targeted for Indigenous inclusion, and appropriate training and development programs will be outlined to support this objective.

Actions	Description
Social Impact Management Plan (SIMP)	A SIMP will be prepared for the project following project determination. The SIMP will document the predicted impacts and opportunities of the project and provide a detailed framework for the management, monitoring and reporting of social impacts. The SIMP will be prepared in consultation with the BSC, Project CCC and other interested and relevant stakeholders.
Complaints and Grievances	Regis will develop a Complaints and Grievance Procedure for the project. The procedure will ensure stakeholder issues, complaints and grievances are identified, addressed, recorded and reported such that the project can demonstrate how Regis is responding to stakeholder concerns.
Mine Closure SIA and Management Plan	Regis will commence the preparation of a Mine Closure SIA and Management Plan at least five years prior to the potential Mine Closure and update the plan three years prior to mine closure. The Mine Closure SIA will be prepared in accordance with the strategy defined in Section 6.5.4 and any new leading practice in mine closure.

7.3 MANAGEMENT FRAMEWORKS

This section presents three management frameworks which seek to:

- Ensure residents of the PAA and broader community remain informed on the project, the project approvals process;
- Mitigate and manage the project's social impacts on the communities of the PAA; and
- Mitigate and manage the impact of the project workforce on the Blayney LGA particularly with regards to workforce accommodation.

The three management frameworks presented are:

- Stakeholder Engagement Framework;
- Near Neighbours Impact Management Framework; and
- Workforce Accommodation and Workforce Management Framework

7.3.1 Stakeholder Engagement Framework

The Stakeholder Engagement Framework seeks to address stakeholder concerns in relation to the quality and availability of relevant project information. It is a critical measure for managing stress and anxiety in the community, particularly within the PAA in relation to the project. Table 32 provides a framework to guide project engagement strategies.

Table 32
Stakeholder Engagement Framework

Objectives	• Provide transparent, consistent and inclusive stakeholder engagement which seeks to ensure all near neighbours have access to up-to-date and adequate information about the project, its activities, workforce and schedule to support impact management and monitoring. • Ensure stakeholders have direct access to project representatives who can answer their questions about the project and its' potential impacts. • Ensure stakeholder issues, complaints and grievances are identified, addressed, recorded and reported such that the project can demonstrate how Regis is responding to stakeholder concerns. • Build relationships which support communication, information sharing and feedback to assist decision making with regard to construction and operations phase impacts. • Facilitate opportunities for interaction between Regis employees and local residents to contribute positively to community cohesion and development. • Ensure stakeholders are aware of the Project CCC, and the CCC meetings and minutes. • Ensure the BSC, short-term accommodation providers and all relevant government and non-government service providers are provided with adequate information to enable informed decisions about accommodation and service provision to support project delivery.
Key Government Policies	*NSW Community Consultative Committee Guidelines for State Significant Projects.* *NSW Voluntary Land Acquisition and Mitigation Policy (VLAMP) for State Significant Mining, Petroleum and Extractive Industry Developments.*

Actions	Stakeholders	Timing	Performance Measures
EIS Exhibition Consultation Program			
• Ensure all residents of the PAA and other key stakeholders are made aware of the EIS exhibition period and have access to project staff to discuss the findings. • Undertake tailored consultation with residents of the PAA to ensure all residents are informed of the: – Nature and magnitude of predicted impacts at their private property; – Measures to manage and or mitigate predicted impacts; and – Opportunities for compensation or property acquisition. • On request from stakeholders, particularly residents of the PAA, facilitate access to the EIS Technical Reports. • Initiate contact with other relevant stakeholders to alert them to the EIS exhibition and offer to meet to discuss any concerns. • Present EIS findings to Project CCC.	Residents of the PAA. Broader Blayney community. Key stakeholders and interest groups.	2019	CCC meeting minutes are made available on Regis' Project website. Liaison with property owners as agreed. Evidence of engagement with near neighbours, broader Blayney community and key stakeholders.

Actions	Stakeholders	Timing	Performance Measures
• Offer to meet with downstream landowners to discuss the EIS findings. • Offer to meet with the BHPG to discuss the EIS findings.			
Pre-Construction Engagement Program			
• Prepare a Construction Phase Stakeholder Engagement Plan (CP SEP) for the project prior to the commencement of the construction phase. The CP SEP will document the key actions to be taken to keep residents of the PAA and the broader community including the BSC and government and non-government stakeholders informed of the timing and progress of the construction activities. • Appoint a single point of contact in Regis for stakeholder engagement. • Commence engagement with key stakeholders in relation to the development of the CWAS. • Commence engagement with relevant stakeholders in relation to the preparation of the project SIMP. • Engage with relevant key stakeholders to progress the development and implementation of the management strategies defined in the SIA. • Provide advance warning to residents of the PAA of the closure of Dungeon Road. • Inform residents of the PAA of the blast notification process. • Engage with residents of the PAA to complete structural engineering surveys of residential buildings located within the Blast Management Zone (BMZ), or on the request of residents. • Maintain the project website as the key platform for communication of consistent project messaging. • Ensure Project CCC meetings continue as scheduled and meeting minutes are made available on the project website immediately following meetings. • Establish a complaints management process to facilitate resolution of community complaints relating to project activities or personnel. • Maintain and publish the project's complaints register online, including information about the nature of the complaint and responsive actions. • Report to the Project CCC and through the Annual Review regarding community complaints.	Residents of the PAA. Broader Blayney community. Key stakeholders and interest groups.	During project approvals process	SIMP prepared. Actions to manage social impacts refined. Structural engineering surveys completed. Regis website is up to date. Project CCC minutes are available on the website. Complaints and Grievances Procedure established. Reporting of complaints and grievances records.
Construction Communication and Engagement Program			

Actions	Stakeholders	Timing	Performance Measures
• Maintain the project website as the key platform for communication of consistent project messaging. • Ensure Project CCC minutes are made available immediately on the project website following meetings. • Maintain transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS. • Use appropriate media to disseminate current project information and demonstrate how community feedback has been considered in project execution. • Provide blasting notifications in advance to provide predictability and increase residents' level of comfort with blasting events. • Provide advance notification to residents of the PAA as to the timing of the transition of construction activities from day time only to 24 hour/7 day a week construction. • Maintain the project's complaints register online, including information about the nature of the complaint and responsive actions.	All near neighbours. Broader Blayney community.	Following project approval and during the CP.	CCC meeting minutes made available on Regis' project website. Liaison with property owners as agreed. Evidence of engagement with near neighbours, broader Blayney community and key stakeholders. Formal notification to PAA residents of key site activities. Reporting of complaints and grievances records.
Operations Communication and Engagement Program			
• Prepare and implement an Operations Phase SEP (OP SEP) for the project. • Provide regular updates to the Project CCC on the implementation of the SIMP. • Provide regular updates to the local community through Regis' website and local media. • Maintain regular liaison with all near neighbours. • Provide blasting notifications in advance to provide predictability and increase residents' level of comfort with blasting events. Noting that as the project progresses the blasting schedule will be regular and consistent and only exceptions will need to be advised. • Timely and regular provision of impact monitoring results (including air quality, noise, vibration and groundwater), with sufficient supporting information to enable community members' interpretation of how monitoring data relates to the project's compliance requirements, through the CCC and Regis' website. • Maintain and publish the project's complaints register online, including information about the nature of the complaint and responsive actions.	Near neighbours.	OP.	SIMP. Project CCC minutes made available on Regis project website. Reporting of complaints and grievances records.

Notes:

CP – Construction Phase

OP – Operations Phase

LOM – Life of Mine

7.3.2 Near Neighbours Impact Management Framework

The Near Neighbours Impact Management Framework (Table 33) seeks to address the predicted social impacts of the project on residents of the PAA, and in particular residents of the Kings Plains locality.

Table 33
Near Neighbours Impact Management Framework

Objectives	• Develop good neighbour relations based on regular, transparent and responsive engagement. • Minimise impacts to the quality of resident's existing rural way of life through monitoring, engagement and adaptive management. • Minimise potential for changes to the structure and social connections within the Kings Plains community. • Support residents of the Kings Plains locality to make decisions about their future based on the predicted social impacts. • Alleviate anxiety regarding impacts on property values, water resources and future planning through continued engagement and the timely release of information and results.
Key Government Policies	*NSW Community Consultative Committee Guidelines for State Significant Projects.* *NSW Voluntary Land Acquisition and Mitigation Policy (VLAMP) for State Significant Mining, Petroleum and Extractive Industry Developments*.

Actions	Timing	Performance Measures
Regular, Transparent and Responsive Engagement		
During EIS Exhibition: • Ensure all residents of the PAA are made aware of the EIS exhibition period and have access to project staff to discuss the findings. • Undertake tailored consultation with residents of the PAA to ensure all residents are informed of the: – Nature and magnitude of predicted impacts at their private property; – Measures to manage and or mitigate predicted impacts; and – Opportunities for compensation or property acquisition. • Ensure all residents of the PAA are made aware of the publicly available EIS Technical Reports and where these reports can be accessed. • Continue to engage with those near neighbours who are predicted to experience significant amenity impacts to identify suitable at private property treatments.	2019 during EIS Exhibition.	Liaison with property owners as agreed. Evidence of engagement residents of the Kings Plains locality and broader PAA. Interested residents of the PAA understand the extent to which they will potentially be impacted by the project.
Prior to the commencement of construction: • Prepare a near neighbours Construction Phase SEP (CP SEP). The near neighbours CP SEP will document the key actions to be taken to keep residents of the PAA informed of the timing and progress of the construction activities including, but not limited to:	In parallel with PA process.	Near neighbours CP SEP prepared and communicated to all residents of the PAA.

Actions	Timing	Performance Measures
– Closure of Dungeon Road; – Change in construction hours from day time only activities to 24 hour/7 day activities; – Blasting activities; – Results of environmental monitoring; and – Commencement of the site intersection construction and implications for local connectivity. • Establish a complaints and grievances management procedure to facilitate resolution of community complaints relating to project activities or personnel.		Complaints and grievances management procedure established.
During Construction Phase: • Timely and regular provision of environmental monitoring results (including air quality, noise, vibration and groundwater), with sufficient supporting information to enable community members' interpretation of how monitoring data relates to the project's compliance requirements, through the CCC and Regis' website. • Maintain regular liaison with nearby property owners. • Complaints and grievances management procedure	CP.	Environmental monitoring results made available on the Regis website. Timely response to complaints and grievances.
Prior to the commencement of operations: • Prepare a near neighbours Operations Phase SEP (OP SEP). The near neighbours OP SEP will document the key actions to be taken to keep residents of the PAA informed of the progress of operations including, but not limited to: – Key project staff (given changeover from construction to operations); – Any changes in operations hours; – Proposed maintenance and shutdown periods; – Status of project workforce size; – Regis sponsored community events; – Results of environmental monitoring undertaken; – Progress of Regis exploration activities in other areas of the Blayney LGA; and – Progress of rehabilitation activities.	Prior to the commencement of OP.	Near neighbours OP SEP prepared and communicated to all residents of the PAA.
Following the commencement of operations: • Implementation and regular review and evaluation of the near neighbours OP SEP. • Maintain regular liaison with nearby property owners.	OP.	OP SEP implemented. Regular review and evaluation of OP SEP completed.

Actions	Timing	Performance Measures
Stronger Rural Communities		
Minimise potential outmigration of existing residents of the PAA and in particular the Kings Plains locality and settlement by: • Engaging in and maintaining transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS, to address perceptions of uncertainty. • Developing property-specific management plans in agreement with individual landholders within the Kings Plains locality. These management plans will incorporate tailored strategies e.g. installation of air-conditioning or double glazing, landscaping and screening, to reduce amenity impacts of the project at private residences and will seek to address resident concerns in relation to impacts. • Demonstrating to the surrounding community, an ability to develop the mine and comply with all necessary regulatory requirements. • Establish agricultural lease arrangements with suitable landholders for Regis owned land located outside of the mine disturbance boundary.	CP and OP.	Workforce participation in local community organisations and increased volunteerism. Number of workforce residing in Kings Plains and Regis owned properties.
Encourage operations phase project employees to reside in Regis owned properties ,e.g. by providing attractive rental rates or offering accommodation as part of employment contract.	OP.	A portion of the project operations phase workforce resides in the PAA.
In cases of property acquisition, offer landholders a first buy-back opportunity at the cessation of mining activity.	During PA process.	Property acquisition contracts include first buy-back condition.
Support the sustainability of the Kings Plains RFB by: • Encouraging the operations phase workforce to join the Kings Plains RFB • Support the Kings Plains RFB to be adequately resourced (human resources) and equipped for fire-fighting • Develop a corporate volunteer strategy to demonstrate Regis commitment to encouraging its employees to participate in volunteering activities within the Blayney LGA.	OP.	The workforce is represented on the Kings Plains RFB.
Ensure suitable access is maintained to Vittoria Road or Mid Western Highway for Regis tenants on land located outside the mine disturbance area.	Prior to commencement of CP.	Regis owned residences located outside the mine disturbance area have suitable connectivity to the Mid Western Highway or Vittoria Road.

Actions	Timing	Performance Measures
Advocate on behalf of near neighbours for funding through the project VPA to be directed at managing or offsetting social impacts in the PAA.	During the PA process and ongoing.	Discussions held with BSC regarding VPA spend in PAA.
Conduct a detailed oral history of the Kings Plains locality in consultation with past and present members of the Kings Plains community.	Following project determination.	History of Kings Plains recorded.
Conduct further analysis of the dimensions of sense of place in the Kings Plains locality to understand the adaptive capacity of the Kings Plains community and opportunities for collaboration to support adaption to the presence of the mine. Collaborative opportunities may present in the rehabilitation and mine closure planning and implementation process, or in the biodiversity stewardship program.	During the PA process.	Collaborative opportunities identified for Kings Plains residents.
Implement a communications strategy that informs near neighbours of the future anticipated changes to the environment within the mine project area. The purpose of this is to reduce the sudden impact of the landscape changes resulting from the commencement of project construction. Potential tools to be utilised include 3D Animations and visual montages.	During the PA process.	Evidence of further engagement.
Support Resident Health and Wellbeing		
To reduce uncertainty in relation to the potential health impacts of the project, Regis will: • Engage in and maintain transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS, to address perceptions of uncertainty. • Complete a HIA for the project in parallel with the project approvals process and communication of HIA results to residents. • Operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent. • As required on a requested case by case basis, provide to households in the PAA first flush systems (or equivalent suitable system) on existing rainwater tanks. • Offer air conditioning and/or double glazing on a case by case basis and on request to residents in the Kings Plains locality. • Continue to implement a public education campaign in relation to the transport, use and management of cyanide on site. • Clearly communicate to all residents of the PAA their rights in relation to property acquisition and compensation. • Ensure residents of the PAA have access to environmental monitoring results by making the results available on the project website. • Demonstrate compliance with relevant conditions of consent and report performance to the community through the Project CCC.	Ongoing through PA process.	HIA completed and communicated to residents of the PAA. Property mitigation agreements and solutions agreed with land owners.

Actions	Timing	Performance Measures
To address resident stress and anxiety in relation to the potential amenity impacts Regis will: • Engage in and maintain transparent, evidence-based and ongoing dialogue with concerned property owners and other community members, based on the results of the EIS, to address perceptions of uncertainty. • Continue to engage with all near neighbours who are predicted to experience significant amenity impacts in relation to the identification of suitable at private property treatments, documented through a property management plan. • Install noise monitoring systems to the south and west of the site to deliver real-time monitoring data. In the case of exceedances, construction and operations will automatically stop work and develop measures to work within compliance. • Provide blasting notifications in advance to provide predictability and increase residents' level of comfort with blasting events.	Ongoing during PA process.	Property management plans agreed with relevant residents of the PAA.
To address resident stress and anxiety in relation to uncertainty around water impacts outside of the mine project area, Regis will: • Communicate to residents of the PAA the process for raising and investigating concerns in relation to off-site groundwater impacts and the related compensation arrangements. This will include the application of make good arrangements such as the provision of compensatory water supply measures. • Ensure the results of the ongoing groundwater monitoring program are accessible to all bore holders in the PAA. • On request from landholders within the PAA, Regis will install and monitor groundwater bores on private property.	Prior to commencement of the CP and ongoing.	Results of groundwater monitoring provided to all bore holders in the PAA. Groundwater monitoring bores installed on request from landowners.
To address residents stress and anxiety in relation to the impacts of blasting on private property, Regis will undertake pre blast engineering surveys of private properties within the blast management zone and on request from landowners located outside the zone but within a reasonable distance.	Prior to commencement of the CP.	Pre blast engineering surveys completed for all relevant landowners.
Minimise Impacts to Rural Way of Life		
Regis will minimise project related traffic impacts on local road networks in the PAA through: • Encouraging the construction and operations phase workforce that do not live adjacent to Vittoria Road and Guyong Road or where an alternative route to the project area would take significantly longer, to use an alternate route to the project area. • Conducting logistics scheduling in a manner that ensures project related vehicle movements on the road network during both construction and operation are planned to occur outside school drop off and pick up periods. • Providing mini bus transport between Blayney and the mine project area for the construction workforce, encouraging public and road safety. • Identifying and implementing a program to encourage the operations phase workforce residing in Blayney, Orange and Bathurst to car pool for commuting to the mine project area. • Requiring all contractors and subcontractors based in Orange LGA and Cabonne LGA to use the alternate route to the project area. Buses used to transport workers will also use this route. • Installation of truck advanced warning signage 300 m in advance of the intersection to the mine project area in both directions along the Mid Western Highway.	CP.	TMP.

Actions	Timing	Performance Measures
To minimise the visual impacts of the project for residents of the PAA, Regis will: • Implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the Project including ensuring that all external lighting associated with the Project complies with *Australian Standard AS4282 (INT) 1997 – Control of Obstructive Effects of Outdoor Lighting*, or its latest version. • In consultation with residents, develop visual impact management plans for all private property within the PAA likely to have significant direct views of the mining operations from the residence and/or its associated facilities.	CP.	Property-specific management plans established
To minimise project related noise and blasting impacts on the PAA Regis will implement the following actions: • Blasting will be carried out between the hours of 8:00 am to 4:00 pm, as recommended by the AQA, Monday to Saturday. Blasting will generally not be carried out on Sundays and public holidays. • Undertake attended noise monitoring at regular intervals in Kings Plains and along Guyong Road to confirm compliance with relevant noise criteria. • Undertake test blasts and monitor all blasts and maintain a blast log to provide a traceable system of documentation in case of incident or complaint. • In consultation with residents, develop property–specific plans for managing noise impacts e.g. installation of air conditioning or double glazing on request to significantly impacted residents. • Install noise monitoring systems south and west of the mine project area to deliver real-time monitoring data. In the case of exceedances, construction and operations will be reviewed and measures implemented to work within compliance. • Develop property specific management plans for landowners with stock and landowners engaged in equine activities who have potential to be affected by blasting activities.	CP and OP.	Blast Management Plan prepared Property-specific management plans established on request Management arrangements in place with relevant residents to minimise impacts to equine stock.

Notes:

PA – Project Approval

CP – Construction Phase

OP – Operations Phase

LOP – Life of Mine

7.3.3 Workforce Accommodation and Management

The Workforce Accommodation and Management Framework seeks to address the predicted impacts of the construction phase workforce on housing and short-term accommodation supply in the Blayney LGA. The framework is integral to ensuring workforce accommodation demands during the construction phase do not adversely impact the non-mining sector. Table 34 provides a framework for workforce accommodation management.

Table 34
Workforce Accommodation and Management Framework

Objectives	• Project workforce arrangements avoid placing upward pressure on housing prices, rental costs and housing demand in the communities of the Blayney LGA • Project workforce accommodation arrangements avoid reducing access to tourism accommodation for visitors to the Blayney LGA and broader Local Area. • Regis houses in the PAA are occupied by local tenants or the project workforce during the construction phase and operations phase. • Project workforce accommodation arrangements benefit local accommodation providers. • Cumulative housing impacts are proactively managed in partnership with relevant stakeholders
Key Government Policies	*Blayney Shire Council Settlement Strategy (revised)* *Blayney LEP* *Blayney Shire Community Strategic Plan 2018-2028* *Central West and Orana Regional Plan 2036*

Actions	Stakeholders	Timing	Performance Measures
Workforce Accommodation Planning			
• Strong focus on employing residents of the Local Area during all phases of the project. • Encourage construction contractors and suppliers to hire locally where possible.	Residents of the Local Area. Construction contractors.	CP and OP.	Where possible at least 50% of the mine development CP workforce are LHs. At least 80% of the OP workforce are LHs.
Prepare a detailed CWAS for the project that: • Demonstrates how the construction phase workforce will be accommodated across the Local Area; • Demonstrates how accommodation demand will be managed during periods of high demand e.g. during key regional events; • Documents the approach to informing regional accommodation provides of project workforce accommodation demands including anticipated timing; • Enables the coordinated placement of the workface in tourism accommodation throughout the Blayney LGA and other communities of the Local Area; • Keeps key stakeholders informed of predicted project accommodation demands across the CP; and • Contains a monitoring framework incorporating 'triggers' in decisions about additional accommodation options.	Key stakeholders including Housing Plus and BSC. Local housing support services. Broader Blayney community and short-term accommodation providers in Blayney LGA.	2019 – CP.	CWAS prepared and implementation.

Actions	Stakeholders	Timing	Performance Measures
• Accommodation coordinator role allocated to act as a single point of contact for real estate agencies and short-term accommodation providers throughout the Blayney LGA (i.e. through an individual advocate or through Orange360) and to coordinate workforce access to accommodation throughout construction.	Short-term accommodation providers and real estate agents in Blayney LGA.	Prior to commencement of CP.	Accommodation coordinator role allocated.
• Investigate the feasibility of establishing an accommodation database that can be used by all accommodation providers within Blayney LGA and neighbouring centres to regularly upload accommodation availability data to inform workforce accommodation planning.	Orange360.	During PA.	Facilitation of a central point for booking accommodation.
• Proactive engagement with the BSC prior to the commencement of the Construction Phase and throughout the operations phase to enable the BSC to make informed decisions regarding land and housing available to meet project and non-project related demands.	BSC.	Prior to commencement of CP.	Meetings with Housing Plus.
• Monitor local and regional housing market activity in the period prior to construction to inform the CWAS.	Housing Plus. BSC. Real estate agents in Blayney LGA.	During PA.	Monitoring reports and housing market data.
Housing and Accommodation Affordability and Accessibility for the Non-Mining Sector			
• Undertake further engagement with Housing Plus and other relevant housing support services to identify suitable actions to offset potential impacts (i.e. displacement) on low to medium income households in the Blayney LGA.	Housing Plus.	During PA.	Evidence of discussion with Housing Plus and identified actions to manage impacts.
• Seek to reduce construction activities and associated workforce requirements during peak regional events e.g. Bathurst 1000 to reduce project demands on short-term accommodation in Blayney LGA and release rooms for the non-mining sector.	Non-mining sector. Short-term accommodation providers.	During CP.	Number of workers remaining in short-term accommodation in Blayney LGA during regional events.
• Identify suitable contingency accommodation measures for the construction phase if required to minimise potential for displacement of lower socio-economic households from private rental accommodation.	Housing Plus. Lower socio-economic households.	During PA.	Contingency plans in place for workforce accommodation.

Actions	Stakeholders	Timing	Performance Measures
Operations Phase Workforce Accommodation Planning			
• Provide practical assistance to workers who are relocating to Blayney LGA to take up a permanent position on the project. • Offer workers who are relocating permanently to Blayney LGA or living in the Blayney LGA financial incentives as part of their total remuneration. Incentives may include rent subsidy for a period of time.	Project workforce.	OP.	Local hire numbers.
• Commitment that senior mine management will reside permanently in the Blayney LGA.	Senior mine management.	OP.	Number of senior mine management staff residing in Blayney LGA
• Encourage potential workforce to locate to the Blayney LGA by promoting the attractiveness of Blayney LGA and availability of services and facilities e.g. incorporate a town and regional tour into the employee recruitment process connecting with key services such as schools, health and childcare.	Potential workforce.	Prior to commencement of OP.	Number of new residents residing in Blayney. Completion and distribution of number of welcome packs and the appointment of a position.
• Ensure BSC is informed of the size of the workforce for each stage of the project, project timing and the anticipated number of NLHs to enable BSC to proactively plan for the release of residential land and the supply of new housing in Blayney LGA.	BSC.	Ongoing through to the OP.	Evidence of meetings held with BSC.
Management of Cumulative Impacts to Housing and Short-Term Accommodation During Construction Phase			
• Establish joint meetings with Newcrest and Infigen Energy regarding management and monitoring of the cumulative impacts of the additional construction phase workforces on housing affordability and availability in Blayney LGA. • Consult with BSC and Newcrest regarding cumulative impacts to housing availability and affordability, where a major expansion progresses at CVO. • Proactively engage with the BSC both prior to the commencement of the construction phase and throughout the construction and operations phases to enable the BSC to make informed decisions regarding land and housing availability to meet cumulative accommodation demands.	CVO. BSC. CC	2019 ongoing.	Number of meetings with CVO. Recorded engagement with CVO and other Major Projects in the area. Engagement with BSC and CC.
• Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact of the project on the housing market to allow for adaptive management.	Housing Plus. BSC. Real estate agents in Blayney LGA.	During PA and ongoing.	Monitoring reports and housing market data.

Notes: PA – Project Approval; CP – Construction Phase; OP – Operations Phase; LOP – Life of Mine

7.4 MONITORING, REPORTING AND REVIEW

7.4.1 Monitoring

The monitoring and evaluation of social impact management activities is important in understanding how programs are performing against expected outcomes and how successful these programs are at mitigating or managing identified impacts. A detailed monitoring program will be described in the project SIMP to be prepared following project determination. Table 35 lists the primary tools proposed for monitoring the effectiveness of the management measures defined within Section 6 and Section 10.

Table 35
Social Impact Monitoring Tools

Monitoring Tool	Type	Frequency	Purpose
Employment records	Quantitative	Six monthly	Monitor employment diversity (gender, Indigenous status), local residency, journey to work etc.
Complaints and grievances	Quantitative and qualitative	Quarterly	Monitor community complaints, issues and suggestions regarding the project, including any follow-up conversations conducted by Regis.
Procurement records	Quantitative	Six monthly	Monitor project spend on goods and services with local and regional business, including sub-contractors.
Housing market data	Quantitative	Quarterly during Year 1 and six monthly thereafter	Monitor changes in house prices and rentals, vacancy rates, motels and temporary accommodate.
Social statistics for the PAA and SAA	Quantitative and qualitative	Annual	Monitor population change
Social statistics and engagement with service providers	Quantitative and Qualitative	Six monthly until Year 3	Monitor changes in service provider statistics (hospital admission rates, GP attendance, school enrolments, emergency response and reported crime).
Attendance records	Quantitative	Annual	Monitor workforce and community participation in education and training programs, induction programs, local sports events, local business forums and business events.
Workforce survey	Qualitative	Annual	Record workforce perceptions about general wellbeing, family functioning and community issues.
Survey of residents of Blayney LGA	Quantitative and Qualitative	Biannual	Record community perceptions about company reputation, workforce integration into the community,

Monitoring Tool	Type	Frequency	Purpose
			access to local services, and specific project impacts.
Local business survey	Qualitative and Quantitative	Biannual	Record perceptions about access to the supply chain, tender opportunities, and business engagement and support programs.
Indigenous community focus groups	Qualitative	Annual	Record perceptions about engagement of Indigenous community in employment and business opportunities related to the project. Seek feedback regarding emerging concerns or opportunities of cultural and/or historic significance.
Kings Plains residents focus group	Qualitative	Annual	Record perceptions of performance, issues of concern and perceived liveability.
Project CCC meeting minutes	Qualitative	Quarterly	Review issues raised and feedback received on initiatives progressed.
Annual report from the Project CCC Chairperson	Qualitative	Annual	Review of activities conducted by the Project CCC.

7.4.2 Reporting and Review

Communicating the results of monitoring activities is important in providing information on social impact management activities to the community and stakeholders. Monitoring will provide Regis with important data on whether the objectives of program activities are being met and if management performance goals are being achieved. This enables impact management activities to be adapted to improve overall impact management performance.

Regis will report against the monitoring mechanisms defined in Table 35 as part of the Annual Review for the project. Every three years the identified monitoring mechanisms will be reviewed for effectiveness as a part of the SIMP review process.

7.4.3 Project CCC

The CCC plays a critical role in the monitoring, reporting and review process. As set out in the NSW Government's *Community Consultative Committee Guideline for State Significant Projects*[188], Regis will regularly provide the Project CCC with timely, accurate and comprehensive reports on the project's operations and performance on its environmental management and community relations. Regis will also publish the minutes of all Project CCC

[188] NSW Government, 2019.

meetings on the project website. In accordance with the CCC Guideline, Regis will provide the Project CCC with copies of:

- The project's consent and other relevant documents including management plans;
- Results of environmental monitoring;
- Annual review or compliance reports;
- Audit reports;
- Reports on community concerns or complaints and the proponent's responses to these matters; and
- Any other information specified by the DPIE.

The Project CCC will be provided with the outcomes of the social impact monitoring. The Project CCC will be provided with an opportunity to comment on the first draft of the SIMP (including the monitoring, reporting and review framework) when it is prepared post project determination. Future versions of the SIMP will be provided to the Project CCC at the same time they are submitted to the DPIE and BSC.

8 IMPACT SIGNIFICANCE ASSESSMENT

8.1 OVERVIEW

This section presents the outcomes of the significance evaluation of the social impacts and opportunities of the mine development identified and discussed in Section 6. The assessment of impact significance is based on the methodology described in the SIA Guidelines and summarised in Section 3.3.5 and Appendix B which includes a combination of social risk assessment (Table 36) and spatial and temporal analysis of the social impact.

The Social Risk Matrix (Table 36) has been used to quantify each social impact and opportunity.

Table 36
Risk Rating Matrix

			Consequence Level				
			1	2	3	4	5
			Minimal	Minor	Moderate	Major	Catastrophic
Likelihood Level	A	Almost Certain	A1	A2	A3	A4	A5
	B	Likely	B1	B2	B3	B4	B5
	C	Possible	C1	C2	C3	C4	C5
	D	Unlikely	D1	D2	D3	D4	D5
	E	Rare	E1	E2	E3	E4	E5
Social Risk Rating							
	Low		Moderate		High		Significant

Source: DPE, 2017.

An initial evaluation of social risk, using Table 36 was undertaken prior to consideration of management and mitigation measures. The outcomes of the risk assessment informed the need, or otherwise for the development of the project specific strategies described in Section 6. An evaluation of the residual risk was then completed and a final significance ranking of 'low', 'moderate' or 'high' was determined.

In general, a 'significant' or 'high' social impact indicated that project-specific social management is required to be implemented, which if successfully implemented by Regis, would seek to reduce the significance of the social impact.

8.2 IMPACT SIGNIFICANCE ASSESSMENT

The outcomes of the impact significance assessment are presented in Table 37, Table 38, Table 39 and Table 40.

Table 37 and Table 38 summarise the:

- Predicted social impacts for the PAA (Table 37) and the SAA (Table 38) resulting from the project proceeding;
- Stakeholders potentially affected;
- Predicted duration of the impact;
- Predicted project phase in which the impact will occur;
- Level of stakeholder concern identified during consultation in relation to the predicted impact;
- Evaluation of the risk associated with the potential social impact, in the absence of specific mitigation strategies other than those already incorporated into the design of the project (Unmitigated Risk);
- Evaluation of residual risk (Mitigated Risk), in consideration of project-specific social management strategies; and
- Final significance rating.

Table 39 presents the outcomes of the significance evaluation of potential project opportunities and summarises the:

- Predicted social opportunities for the SAA;
- Stakeholders potentially affected;
- Predicted duration of the impact;
- Predicted project phase in which the opportunity will be realised;
- Evaluation of the opportunity in the absence of specific enhancement strategies other than those already incorporated into the design of the project;
- Evaluation of enhanced opportunity in consideration of project-specific social enhancement strategies; and
- Final significance rating.

Table 40 presents the cumulative social impact significance assessment.

Only social impacts and opportunities with a significance rating of high or moderate are included in these tables. Appendix G contains the outcomes of the significance assessment for the full suite of social impacts and opportunities.

Table 37
PAA Mine Development Significance Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.2	Impact to sense of place due to adverse changes in valued attributes of the local area (i.e. the landscape and the natural environment, and community)	Residents of Kings Plains locality and people with historical connection to the land and locality	Long-term. Impact most significant in the initial construction phase when landscape changes are most significant.	Life of Mine	H	A4	B3	H
6.3.2	Rural amenity of near neighbours is reduced due to the impact of cumulative biophysical changes i.e. noise levels and a reduction in visual quality	Residents of Kings Plains locality and some near neighbours to the west and north of the mine project area	Long-term. Impact greatest in first 1-3 years when the southern amenity bund is under construction	Life of Mine	H	A4	B3	H
6.3.2	Residents experience reduced enjoyment of outdoor spaces at night due to intrusive lighting and resulting impacts on dark skies.	Residents of Kings Plains locality and some near neighbours to the west and north of the mine project area	Long-term	Life of Mine	H	A4	C3	H
6.3.6	Perceived reduction in the value of private property due to proximity of the mine development and anticipated amenity impacts property	All residents of the PAA	Long-term	Life of Mine	H	B4	C4	H

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.3	Mine development impacts the cultural ecosystem services accessed by residents	Residents of the Kings Plains locality and some neighbours to north and west of the mine project area	Long-term	Life of Mine	H	A4	C3	H
6.3.3	Mine development impacts the provisioning ecosystem services accessed by residents	Residents of the Kings Plains locality, some neighbours to north and west of the mine project area and commercial apiarists	Long-term	Life of Mine	H	A4	B4	H
6.3.4	Fragmentation of Kings Plains community and potential changes to social cohesion	Residents of Kings Plains	Medium-term. Impact likely to be most significant during Year 1 – Year 3 when cumulative amenity impacts are predicted to be greatest	Construction Phase and initial years of Operations Phase	H	A4	B3	H
6.3.4	The mine development impacts the existing rural way of life	Residents of the Kings Plains locality and some residents of located to the north and west of the mine project area	Long-term	Life of Mine	H	A4	B3	H

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.5	Resident health and wellbeing is affected by the stress and anxiety associated with project uncertainty	Residents of Kings Plains locality and some residents in the broader PAA	Medium-term	Construction Phase and initial years of Operations Phase	H	A4	C3	H
6.3.5	Resident health and wellbeing is affected by sleep disturbance resulting from the noise and vibration impacts of the mine development	Residents of the Kings Plains locality	Medium-term. Year 1 – Year 3 when the southern amenity bund is under construction	Operations Phase	H	B4	C3	H
6.3.5	Resident health and wellbeing is affected by sleep disturbance resulting from the noise and vibration impacts of the mine development	Residents of the Kings Plains locality	Long-term. Beyond Year 3	Operations Phase	H	C3	C2	M
6.3.3	Changes in groundwater accessibility impact agricultural livelihoods	Residents of the PAA	Long-term	Life of Mine	H	C4	D2	M
6.3.3	Mine development has an economic impact on existing commercial apiarian businesses	Existing apiarian businesses	Medium-term	Construction and Operations	H	A4	D3	M
6.3.3	Mine development reduces access to surface water or ground water resources at private properties	All residents of the PAA	Long-term	Life of Mine	H	D4	D3	M

Note: H – High; M – Moderate; L – Low.

Table 38
SAA Mine Development Significant Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.10	Local business expectations in relation to project opportunities are not met resulting in a financial burden for some local businesses and potential loss of services for Blayney community	Local business owners and operators, and their families	Ongoing risk throughout construction and initial phases of operation	Construction Phase and Operations Phase	H	C4	C3	H
6.2.7	Influx of construction workforce leads to changes in structure and cohesion of the communities of Blayney and Millthorpe townships	Residents of Blayney and Millthorpe	Medium-term (18 months) and temporary	Construction Phase	H	B3	C3	H
6.2.5	Increased demand for short-term accommodation by the construction workforce presents challenges for competing local industry and businesses	Residents of Blayney LGA, business operators, service and facility providers and BSC	Medium-term (18 months)	Construction Phase	H	A3	C3	H
6.2.5	Construction Phase workforce accommodation demands reduce accessibility to private housing for existing and future residents	Existing and future residents of Blayney	Medium-term	Construction Phase	M	A3	B3	H
6.2.5	Low-income households are displaced from private rental accommodation in Blayney	Low-income households and vulnerable groups	Medium-term (18 months)	Construction Phase	M	A3	C3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
	due to workforce accommodation demands	(e.g. elderly and Indigenous households)						
6.2.9	Construction phase labour demands results in labour draw from the non-mining sector impacting economic output and business viability	Non-mining sector in Blayney LGA	Medium-term	Construction Phase	H	A4	A3	H
6.2.9	Construction phase labour demands significantly constrain the labour market of Blayney LGA	Blayney LGA	Medium-term	Construction Phase	H	A3	B3	H
6.2.10	The project reinforces the Blayney LGA's specialisation in mining potentially increasing economic vulnerabilities	Blayney LGA	Long-term	Life of Mine	L	B3	C3	H
6.2.8	Increased demand for health and emergency services by the construction workforce reduces access to these services for existing residents	Existing residents of Blayney LGA, and health and emergency service providers	Medium-term	Construction Phase	M	B3	C3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.3/ 6.2.11	Downstream landowners experience livelihood impacts due to project impacts on the quantity and quality of water in the Belubula River	Downstream landowners along the Belubula River	Long-term	Life of Mine	H	D4	D3	M
6.2.3	The mine development reduces existing accessibility to ecosystem services for residents of the Blayney LGA	Residents of Blayney LGA	Long-term	Life of Mine	H	A3	C2	M
6.2.4	The mine development results in further loss of cultural heritage and connection to country for Aboriginal people, and further impacts to the beliefs and values of the Wiradjuri People	Wiradjuri People and OLALC	Intergenerational	Life of Mine	H	C3	C2	M
6.2.10	The project generates inflationary pressures contributing to changing lifestyle affordability	Non-mining sector of Blayney LGA, low-to medium income households of Blayney LGA and vulnerable households (e.g. elderly)	Long-term with impact likely to be most significant during Construction Phase	Life of Mine	M	C3	C2	M
6.2.5	Increased demand for local and regional housing support services due to displacement of low-income households	Housing Plus and other housing support services and low-income households	Medium-term (18 months)	Construction Phase	M	B2	C2	M

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.10	Reduced employment and economic output in other sectors of the economy (e.g. trades and services) as a result of the project	Businesses and residents employed in non-mining sectors of the economy	Medium-term	Construction Phase	H	B3	C3	M
6.2.12	Different sectors of the Blayney LGA experience a greater social and economic burden as a result of the project	Vulnerable groups and ow income households	Medium-term	Life of Mine	M	A3	B3	M
6.2.2	Increased mine traffic on the local and regional road network reduces safety for road users	Local road users	Long-term	Life of Mine	H	C3	C2	M
6.2.2	The potential for significant economic and social costs to society due to a cyanide contamination event	Residents of Blayney LGA and neighbouring Cabonne LGA	Intergenerational	Life of Mine	H	C4	D3	M

Note:

H – High
M – Moderate
L - Low

Table 39
SAA Mine Development Significance Assessment – Social Opportunities

SIA Ref	Social Opportunity	Stakeholders	Temporal	Project Phase	Opportunity	Enhanced Opportunity	Significance
6.2.5	Growth in the land and housing development market in Blayney	Existing and new residents of Blayney township, BSC, business operators and service providers	Long-term	Operations Phase	B3	A3	H
6.2.8	Stronger local investment supports improvements and/or expansion in services and facilities in Blayney LGA	Residents of Blayney LGA and visitors to the CW Region	Long-term	Life of Mine	C3	A3	H
6.2.10	Increased local spend supports long-term sustainability of existing local businesses and creates opportunities for expansion or establishment of new businesses	Local business owners and residents of Blayney LGA	Long-term	Life of Mine	C3	B3	H
6.2.10	Significant economic benefits from the project accrue to the Blayney LGA	BSC, residents, businesses and service providers in Blayney LGA	Long-term	Life of Mine	B3	A3	H
6.2.9	The creation of direct and indirect jobs in Blayney LGA	Residents of Blayney LGA and business operators	Long-term	Life of Mine	A3	A4	H
6.2.7	Project induced resident population growth in Blayney township and Blayney LGA supports stronger community cohesion and enhanced liveability	Existing residents of Blayney LGA, BSC, Service and facility providers and local businesses.	Long-term	Operations Phase	C1	B3	M
6.2.9	Opportunity to increase labour and skills capacity in the Local Area	LGAs of the Local Area	Long-term	Life of Mine	C2	C3	M
6.2.9	Indigenous people in the Local Area are employed on the project	Indigenous population	Long-term	Life of Mine	C2	B3	M

SIA Ref	Social Opportunity	Stakeholders	Temporal	Project Phase	Opportunity	Enhanced Opportunity	Significance
6.2.9	Enhanced education and training opportunities available at Blayney High School	High school students at Blayney High School and local business operators	Long-term	Life of Mine	C2	B3	M
6.2.10	Economic benefit to the CW Region.	Residents, business operators, service providers and Councils in the CW Region	Long-term	Life of Mine	A3	A4	M

Note:

H – High
M – Moderate
L - Low

Table 40
Cumulative Mine Development Significance Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.4.2	Reduced accessibility to short-term accommodation due to cumulative impacts of other projects in the Blayney LGA	Low-income households, vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	C4	C3	H
6.4.2	Sustained reliance on a single industry for economic growth and infrastructure provision	BSC and the broader Blayney community	Long-term	Life of Mine	M	A4	A3	H
6.4.2	Temporary shortage of short-term accommodation impacts accessibility to accommodation for the non-mining sector	Visitors to the Blayney LGA, non-mining sector business, low-income households and vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	A4	A3	H
6.4.2	Short-term cumulative shortage of private rental accommodation for the non-mining sector	New and existing residents of Blayney LGA, low-income households and vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	A4	A3	H
6.4.2	Temporary increase in demand for health and emergency services increases demands for service providers and reduces access to services for existing residents	Blayney LGA health and emergency service providers, and Blayney LGA	Medium-term	Construction Phase	M	B4	B3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.4.2	Cumulative increase in temporary workforce in Blayney leads to temporary changes in community cohesion	Residents of Blayney LGA	Medium-term	Construction Phase	L	B3	C3	H
6.4.2	Short-term labour draw from the non-mining sector impacts the operation of non-mining sector businesses	Blayney LGA businesses	Medium-term	Construction Phase	H	B3	C3	H

Note:

H – High
M – Moderate
L - Low

PART C – PIPELINE DEVELOPMENT

9 SOCIAL BASELINE

This section briefly describes the relevant socio-economic characteristics of the social area of influence for the pipeline development.

9.1 INTRODUCTION

9.1.1 Social Area of Influence

The components of the social area of influence for the pipeline development are described in Table 41. The social baseline description focusses principally on the Bathurst LGA as this is where the pipeline corridor is predominantly located.

Table 41
Pipeline Development – Social Area of Influence

Area of Influence	Description
Private properties wholly or partially within the pipeline corridor	The pipeline development will directly impact 16 private landholders, plus landholders associated with Angus Place Colliery, Centennial Coal and Energy Australia. Lithgow and Bathurst Councils and five crown entities (Forestry NSW, RMS, Department of Fisheries, Department of Industry (Crown Land) and Railcorp) are also impacted by the pipeline corridor. Regis will enter into a land access agreement with each affected landowner within the pipeline corridor, including tenement holders.
Nearby communities	The primary communities of interest for the pipeline development are the Bathurst and Lithgow LGAs including the centres of Bathurst and Lithgow and the smaller townships of Portland and Wallerawang. Workforce accommodation arrangements also have the potential to affect the Blayney LGA. These issues have been considered in the Section 6.
LGAs	The pipeline development is located primarily within the Bathurst and Lithgow LGA, with a small portion located in the Blayney LGA.
Indigenous Areas	As noted in Section 2.1.6 the pipeline development traverses the traditional country of the Wiradjuri People. Wiradjuri people reside across the Bathurst LGA and neighbouring LGAs.
CW Region	The economic benefits of the pipeline development will extend to the CW Region. Detailed analysis of broader and State-wide economic benefits is not a key focus for the SIA, however recognition of these benefits and impacts is a key consideration when discussing the distributive social equity of the project.

9.2 LOCAL SETTING

9.2.1 Geographic Location

The pipeline corridor is illustrated in Figure 1 and Figures 3a-h. The pipeline corridor extends from Centennial's Angus Place and SCSO; and EA's MPPS operations in Lithgow LGA to the mine project area located in the Blayney LGA. The majority of the pipeline corridor is located within the Bathurst LGA.

The pipeline corridor is approximately 90 km long and between 6 m to 20 m wide. It will traverse a combination of 16 private landholders; landholders associated with Angus Place Colliery, Centennial Coal and Energy Australia, Lithgow City and BRC's lands and five crown entity lands (Forestry Corporation (a state owned corporation), RMS, Department of Fisheries, Department of Industry (Crown Land) and Railcorp). Land use within and adjoining the pipeline corridor is illustrated in Figures 3a-h. The total disturbance footprint for the pipeline corridor and the associated pumping stations is approximately 127 ha.

The pipeline development, subject to detailed engineering includes the construction of four pumping station facilities (Figures 3a-h), three of which will be located in Lithgow LGA at Angus Place, SCSO and MPPS. The fourth pumping station facility will be located near the Bathurst Waste Management Centre within the Bathurst LGA.

9.2.2 Existing Land Use

The following section provides a summary of the existing land use within and adjoining the pipeline corridor. A detailed description of land use is presented in the EIS[189].

Natural areas

The pipeline corridor traverses the VSF, Sunny Corner State Forest (SF) and Ben Bullen SF (Figure 3a-h). Newnes SF is immediately to the east of the eastern end of the pipeline corridor.

Agriculture

The majority of the pipeline corridor traverses cleared agricultural land, consisting primarily of cleared open paddocks utilised for cattle grazing and cropping (Figure 3a-h).

Infrastructure and Utilities

The pipeline corridor will primarily follow existing local and classified road reserves and Forestry Corporation/ NSW Department of Industry Crown Land tracks. The pipeline corridor will also run adjacent to part of the APA gas line easement south of the Great Western Highway. The pipeline corridor will cross the gas easement in six locations.

[189] EMM, 2019.

Mining and Industrial

Existing mining and industrial operations within the vicinity of the pipeline corridor are described below:

- Angus Place – operated by Centennial Coal, Angus Place is located just north of Wallerawang and north to north-west of Lithgow, Angus Place is an underground coal mine utilising longwall and continuous miner techniques for the extraction of 4 Mtpa of coal[190] . Angus Place is currently under care and maintenance. It is proposed that a pumping station facility at the eastern most point of the pipeline will be located within the boundary of Angus Place.
- Springvale Colliery – operated by Centennial Coal, Springvale Colliery is located near Lithgow and Wallerawang and approximately 6 km south of the pipeline's most eastern point. It is an underground coal mine utilising longwall technique to extract 4.5 Mtpa of coal[191].
- SCSO – operated by Centennial Coal, SCSO processes coal from Springvale Colliery and then transports coal to EA's MPPS and Centennial's Lidsdale Siding. It is located just north of Wallerawang and north to north-west of Lithgow. It is proposed that a pumping station facility connected to the pipeline will be located near the eastern boundary of SCSO.
- MPPS – owned and operated by Energy Australia, MPPS is located 25 km from Lithgow. MPPS is a coal-fired power station which powers 1.18 M homes. The Springvale Water Treatment Project is located to the south of the power plant. It is proposed that a pumping station facility connected to the pipeline will be located near the southern boundary of MPPS.
- Bathurst Waste Management Centre – the pipeline corridor traverses the BRC's Bathurst Bike Park to the south of the Bathurst Waste Management Centre, which comprises a landfill depot and recycling centre. It is proposed that a pumping station facility connected to the pipeline will be located to the south of the Bathurst Waste Management Centre on land owned by BRC.

Heritage Values

There are no Commonwealth or National Aboriginal heritage listed places within the pipeline corridor.

A search of the Heritage Council of NSW's administered heritage databases and the BSC, BRC and Lithgow City Council LEPs returned 20 records for historical heritage sites within a 1 km area around the pipeline corridor. These items are listed in the *Pipeline Development*

[190] Centennial Coal, 2014a.
[191] Centennial Coal, 2014b.

Cultural Heritage Assessment (Pipeline Development CHA)[192] (EIS, Appendix Z) for the pipeline development. Leeholme Homestead and the Portland General Cemetery are the recorded historical sites (Bathurst Regional LEP) located in closest proximity to the pipeline corridor.

The pipeline corridor itself is outside the curtilages for the Leeholme Homestead and the Portland General Cemetery. For Leeholme Homestead and outbuildings, the pipeline corridor is on the western side of O'Connell Road, while the homestead is on the eastern side. There will be no ground disturbance impacts outside the road reserves adjacent to these local heritage listings, and neither the Leeholme Homestead nor the Portland General Cemetery will be impacted by the pipeline development.

There are no historic heritage sites recorded within the pipeline corridor.

Seven Aboriginal cultural heritage sites consisting of six isolated artefacts and one low density artefact scatter of two artefacts were recorded during the field survey of the pipeline corridor. One previously recorded Aboriginal site was located during the field survey. Two other previously recorded Aboriginal sites were unable to be located during the survey. According to the GPS coordinates provided by AHIMS[193], these sites were expected to be found inside the pipeline corridor. The sites recorded during the survey are representative of sites recorded in the CW&O Region.

9.3 PLANNING CONTEXT

The EIS[194] contains a detailed description of the planning framework for the pipeline development. The following sections provide a brief overview of the planning requirements relevant to the assessment of social impacts.

9.3.1 Regional Planning Context

The pipeline corridor is located within the CW Region. The purpose and intent of the CW&O Regional Plan has already been discussed in Section 5.2.1. The CW&O Regional Plan identifies the following top three economic opportunities for the Bathurst and Lithgow LGAs:

- Bathurst Region – Tourism, Manufacturing, Technology and Education; and
- Lithgow – Transport and Logistics, Tourism and Mining.

[192] OzArk, 2019b.
[193] Aboriginal Heritage Information Management System. Administered by OEH, AHIMS is the central register of all Aboriginal sites within NSW.
[194] EMM, 2019.

Table 42 presents the CW&O Regional Plan priorities for the LGAs of Bathurst and Lithgow.

Table 42
Regional Plan Priorities

Bathurst LGA Priorities	Lithgow LGA Priorities
• Support the delivery of residential release areas and increase the range of housing options in existing urban areas.	• Maintain the primacy of Lithgow's main street and central business district.
• Support the development of a nationally recognised automotive industry hub at Mount Panorama including the development of Velocity Park Raceway and associated infrastructure and facilities.	• Develop transport and freight connections that capitalise on Lithgow's proximity to Sydney.
• Promote Bathurst as a centre of excellence for technology and education.	• Leverage opportunities from the Local Government Area's location and rural character to support diverse industries such as tourism.
• Recognise and enhance cultural, heritage, rural and environmental values.	

Source: DPE 2017

9.3.2 Local Planning Context

The pipeline corridor traverses the Bathurst Blayney and Lithgow LGAs with approximately 2 km length in the Blayney LGA. Pursuant to the Bathurst Regional LEP 2014, Blayney LEP, and the Lithgow Local Environmental Plan 2014 (Lithgow LEP), the pipeline corridor is on land zoned:

- RU1 – Primary Production (Lithgow, Bathurst and Blayney LEPs);
- SP2 – Infrastructure (Electricity generating works) (Lithgow LEP);
- SP2 – Roads and Traffic (Lithgow and Bathurst LEPs);
- RU3 – Forestry (Lithgow, Bathurst and Blayney LEPs);
- RU4 – Primary Production Small Lots (Bathurst LEP); and
- RU5 – Large Lot residential (Lithgow LEP).

9.4 SUMMARY OF SOCIAL BASELINE CHARACTERISTICS

This section provides a summary of the social baseline characteristics of the social area of influences with a focus on the Bathurst LGA. Relevant socio-economic data is also provided for the Lithgow LGA. Detailed social baseline information is provided in Appendix F.

9.4.1 History and Settlement

Aboriginal Heritage

Aboriginal occupation of CW Region NSW for the pipeline development is described in the Pipeline Development CHA[195] (EIS, Appendix Z). The study area for the pipeline development falls wholly within the land of the Wiradjuri people. The Wiradjuri people are the largest Aboriginal Group in NSW extending over a considerable area of NSW and comprising many individual groups or clans.

Early accounts of contact between European and Aboriginal people in the Macquarie River area were provided by Oxley (1820) and Sturt (1834), and later by Garnsey (1942) (Whitehead 2003). Early references to Aboriginal people in the Orange and Wellington regions are provided by John Oxley, who passed by Limestone Creek, south of Mt Canobolas, on 12 April 1817, describing the area as "*a beautiful picturesque country of low hills and fine valleys well-watered*" (Whitehead 2003: 351). Further south-west, at the Lachlan River, Oxley met Aboriginal people carrying stone hatchets and possum skin cloaks. Oxley then returned to Bathurst along the Bell and Macquarie Rivers north of Orange in late August, passing near Wellington on 25 August 1817. Oxley noted the abundant natural resources in areas adjacent to the Macquarie River—including emus, ducks, swans, fish and freshwater muscles—and that the country had an abundance of running water, with a spring on every hill (Rawson 1997: 8).

European Settlement History of Lithgow to Blayney Region

A brief settlement history of Lithgow to Blayney Region is documented in the Pipeline Development CHA (EIS Appendix Z) for the pipeline development. The following sections provide a summary of the settlement history of Bathurst Region and the Lithgow Valley building adding to the description of Blayney LGA presented in Section 5.3.2.

The first European settlers arrived in the Lithgow Valley in 1824 and the town of Lithgow was named in 1827[196]. Settlement in the area was slow; by 1860 only four properties were settled in the valley. In 1868, the construction of the railway line through the Lithgow Valley resulted in the distribution of workmen and campsites throughout the length of the Lithgow Valley. In 1868 the Hermitage Colliery commenced operations, as the first commercial mine to engage in mining and selling coal. By 1874, there were four mines in operation: Eskbank Colliery; the Lithgow Valley Colliery; Vale of Clwydd Colliery; and the Hermitage Colliery. The exportation of coal also became commercially viable with the construction of the railway line.

[195] OzArk, 2019b.

[196] RPS Group, 2014.

In 1870, the railway reached Wallerawang. The Cobb and Co. Coach Service provided transport between the station at Wallerawang, Bathurst and Mudgee. The exploitation of coal reserves began in Wallerawang around 1873 with several mines being opened on the Lithgow seam at Mt Piper, mid-way between Wallerawang and Lidsdale. Completion of the Wallerawang-Mudgee railway branch line in 1880s coincided with the rapid growth of the coal mining industry in the Western Coalfields. Following this period of industrialisation in the late 1860s and 1870s, the town of Lithgow boomed during the 1880s. Lithgow became the centre of a massive coal mining district and eventually this led to the establishment of Australia's first commercially viable steel mill. By 1900, Lithgow boasted nine hotels, three banks, a municipal water supply and gaslights in the main street. The presence of steel was a factor in the establishment of a national Small Arms factory in Lithgow in 1912[197].

The population of Lithgow increased from 5,628 people in 1901 to 8,196 people in 1911. Today, Lithgow City has a population of 21,636 people.

The Bathurst region was proclaimed by European settlers in May 1815, establishing the oldest inland settlement on the Australian continent[198]. The government settlement was developed for agriculture and by 1826 it had become a diverse and extensive agricultural enterprise, including the production of grain, wool, vegetables, cattle, sheep and leather via convict labour.

Bathurst's economy was transformed by the discovery of gold in 1851. Prospectors and settlers flooded to the region, triggering an era of prosperity and growth. Hotels, courts, police stations, post offices, schools and businesses, including Cobb and Co., were established. After the gold rush, Bathurst became a centre for agricultural and manufacturing. The Main Western railway line from Sydney reached Bathurst in 1876 and the town became an important railway centre, including workshops, locomotive depots and track and signal engineering offices.

In 1885, Bathurst had a population of approximately 8,000 people and a district population of an additional 20,000 people, mostly employed in agriculture and pastoralism. Today, Bathurst is a large regional centre for forestry, agriculture and industry. Education, tourism and manufacturing are important contemporary economic drivers. In 2018, the Bathurst LGA had a resident population of 43,206 people.

[197] Regional Showcase Australia, 2019.

[198] Bathurst Regional Council, 2014.

9.4.2 Context

Bathurst LGA

The Bathurst LGA is located to the east of the Blayney LGA and west of the Lithgow LGA. The city of Bathurst is the administrative centre of the LGA and also provides a significant regional centre to the CW Region.

The Bathurst LGA is a rural and expanding residential area. Settlement is based in the township of Bathurst, and numerous small villages. Rural land is used primarily for timber production and agriculture, particularly sheep and cattle grazing, with some orcharding, crop farming and market gardening.

Bathurst is located at the cross roads of the Great Western, Mid Western and Mitchell Highways and on the Blue Mountains Line on the Intercity Trains Network with a daily service to Sydney. Bathurst is located approximately 40 km east of Blayney and approximately 200 km north-west of Sydney.

Lithgow LGA

Lithgow LGA is located to the east of Bathurst LGA and adjoins the southern boundary of the Mid Western Regional LGA. Lithgow is the administrative centre of the Lithgow LGA. Lithgow LGA is a predominantly rural area, with rural-residential and residential areas in several townships, and some industrial land use. Nearly two thirds of the LGA is national park or SF. Settlement is based in the township of Lithgow, the smaller townships of Portland and Wallerawang, and numerous other small villages. Rural land is used mainly for farming, grazing and mining (particularly coal mining).

Lithgow is located about 140 km west of Sydney and is within the eastern portion of the CW Region. Lithgow City is serviced by the Castlereagh and the Great Western Highways, and the Blue Mountains Line.

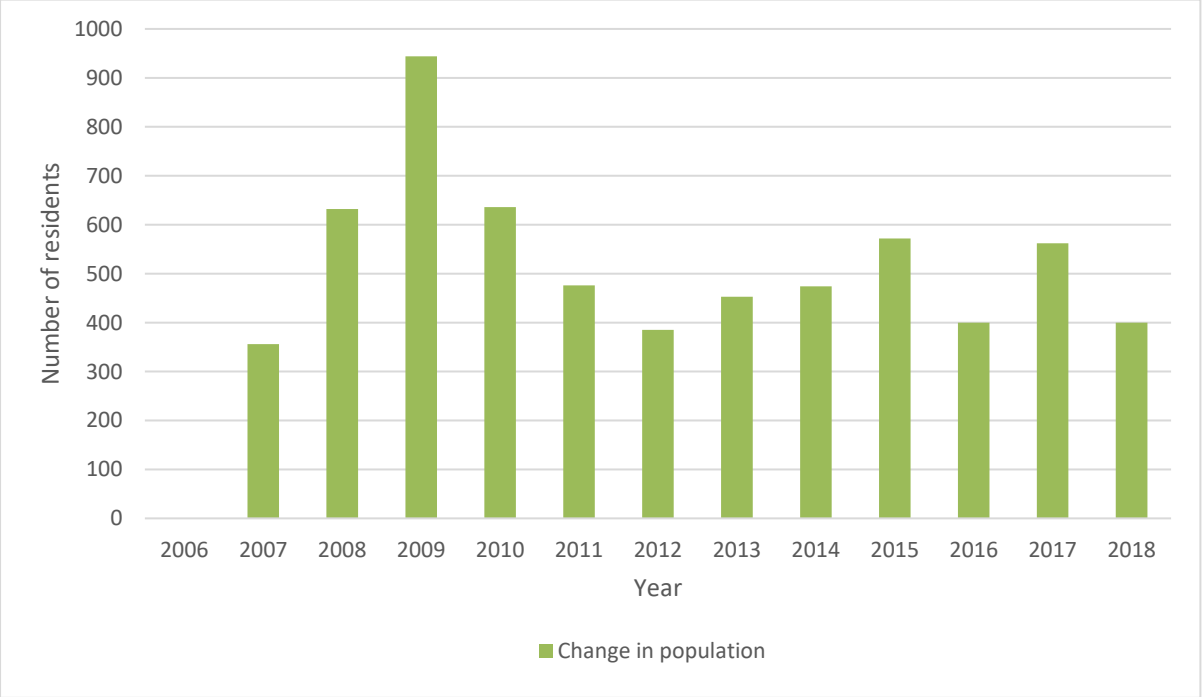
9.4.3 Population and Population Growth

The Bathurst LGA has an area of 3,820 km^2 and in 2018 had an ERP of 43,206[199]. In 2018, the ERP of the urban area of Bathurst LGA[200] was 37,314 representing more than 85% of the LGA population. The population of Bathurst LGA has increased by 17% (6,290 people) since 2006 (Graph 7), with the most significant growth experienced in 2009.

[199] Bathurst Regional Council (ud, a).

[200] Area bounded by the localities of Duramana and Peel in the north, the localities of Yarras, Forest Grove, Glanmire and Brewongle in the east, the Oberon Council area and the localities of The Lagoon, Rockley Mount, Cow Flat and Georges Plains in the south, and the localities of Evans Plains, Stewarts Mount and Mount Rankin in the west as defined in BRC (ud, b).

Graph 7
Population Change Bathurst LGA



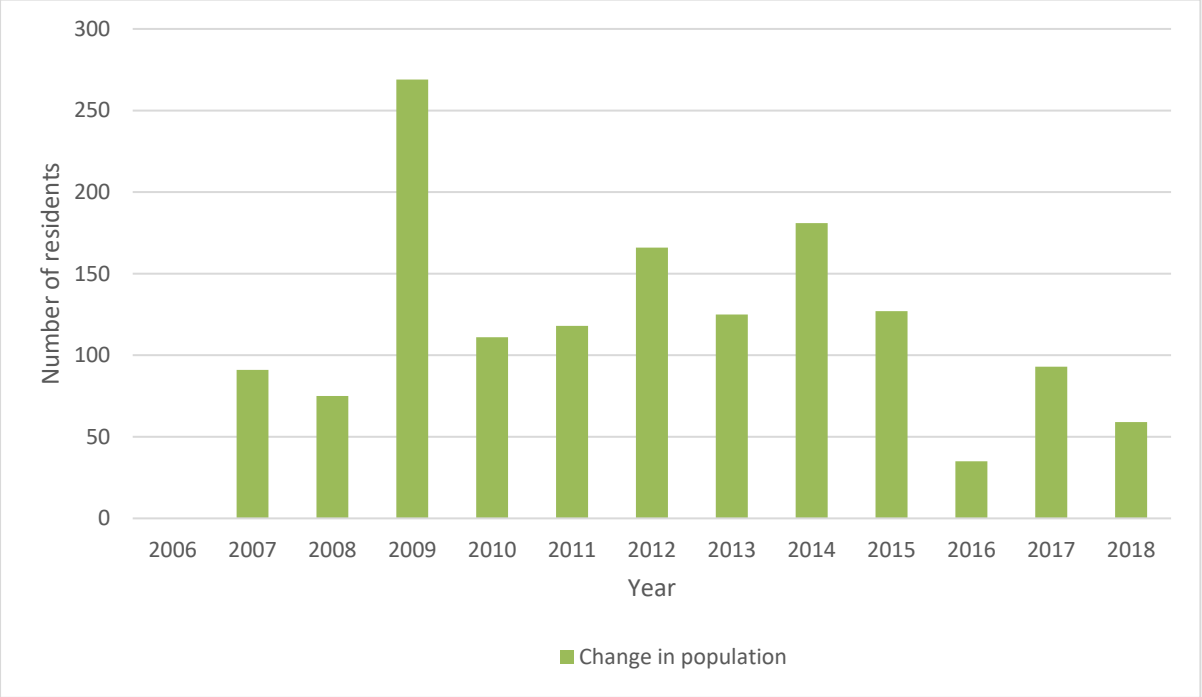
Source: BRC (ud).

The Lithgow LGA has an area of 4,567 km^2 and in 2018 had an ERP of 21,636[201]. The population of Lithgow LGA has increased by 7% (1,450 people) since 2006 (Graph 8), with the most significant growth experienced in 2009 consistent with Bathurst LGA suggesting there were processes occurring in the CW Region during this period that influenced both LGAs. The sharp drop in population growth from 2014 is likely associated with contraction in the surrounding mining industry. The Bathurst LGA population experienced a similar but smaller change in population growth during this period.

In 2018 the ERP of Portland was 2,471 people and the ERP for Wallerawang-Lidsdale was 2,541 people.

[201] Lithgow City Council, (ud,a).

Graph 8
Population Change Lithgow LGA



Source: Lithgow City Council (ud)

9.4.4 Selected Socio-Economic Characteristics

Table 43 presents selected demographic and socio-economic characteristics of the Bathurst and Lithgow LGAs with comparison to the CW Region[202] and NSW. Notably features of Table 43 relevant to the Bathurst LGA include:

- An unemployment rate that is generally consistent with the CW Region and NSW;
- A similar proportion of the population identifying as ATSI as the CW Region but a substantially higher proportion than NSW;
- A sizeable labour force with a sizeable unemployed labour pool;
- A relatively young resident population in comparison to the CW Region and NSW;
- High median household income in comparison to the CW Region and NSW; and
- Relatively low cultural diversity in the population.

Notably features of Table 43 relevant to the Lithgow LGA include:

- Significantly older median age population in comparison to all other areas of interest;
- A larger elderly population in comparison to all other areas of interest;

[202] Defined as the Central West SA4 by the ABS.

- A higher number of lone person families and households in comparison to all other areas of interest;
- Significantly lower household income in comparison to all other areas of interest.; and
- Greater cultural diversity in comparison to Bathurst LGA and the CW Region, but less than NSW.

Table 43
Selected Characteristics 2016 ABS Census – Lithgow and Bathurst LGAs

Selected Characteristic	Bathurst LGA	Lithgow LGA	CW Region	NSW
Median Age	37	45	41	38
ATSI Population	5.4%	5.7%	6.4%	2.9%
Labour Force Size	19,329	8,445	91,992	3,605,872
Unemployment Rate	6.0%	7.7%	6.2%	6.3%
Seniors (70 to 84)	8.9%	12.4%	10.9%	8.9%
Couples Family with Children	28%	32.7%	40.3%	45.7%
Lone Parents	17.9%	19.3%	17.1%	16.0%
Lone Person Households	25%	32.6%	28.8%	23.8%
Median weekly household income	$1,308	$984	$1,166	$1,486
Median weekly rent (all people)	$280	$230	$235	$339
Median weekly rent (ATSI population)	$280	$220	$220	$270
Overseas Born	9%	20.3%	16.9%	34.5%
Households where rent payments are greater than or equal to 30% of household income	11.5%	10.1%	9.4%	12.9%
Households where monthly mortgage repayments are greater than or equal to 30% of household income	5.7%	4.7%	5.1%	7.4%
IRSD[1]	986	923	na	na

Source: ABS 2018.

Note:

1. IRSD is defined as Index of Relative Socio-economic Disadvantage.

9.4.5 Housing and Short-Term Accommodation

The following section provides a brief summary of housing and short-term accommodation availability in the Bathurst and Lithgow LGAs. Further information on housing market conditions is provided in Appendix F.

Housing Availability

Table 44 shows the highest and lowest priced rental properties and the number of properties available for rent in the Bathurst and Lithgow LGAs in June 2019. Table 44 shows that a sizeable supply of rental accommodation is available for the workforce associated with the pipeline development.

Table 44
Rental Price, High and Low, May 2019

Property Type and Location	Lowest Rent ($p/w)	Highest Rent ($/pw)	Number of Properties
	Bathurst (Postcode 2795)		
All Properties	$135	$500	93
3-bedroom + houses	$250	$500	46
2-bedroom houses	$210	$420	14
2-bedroom + units/ townhouses	$215	$350	13
	Lithgow (Postcode 2790)		
All Properties	$200	$370	27
3-bedroom + houses	$250	$370	14
2-bedroom houses	$220	$320	12
2-bedroom + units/ townhouses	$200	$200	1
	Portland (Postcode 2847)		
All Properties	$130	$325	4
3-bedroom + houses	$250	$250	1
2-bedroom houses	$240	$325	2
2-bedroom + units/ townhouses	0	0	0

Source: Realestate.com.au 2019.

Tourist Accommodation

Short-term accommodation providers in Bathurst and Lithgow LGAs primarily provide temporary accommodation to tourism visitors to the LGA's and broader CW Region but are increasingly catering for mining staff, temporary contract workforces and personnel visiting the town for meetings.

The ABS produce statistical information for accommodation establishments with 15 or more rooms. The majority of establishments in Bathurst and Lithgow are not included in the ABS data due to the size of the establishments. Table 45 lists the number of accommodation

establishments with 15 or more rooms in the Bathurst and Lithgow Statistical Area Level 2[203] (SA2). The data presented is for the June quarter 2016. Limited data is available for Lithgow SA2. There are a large number of smaller establishments advertised on booking.com, Air BnB and Stayz.com.

Table 45
Tourism Accommodation Statistics, 2016

Location	No of Establishments	No of Rooms	Room Occupancy Rate (%)	Room Nights Occupied	Room Nights Available
Bathurst SA2	14	580	54.7	28,867	52,780
Lithgow SA2	6	na	na	na	na
NSW	245	27,895	76.4	1,917,900	2,508,800

Source: ABS 2016.

[203] Statistical Areas Level 2 (SA2) are medium-sized general-purpose areas. The SA2 is the smallest area for the release of ABS non-Census and Intercensal statistics, including the ERP and Health & Vitals data. ABS tourism accommodation data are only provided for small area NSW (i.e. SA2) and for Australian states.

10 IMPACT ASSESSMENT

This section describes the social impacts and opportunities associated with the pipeline development. It provides an assessment of the significance of social impacts and opportunities to local and regional communities and presents mitigation and management measures.

10.1 INTRODUCTION

The SIA for the pipeline development assesses material social impacts, defined in the SIA Guideline[204] as '*impacts that matter the most, and/or pose the greatest risk to those expected to be affected*'. In this regard the SIA for the pipeline development focusses principally on the impacts of the project for the directly affected landowners. Impacts associated with the pipeline development construction workforce, specifically labour supply and workforce accommodation demand have been considered in the mine development assessment (Section 6.1).

The social impacts and opportunities presented below and the associated significance ratings reflect the outcomes of a comprehensive landowner engagement program undertaken by Regis since October 2017.

10.2 SOCIAL IMPACTS AND OPPORTUNITIES

10.2.1 Employment Opportunities

The pipeline development will result in the creation of a number of direct and indirect employment opportunities. The direct project workforce demand and the likely workforce hiring patterns (LHs and NLHs) are discussed in Section 2.2.3. Indirect employment generation associated with the pipeline development is discussed as a component of the broader project in Section 6.2.10.

The following section considers the direct employment benefits of the pipeline development for the Local Area.

The pipeline development will require a peak construction workforce of 120 people. The construction of the pipeline development will require a labour force with highly specialised skills. It is therefore anticipated that the majority of the construction workforce for the pipeline development would be NLHs (Section 2.2.3). An estimated 20% (24 persons) are anticipated to be LHs and a further 80% (96 persons) NLHs. The majority of NLHs are anticipated to be sourced from outside the CW Region.

[204] DPE, 2017b.

Regis will seek to prioritise the local employment of suitable applicants. Given the skill requirements, it is unlikely that the pipeline development will attract more than 20% of its workforce from the Local Area. However, given the size of the labour force in Bathurst LGA (22,208 people) and the size of the unemployed labour pool (931 people, 5.3%)[205] securing a proportion of LHs for the pipeline development is unlikely to be difficult. Whilst the likelihood of local employment on the pipeline development is almost certain, the overall employment benefit of the pipeline corridor to the Local Area is considered minor.

10.2.2 Short-Term Accommodation Demand

The pipeline development will generate demand for an estimated 100 beds of short-term accommodation during the 12 month construction phase. Multiple workfronts will operate at the same time for the pipeline development. Hence accommodation demand is likely to be dispersed across the LGAs of Bathurst and Lithgow and to a much lesser extent Blayney. More than likely Bathurst and Lithgow LGA will accommodate the majority of the pipeline development workforce. Both Bathurst and Lithgow LGAs have greater capacity than Blayney to absorb project accommodation demands due to the size of the short-term accommodation market in these locations. Availability of rental accommodation and short-term accommodation is discussed in Section 9.4.5. There is a sizeable pool of rental accommodation in the Bathurst LGA (97 rental properties) and a smaller pool in Lithgow LGA (27 rental properties) that could be accessed by the workforce. This is in addition to short-term accommodation options.

Given that the Blayney LGA is likely to experience high demand for short-term accommodation due to the mine development (Section 6.2.4), Regis will encourage all NLHs associated with the pipeline development to reside in the LGAs of Bathurst and Lithgow. A CWAS will be prepared for the project as described in Section 7.2.2.

The construction phase of the pipeline development will overlap with the Bathurst 1000 event and therefore has some potential to reduce access to accommodation for visitors for approximately one week during October. To minimise the severity of this impact, Regis will, where possible, reduce construction activities during key regional events (e.g. Bathurst 1000) and ensure workers do not remain in regional short-term accommodation options across these peak demand periods.

The cumulative impact of the pipeline development and the mine development on short-term accommodation provision has already been discussed in Section 6.2.4.

[205] DESSFB, 2019.

10.2.3 Access and Amenity

The construction phase of the pipeline development may give rise to temporary delays to access across local road networks. A *Traffic Impact Assessment*[206] (TIA) (EIS Appendix BB) has been prepared for the pipeline development which includes draft TMPs. These TMPs will be progressively refined and implemented for the construction of the pipeline development.

There may be temporary impacts to amenity during the construction of the pipeline development due to temporary and short-term noise and vibration. There will also be short-term and minor visual impacts associated with construction.

A *Noise and Vibration Assessment*[207] (EIS Appendix AA) was undertaken for the pipeline development. The results of the *Noise and Vibration Assessment* (EIS Appendix AA) indicate that construction noise levels for several activities have the potential to be above the relevant noise management levels (NMLs) at all receivers in close proximity to the work, although for the most part are expected to be only for a short duration (i.e. either one to two shifts or up to a few days). For the static construction activities, such as under boring, exceedances are anticipated to occur for a few shifts during peak construction activities. Notwithstanding, construction noise levels are predicted to satisfy the highly noise affected criteria of 75 dB LAeq (15min) for all activities.

Operational noise emissions from the pump stations are anticipated to be negligible at adjacent receivers to each site, although this assumes some form of container or enclosure is adopted for each pump station.

The *Noise and Vibration Assessment* (EIS Appendix AA) identifies a hierarchical strategy to minimise noise impacts during construction of the pipeline development.

A formal complaints and grievances procedure will be developed for the construction phase of the pipeline development. This procedure will be aligned with that prepared for the mine development. Regis will communicate the procedure to all directly affected pipeline corridor property owners and near neighbours.

As the project pipeline will be largely underground once it is operational, amenity or access impacts to landowners or the public from the pipeline itself are not expected.

[206] Ason Group, 2019.

[207] Muller Acoustic Consulting, 2019b.

10.2.4 Water Access

The installation of a water pipeline in the CW Region has the potential to generate landowner expectations in relation to water access for industrial, rural, domestic and emergency use. NSW is currently experiencing a severe drought with the Central West, Far West and North West regions the worst affected to date[208]. Severe drought has extended for the past 6 – 12 months, with some regions having experienced the effects of drought for several years[209]. The prolonged drought is increasing animal welfare concerns and financial stress amongst the agricultural industry, as well as elevating the risk and increasing occurrence of rural bush fires[210]. Water scarcity is a significant issue of concern for rural landowners and access to water is highly valued.

Consultation undertaken with landowners to inform the SIA for the pipeline development suggests several landowners have expectations that in the future they may have access to the pipeline water. This expectation is coupled with a strong desire for water security and is fuelled in part by the presence of drought across much of the CW Region. Landowners and other stakeholders are likely to be disappointed if their expectations in relation to water access are not met. During negotiations for the pipeline corridor, Regis has clearly advised landowners and other stakeholders that access to pipeline water will not be possible during the pipeline construction and operations phase.

The Central Tablelands Water and OCC's network of water pipelines was expanded in 2017/2018 to improve water access and water security. A newly developed 61 km water pipeline from Orange to Carcoar links the Macquarie and Lachlan water catchments. This pipeline is considered an emergency pipeline and has the potential to minimise water production costs[211]. More than likely, the construction of this pipeline has influenced stakeholder expectations in relation to water access.

Regis will maintain open communication with stakeholders regarding the ownership and future use of the pipeline. At this stage, no preferred future use for the pipeline infrastructure has been identified. It is anticipated that the pipeline will remain in the ground at the end of the mine life. There may be an opportunity for the pipeline infrastructure to continue to provide future public benefit to enhance water security and supply to the CW Region, subject to necessary approvals. At the end of mine life, the pipeline development will be prepared for long term (mothball) shutdown. The above ground components will be removed, if after a reasonable time period, no additional users for the water or pipeline are identified.

[208] Water NSW, 2019.
[209] Impact Ag, 2018.
[210] Sheep Central, 2018.
[211] Viadux, 2017.

On the assumption that stakeholders are provided with and understand explanations about the technical barriers to pipeline water access, the significance of the residual impact is assessed as low.

10.2.5 Impacts to Private Property

Disruption to Agricultural Operations - Construction

The construction phase of the pipeline development has the potential to disrupt agricultural operations for directly affected landowners.

Regis has undertaken regular engagement with all directly affected landowners to inform them of location of the pipeline corridor. Hansen Bailey undertook telephone interviews to inform the SIA with nine directly affected landowners along the pipeline alignment. The interviews provided information in relation to the perceived impacts of the pipeline development and possible management measures. Key concerns identified included:

- Potential disruption to cropping and sowing activities;
- The requirement for stock rotation to accommodate trenching activities;
- Project related traffic movements on station roads; and
- Development of additional access tracks to facilitate pipeline installation.

During the initial phase of engagement, each landowner asked Regis to consider their individual property work programs when considering the planning and construction of the pipeline development, in order to minimise the potential disruption to existing and future agricultural activities. The findings of SIA consultation indicate that the majority of landowners were satisfied with Regis' approach to early communication.

The potential impact of the construction phase of the pipeline development on existing agricultural operations was assessed as a high risk due to the flow on effect any disruption could have on scheduled agricultural activities, agricultural productivity and income.

The selection of a pipeline corridor route and location of pumping stations has been guided by a policy of avoiding sensitive land uses and environmental impacts. Land access agreements will be entered into by Regis with the landowners and utilities directly affected by the pipeline corridor. Regis has committed to the development of tailored Property Management Plans (PMPs) for each impacted property, and the preparation of a Landholder Communication Plan to ensure adequate notification of the construction phase is provided to all directly affected landowners. The Landowner Communication Plan will ensure landowners are provided with adequate time to move stock and to crop paddocks (where necessary) prior to the commencement of the pipeline development.

Disruption to Agricultural Operations - Operations

Any above ground infrastructure on private property has the potential to impact agricultural operations and other property related activities. Isolation, scour and air release valves will be located as required along the pipeline. Valves will be typically buried in the ground at the same depth as the pipeline and fitted with a spindle that rises to the surface. Scour valves will be buried and fitted with a spindle and valve box flush with the existing ground level. Air release valves will be typically enclosed within 1.2 m^2 concrete pits with steel lids, and will be located below ground, finishing flush with the existing ground level. Scour valves and air release valves will be installed approximately every 1 to 2 km.

During SIA consultation, landowners indicated that the presence of above ground infrastructure such as the valves were not of concern. Further, during landowner negotiations to confirm the location of the pipeline corridor, Regis discussed and agreed the placement of above ground infrastructure with each landowner. The presence of any above ground infrastructure will be included in the tailored PMP prepared for each landowners. The potential impact of the operations phase of the pipeline development on private property activities is rated low.

Depending on the terms of the easement and license agreement with each landowner there are likely to be restrictions to the future land uses within the pipeline corridor, because land uses which may damage the pipeline may not be permitted to occur. Regis has engaged in lengthy discussions with directly affected landowners in relation to the location of the infrastructure in order to minimise long-term alienation of land and disruption of landowner operations.

Maintenance works may also require access by Regis to different sections of the pipeline during operation and possible disruption to land uses depending on the nature of the required maintenance. Where possible, access for operations and maintenance activities will be via existing roads to minimise the disruption to landowners.

Potential for Land Degradation

During consultation, several landowners raised concern that pipeline corridor rehabilitation activities could lead to land degradation over time with resulting impacts to agricultural operations e.g. a reduction in the land available for cattle grazing and cropping. This social impact has been assessed to be moderate (without mitigation applied).

Each PMP will incorporate a Rehabilitation Management Plan (RMP). Regis will develop tailored RMPs for each private property traversed by the pipeline corridor. The content of the RMP will be agreed with each landowner prior to commencement of works on that property.

10.2.6 Biosecurity

Construction and ongoing maintenance of the pipeline presents a potential biosecurity risk for all land traversed by the pipeline corridor. The following biosecurity related issues were raised during SIA consultation:

- Forestry Corporation identified weed spread as a current issue in parts of the SF area traversed by the pipeline and raised concern that the construction and maintenance of the pipeline corridor may contribute to an increase in the spread of weeds; and
- The potential for pasture reduction due to weed spread and the associated cost of remediation was raised as a concern by some private landowners.

The majority of landowners consulted suggested that the pipeline development was unlikely to present a significant biosecurity risk to private property operations, primarily due to the inclusion of site wash-down procedures in the PMPs. Regis has also discussed and agreed suitable biosecurity practices with the Forestry Corporation. Regis will continue to regularly discuss biosecurity risks with both the Forestry Corporation and affected landowners over the life of the project.

10.2.7 Public Health and Safety

Construction and operation of the project will be managed in accordance with relevant health and safety legislation and with Regis and the construction contractor's health and safety management systems. The EIS (Chapter 31 – Hazard and Risk) includes qualitative consideration of risks to the public and property. The consideration of risks did not identify any risks that cannot be adequately managed through existing or proposed management measures. Risk identification and review is an ongoing process which will occur throughout the life of the project so that appropriate mitigation measures can be put in place. Possible impacts to public health and safety may occur during construction at road and rail crossings as a result of disruption to traffic flow and presence of personnel and machinery at the site. Major roads i.e. classified roads will be underbored.

The project is considered to be an efficient and safe means of transporting water and does not have the same risks as those that may be associated with a gas or petroleum pipeline. However, as the construction activities will require the crossing of waterways, railways, roads and other third party infrastructure, there are some potential public risks associated with these activities. The management of health and safety (for project personnel and the public) during the project is outlined in the EIS[212].

[212] EMM, 2019.

Measures to manage health and safety on the project include the following:

- Adherence to Regis and the contractor's Health and Safety Management System;
- Preparation and implementation of health and safety plans relevant to the construction and operation of the project;
- Preparation of emergency planning procedures for construction, and inclusion of the project in Regis emergency management plan for operation; and
- Preparation and implementation of a TMP(s) for the construction of the project and consultation with relevant infrastructure authorities/owners.

10.2.8 Aboriginal Cultural Heritage, Historic Heritage and Social Values

This area of assessment concerns the importance of the pipeline corridor features to the Aboriginal community in terms of their social, aesthetic and historic values. Aspects of social value include assessment of sites, items, and landscapes that are traditionally significant or that have contemporary importance to the Aboriginal community. This importance involves both traditional links with specific areas, as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these.

Aesthetic values are closely linked with social values. Historic places do not always have physical evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.

Impacts to Aboriginal cultural heritage and non-Aboriginal (historic) heritage have been assessed in the Pipeline Development CHA[213] (EIS, Appendix Z) for the pipeline corridor. The Pipeline Development CHA found that there has been a moderate to high level of previous disturbance to most of the pipeline corridor and there is evidence that the study area for the Pipeline Development CHA has been subject to a variety of land use disturbances. This includes the widespread clearance of native vegetation, extensive ploughing practices, long-term grazing, ground disturbance due to soil erosion, and coal mining (including open cut and underground).

The six sites recorded within the pipeline corridor during the survey, and the one site previously recorded are representative of sites recorded in the region. Although the sites recorded during this assessment were not considered of high archaeological significance, their presence alone, in albeit a much-modified landscape, remains a memory of the past in a landscape that is fast changing (or has changed).

[213] OzArk, 2019.

The Pipeline Development CHA has been provided to the RAPs to confirm the presence of any specific social or cultural values associated with the finds. The findings of the Pipeline Development CHA indicate that:

- None of the Aboriginal sites recorded have significant aesthetic value as the integrity of the sensory landscape has been altered in historic and modern times;
- None of the Aboriginal sites recorded have an apparent direct relationship to known historical Aboriginal sites (such as missions or massacre sites). It is possible that the area saw some of the earliest contact between Aboriginal people and non-Aboriginal settlers, however, none of the recorded Aboriginal sites display evidence that they constitute 'contact' or 'post-contact' Aboriginal sites. To that end, all recorded sites are assessed as having low archaeological significance; and
- The development adds to the cumulative impact on the region's Aboriginal cultural heritage as the seven sites identified will be directly impacted. However, the heritage impact value of this loss is low as the sites consist of isolated finds and a low-density artefact scatter.

Impacts to Aboriginal heritage will be managed through an Aboriginal Cultural Heritage Management Plan (ACHMP) which is to be agreed to by Regis, the RAPs and the DPIE. The ACHMP will also include an unanticipated finds protocol, unanticipated skeletal remains protocol and the process for the long-term management of any artefacts. Further, subject to the agreement of the RAPs the artefacts will be removed from harm and relocated in the landscape close to where they originated; but outside of the area of disturbance. In relation to the relocation of artefacts OzArk[214] concludes

> *"As all recorded artefacts are currently in secondary contexts, moving the already displaced artefacts a short distance out of harm's way is likely to constitute a very minimal loss of heritage value as the artefacts remain associated with the landscape in which they were recorded."*

10.2.9 Economic Growth

Direct and Indirect Economic Impacts

The construction phase of the pipeline development will make a moderate positive economic contribution to the CW&O Region. The EcIA[215] prepared for the project presents an estimate of the direct economic benefits of the construction phase of the project, but does not separate out the pipeline development. The findings of the EcIA are report in Section 6.2.10.

[214] OzArk, 2019.

[215] Gillespie Economics, 2019.

The introduction of the construction phase workforce for the pipeline development will generate moderate indirect economic benefits to the RAA over the 12 month construction phase. These benefits include flow-on spending by those employees in the local area e.g. spending on accommodation, food, leisure and recreation and personal services.

The geographic spread of this spending is difficult to specifically determine and will depend on where each employee resides during that time and their personal preferences for travelling to different centres for various products and services. Further detail regarding the construction phase indirect economic impacts are given in the EIS EcIA (EIS Appendix DD).

10.2.10 Beneficial Reuse

There may be potential retention and beneficial reuse options for the pipeline infrastructure following mine closure. During consultation, the BRC indicated an interest in future beneficial reuse options, and a number of landowners also expressed an interest in reuse options for the pipeline development.

Prior to any decision to decommission the pipeline development, Regis will prepare a Pipeline Decommissioning Plan. A component of this plan will be consultation with interested and affected parties (including directly affected landowners) in relation to potential reuse options. Future use options will also be influenced by the estimated life of the pipeline infrastructure. Landowner agreements include agreement to the pipeline easement in perpetuity.

10.3 CUMULATIVE IMPACTS AND OPPORTUNITIES

The pipeline development will result in the creation of infrastructure corridors/easements on some properties. A number of affected landowners already have multiple easements (i.e. gas, electricity and water) across their properties and several of these landowners expressed concern in relation to the addition of a further easement. The key concern raised related to the cumulative impact of multiple easements on agricultural operations.

The location of the pipeline corridor on each private landholding has been agreed with each directly affected landowner. Regis has committed to the development of tailored PMPs for each impacted property, and the preparation of a Landholder Communication Plan to ensure adequate notification of the construction phase is provided to all directly affected landowners.

10.4 MANAGEMENT, MONITORING AND REPORTING

Table 46 provides a summary of the key tools to manage the potential social impacts of the project and enhance benefits. Other tools including a TMP will also be prepared for the project and will assist in the management of social impacts.

Table 46
Summary of Key Management Tools

Tools	Description
Route and Site Selection	The land required for the pipeline corridor is located largely on freehold tenure, the majority of which is rural grazing land. A detailed site and route selection process has been undertaken during the planning of the project to mitigate the social and environmental impacts; this is described further in the EIS (EMM, 2019). The focus of the pipeline corridor selection process has been the minimisation of social and environmental effects. The alignment of the pipeline corridor was selected to align with existing easements (where possible) to minimise the disruption to land uses in this area. Prior to the finalisation of alignments in this area, discussions were held with landowners and changes made to the alignment where possible based on their preferences, for example to reduce impacts to existing irrigation infrastructure. Within Forestry NSW land existing tracks and laydown areas will be used where practical. Construction within Forestry NSW land will be subject to traffic management controls. The four pumping station facilities have been specifically located to minimise impacts on adjacent or nearby residential properties.
Pipeline Development Consultation	A consultation program has been ongoing throughout the planning stages of the pipeline development. This has included meetings with directly affected landowners and government representatives. Consultation is planned to continue during the project approvals process and during construction. This will keep the public and landowners informed of the project as it develops and to provide an avenue for complaints or issues to be raised.
Landholder Communication Plan	A Landholder Communication Plan will be developed for each property directly impacted by the pipeline development. This will ensure adequate notification of the construction phase is provided to all directly affected landowner. The Landholder Communication Plan will ensure landowners are provided with adequate time to move stock and to crop paddocks (where necessary) prior to the commencement of the pipeline development. Landholder Communication Plans will be developed with each directly affected landholder, in parallel with the project approvals process.
PMP and RMP	Tailored PMP and a RMP will be prepared for each property directly impacted by the project. The content of the PMP and RMP will be agreed with each landowner prior to commencement of the pipeline development and in parallel with the project approvals process.
Local Content Plan (LCP)	Regis will prepare a LCP for the construction and operations phases of the project. The LCP will include an assessment of local contractor capabilities and a detailed analysis of existing local enterprise and the skills / education base of local residents. Wherever possible, project supply and workforce requirements will be matched with existing capabilities in the local community.
Pipeline Decommissioning Management Plan	The Pipeline Decommissioning Management Plan will be prepared to provide a framework for Regis to: • Undertake the decommissioning and/or abandonment of the pipeline corridor assets in a manner that meets stakeholder expectations; • Leave a landform which is safe, stable and non-polluting and compatible with the intended post-closure land use and enable effective transfer to third parties; and

Tools	Description
	• Provide for the retention and beneficial reuse of infrastructure constructed by Regis to third parties, where there is an appropriate agreement in place and regulatory authorities are satisfied.
Complaints and Grievances Procedure	A formal complaints and grievances procedure will be developed for the construction phase of the pipeline development. This procedure will be aligned with that prepared for the mine development.
Construction Workforce Accommodation Strategy	A detailed CWAS will be developed following project determination. The strategy will be prepared in consultation with BSC, Orange360, key accommodation providers and where necessary proponents of existing or new major projects in the Local Area The strategy will: • Demonstrate how the construction phase workforce will be accommodated across the Local Area; • Demonstrate how workforce accommodation requirements will be managed during periods of high demand e.g. during key regional events such as Bathurst 1000; • Document the approach to informing accommodation providers of predicted project workforce accommodation demands including anticipated timing; • Enable the coordinated placement of the workforce in tourism accommodation throughout the Local Area; and • Keep key stakeholders informed of predicted project accommodation demands across the construction phase.

10.5 IMPACT SIGNIFICANCE ASSESSMENT

Table 47 presents an evaluation of the significance of the social impacts and benefits identified in the preceding subsections. The assessment of impact significance is based on the methodology described in Section 8.1.

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Table 47
Evaluation of Potential Social Impacts - Pipeline Development

SIA Section Ref	Social Impact	Affected Stakeholder	Duration	Stakeholder Concern	Unmitigated	Summary of Management Measures	Mitigated Risk	Significance
10.2.8	Impacts to Aboriginal cultural and social values	Wiradjuri people and RAPs	LOP	Moderate	C3	• ACHMP • Ongoing engagement with RAPs in relation to ACHMP	C2	M
10.2.2	Increase in demand for short-term accommodation reduces access for the non-mining sector	Other visitors to the CW Region (business and tourist)	CP (1 year)	Low	C3	• Where possible avoid construction activities during key regional events e.g. Bathurst 1000 and ensure workers do not remain in regional short-term accommodation during this period • Regis to encourage NLH workforce for pipeline development to reside in Bathurst and Lithgow LGAs	C1	L
10.2.1	Temporary access delays across local roads during pipeline construction	Road users	Short-term. Temporary during CP	Low	C2	• TMP	C1	L
10.2.3	Amenity impacts associated with noise and dust generated during construction	Nearby residents	Short-term. Temporary during CP	Low	C2	• Complaints and Grievances Procedure	C1	L

SIA Section Ref	Social Impact	Affected Stakeholder	Duration	Stakeholder Concern	Unmitigated	Summary of Management Measures	Mitigated Risk	Significance
10.2.4	Landowner expectations in relation to access to pipeline water are not realised	Pipeline landowners	LOP	Low	C3	• Maintain open communication regarding the future use and ownership of the pipeline • Prior to the cessation of the mine development and associated need for the pipeline, develop a future use strategy for the pipeline infrastructure	D2	L
10.2.5	Impact to agricultural operations	Pipeline landowners	CP (1 year)	Medium	B3	• Individual Property Management Plan • Landholder Communication Plan • Easement compensation • Inclusion of site wash-down procedures in the PMPs	D2	L
10.2.5	Interruptions to daily property activities	Pipeline landowners	LOP	Low	B3	• Individual Property Management Plan • Landholder Communication Plan. • Easement compensation	D2	L
10.2.5	Pipeline rehabilitation activities lead to land degradation over time with impacts to agricultural operations	Pipeline landowners	LOP	Medium	D3	• Individual Property Management Plan • Rehabilitation Management Plan • Easement compensation • Inclusion of site wash-down procedures in the PMPs	D1	L

SIA Section Ref	Social Impact	Affected Stakeholder	Duration	Stakeholder Concern	Unmitigated	Summary of Management Measures	Mitigated Risk	Significance
10.2.6	Potential for biosecurity risks with impacts to existing agricultural operations	Pipeline landowners	Long-term if not managed correctly	Medium	B3	• Individual Property Management Plan • Rehabilitation Management Plan • Compliance with Forestry Corporation NSW biosecurity controls • Inclusion of site wash-down procedures in the PMPs	D2	L
10.2.7	Impacts to public health and safety	Pipeline landowners and near neighbours	LOP	Low	C3	• Adherence to Regis and the contractor's Health and Safety Management System • Health and Safety Plans • Emergency Planning Procedures for construction • TMP(s)	D2	L
10.3	Cumulative impact of additional easements on private property	Pipeline landowners	LOP	Medium	C3	• Individual PMP • Where possible align pipeline corridor within established property boundaries and roads	D2	L

Notes:
LOP – Life of Pipeline
CP – Construction Phase
OP – Operations Phase

Table 48
Evaluation of Potential Social Benefits - Pipeline Development

SIA Section Ref	Social Opportunity	Affected Stakeholders	Temporal	Without Enhancement	Enhancement Measures	With Enhancement	Significance
10.2.8	Economic benefit to the Local Area (including Lithgow) through increased employment and procurement opportunities	Host LGAs for the pipeline	CP.	C2	• Local Employment Policy • Local Content Plan	B2	H
10.2.10	Potential retention and beneficial reuse options for the pipeline infrastructure	Pipeline landowners and host LGA for the pipeline	Dependent on land access agreements with private landowners and the operational life of the pipeline	D2	• Preparation of pipeline decommissioning plan • Engagement with key stakeholders to determine future ownership and use options for the pipeline infrastructure	D3	M

Notes:
LOP – Life of Pipeline
CP – Construction Phase
OP – Operations Phase

PART D – CONCLUSION

11 CONCLUSION

This SIA has been informed through a tailored and comprehensive SIA consultation process and a thorough examination of qualitative and quantitative data. The SIA assesses material social impacts, defined in the SIA Guideline as "*impacts that matter the most, and/or pose the greatest risk to those expected to be affected*"[216]. The social area of influence of the mine development consists of the people impacted or likely to be affected by the project[217]. In this regard the SIA has focussed on the PAA (neighbours in closest proximity to the mine project area), and the SAA (Blayney LGA) with reference as necessary to the RAA and broader CW Region.

LFB Resources NL, a 100% wholly owned subsidiary of Regis, is seeking SSD consent for the construction and operation of the project, a greenfield open cut gold mine (mine development) and associated water supply pipeline (pipeline development) in the CW Region of NSW. The project will have a peak construction workforce of 710 FTE workers, inclusive of 120 FTE workers associated with the pipeline development. The project will have an average annual operations workforce of 260 FTE workers.

The mine project area is located in a rural setting, immediately north of the small settlement of Kings Plains in the Blayney LGA. The nearest major town to the mine project area is Blayney, located 8 km to the west of the mine project area. The mine project area is located less than a one hour commute from the regional centres of Orange and Bathurst.

The PAA is primarily a rural area with strong rural character and residents who highly value their rural way of life. The estimated population of the PAA is 230 people[218]. The small settlement of Kings Plains is separated from the mine project area by the Mid Western Highway which connects Bathurst and Blayney. The Kings Plains settlement has an ERP of approximately 45 people and 19 residences[219].

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[216] Department of Planning and Environment, 2017b.

[217] Vanclay, F. et. al,. 2015.

[218] ABS 2017b – 2016 ABS Meshblock counts (10056010000, 10149310000, 10149300000, 10115610000, 10116070000, 10116130000) have been used to calculate the estimated population of the PAA. The combined area of these Meshblocks is larger than the PAA and includes a total of 109 dwellings and 285 people. This indicates an average occupancy rate of 2.6 persons per dwelling. There are 88 dwellings in the PAA. Applying the rate of 2.6 persons per dwelling the population of the PAA is estimated at approximately 230 people.

[219] ABS Census Data is not available for small areas such as Kings Plains. The population estimate provided is based on a combination of house counts from aerial photography interpretation and consultation conducted to date with residents.

The Blayney LGA has a long history of gold mining dating back to the 1800s. Gold fields were gazetted to the east of the mine project area, Kings Plains Goldfields, in the late 1850s. There is one gold mine- CVO, operating in the Blayney LGA. This is a significantly large gold mining operation and employs a sizeable workforce that is sourced primarily from the LGAs of Orange, Cabonne and Blayney. In 2017 the mining industry contributed 43% of the $1.652 B of output generated by the Blayney LGA economy[220].

The outcomes of SIA consultation indicate that residents of the PAA are already experiencing a range of impacts from the project. The experienced impact most frequently identified during consultation related to a reduction in health and wellbeing due primarily to uncertainty about the project and the potential impacts. The outcomes of the SIA indicate that the PAA, particularly the Kings Plains locality will experience a number of social impacts as a result of the construction and operations phases of the project. These impacts relate to a range of factors including changes in rural amenity, property acquisition and associated outmigration of residents, and changes in connectively and accessibility. These factors are predicted to adversely impact resident way of life, including use and enjoyment of outdoor space as well as social connectivity. The SIA includes a comprehensive framework (Table 33) for managing the potential social impacts of the project on near neighbours. The core principal of this framework is a commitment to open engagement with near neighbours to identify suitable measures to reduce the amenity impacts of the project.

Residents of the PAA also hold strong fears that the project will lead to long-term impacts on the Belubula River system in addition to impacting groundwater accessibility for near neighbours. Regis has developed a comprehensive management framework to avoid any impacts on the Belubula River and its associated catchment values (EIS Appendix J and EIS Appendix K). This framework includes incorporation of additional safeguards for seepage management into the design of the TSF (EIS Appendix D) and the installation of a dedicated groundwater monitoring network for the life of the project

Recognising existing sensitivities around water access, and in order to provide greater certainty to downstream landowners, Regis has provided a proposal for downstream surface and groundwater monitoring to downstream landowners. This approach will enable downstream landowners to remain informed of any changes in downstream water quality and quantity as a result of the project.

The outcomes of the SIA indicate that social impacts to the broader Blayney LGA are confined mainly to the construction phase of the project and relate primarily to a temporary increase in short-term accommodation demand. The Blayney LGA and the LGAs of the RAA will experience a number of economic and social benefits from the project.

[220] REMPLAN, 2019.

The project will result in significant economic benefits at the regional and state level. The total average annual impact of the peak year of construction (Year 1) on the regional[221] economy is estimated at up to:

- $531 M in annual direct and indirect regional output or business turnover;
- $218 M in annual direct and indirect regional value added;
- $114 M in annual direct and indirect household income; and
- 1,289 direct and indirect jobs.

The total annual impact of an average year of operations on the economy of the RAA is estimated at up to:

- $492 M in annual direct and indirect regional output or business turnover;
- $272 M in annual direct and indirect regional value added;
- $67 M in annual direct and indirect household income; and
- 788 direct and indirect jobs.

Blayney LGA will directly benefit from the project through:

- Direct and indirect employment generation;
- Investment in community infrastructure and services, made possible through the project VPA;
- Investment in education and training as Regis seeks to build a local skill base to support labour supply for the project;
- Project procurement spend. Regis is committed to securing local content on the project and supporting local businesses to participate in the project procurement process; and
- Direct and indirect population growth. The project will attract new residents to the Blayney LGA, of which the majority are anticipated to reside in Blayney.

[221] Noting in the context of the EcIA the Region is defined as the combined LGAs of Bathurst, Blayney, Cabonne and Orange.

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for
HANSEN BAILEY

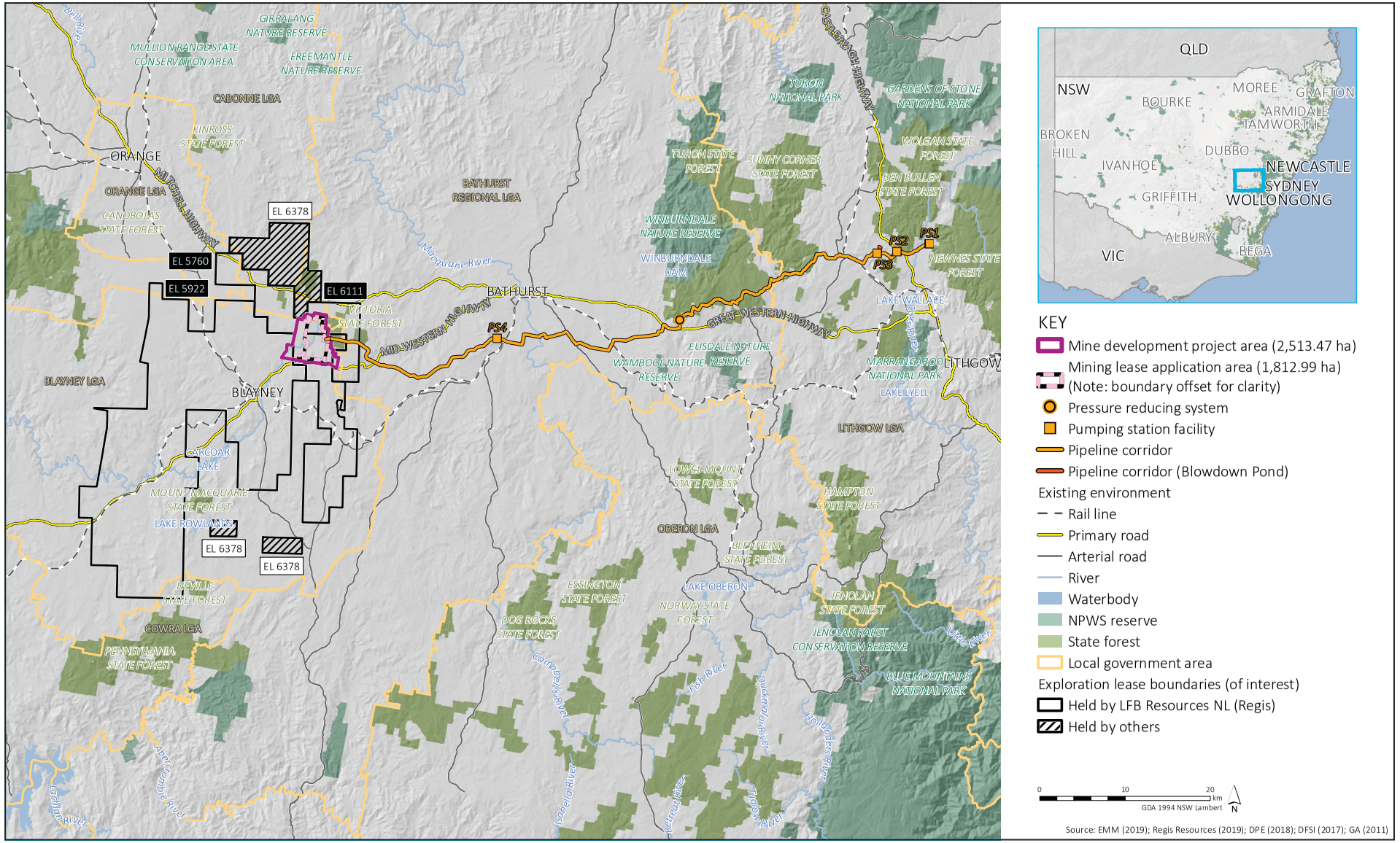




Bronwyn Pressland
Principal Social Planner

Peter Hansen
Director

FIGURES



Source: EMM (2019); Regis Resources (2019); DPE (2018); DFSI (2017); GA (2011)

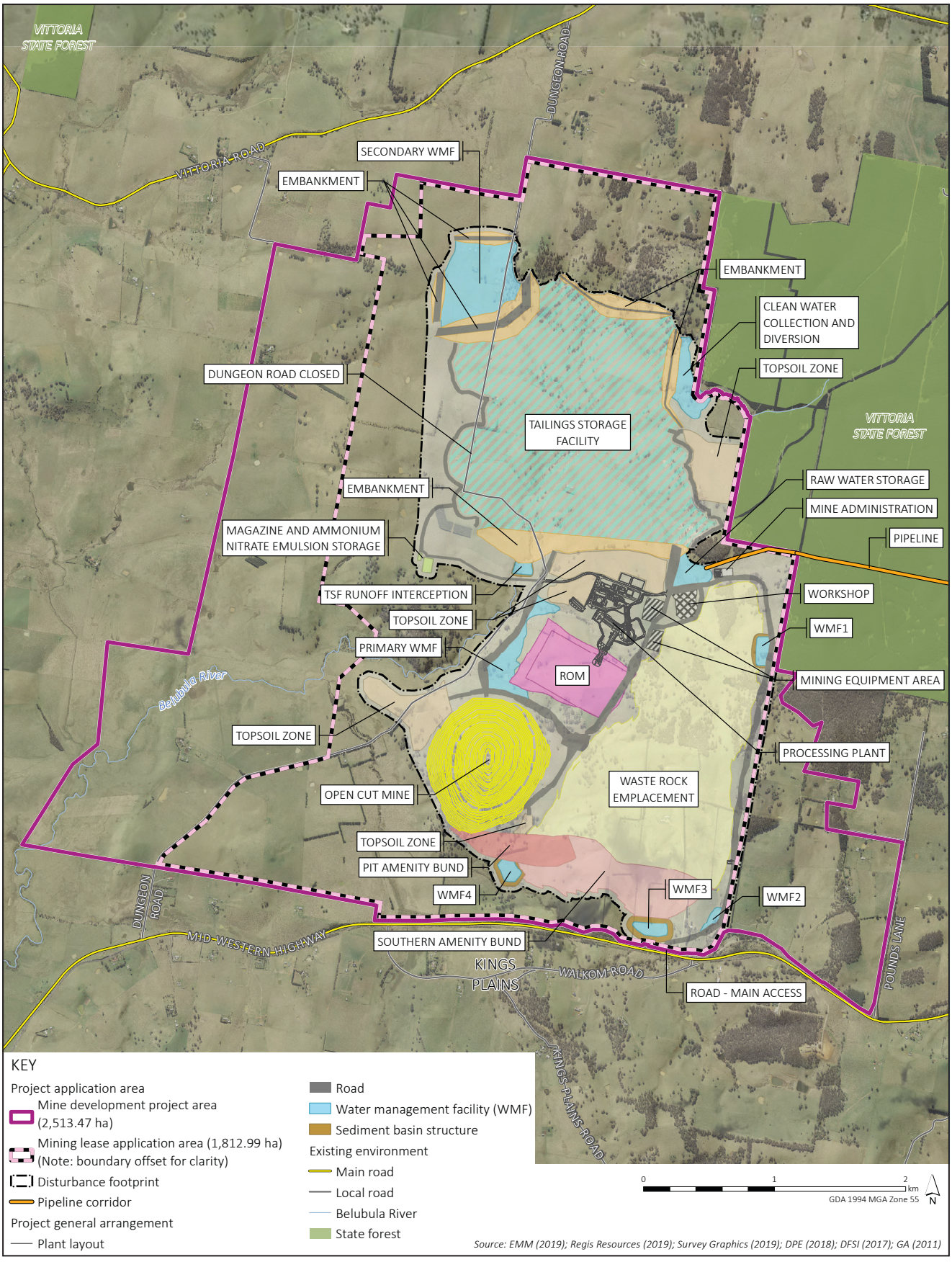
McPHILLAMYS GOLD PROJECT

REGIS RESOURCES LTD

Hansen Bailey
ENVIRONMENTAL CONSULTANTS

Project Application Area

FIGURE 1



Source: EMM (2019); Regis Resources (2019); Survey Graphics (2019); DPE (2018); DFSI (2017); GA (2011)

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Mine Development General Arrangement

FIGURE 2

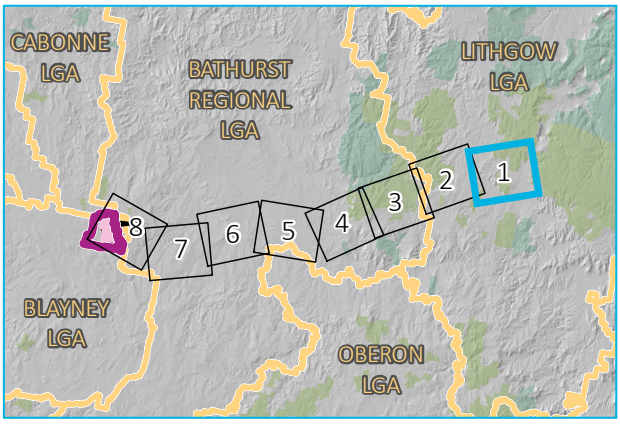


KEY

- Rail line
- Main road
- Local road
- Vehicular track
- Named watercourse
- Crown road (including shared Crown/Council)
- Built up area
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment
- Pumping station facility



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

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Pipeline Corridor

FIGURE 3a



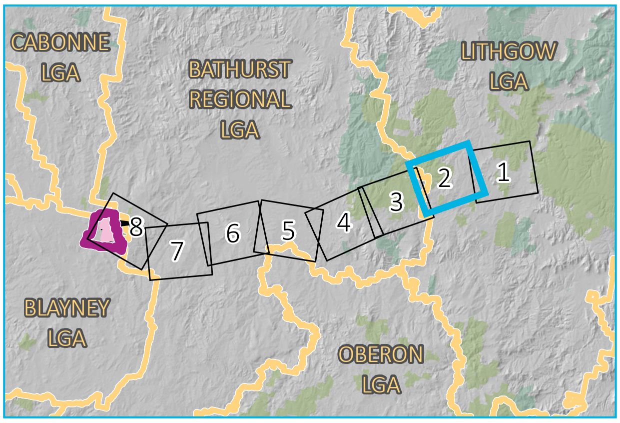
KEY

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- Main road
- Local road
- Vehicular track
- Named watercourse
- Crown road (including shared Crown/Council)
- Built up area
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment

0 1 2 km
GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

McPHILLAMYS GOLD PROJECT

REGIS RESOURCES LTD | Hansen Bailey ENVIRONMENTAL CONSULTANTS

Pipeline Corridor

FIGURE 3b



KEY

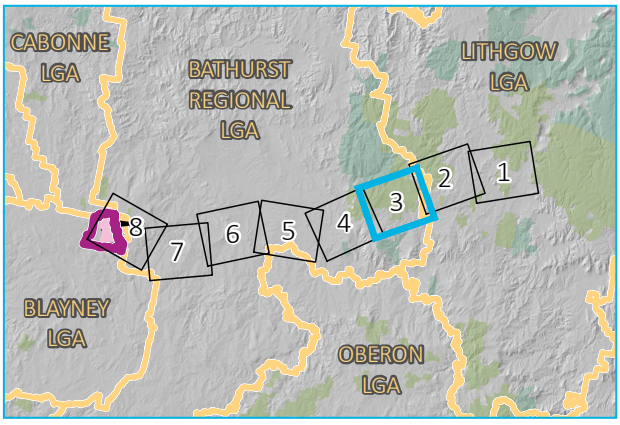
- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment

0 1 2 km

GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

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REGIS RESOURCES LTD

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Pipeline Corridor

FIGURE 3c



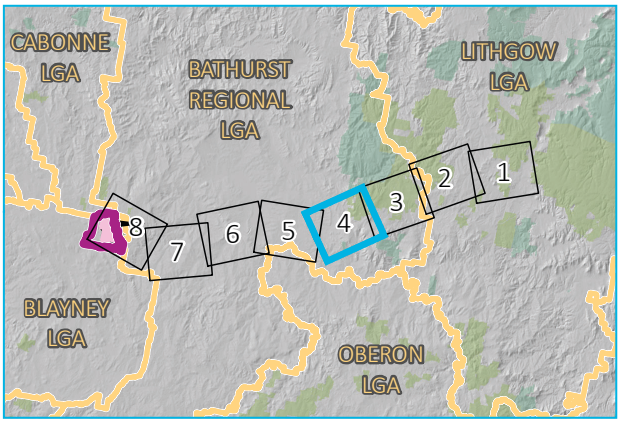
KEY

- Rail line
- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Pressure reducing system
- Proposed pipeline alignment

0 1 2 km
GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

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REGIS RESOURCES LTD

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ENVIRONMENTAL CONSULTANTS

Pipeline Corridor

FIGURE 3d



KEY

- Rail line
- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Built up area
- Waterbody
- NPWS reserve
- State forest
- Local government area

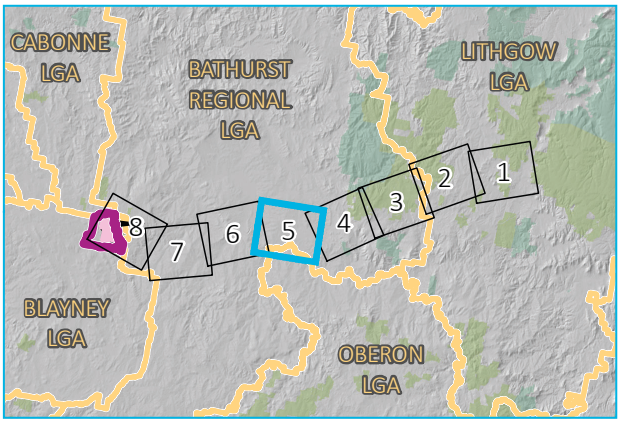
Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment

0 1 2 km

GDA 1994 NSW Lambert

N



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

McPHILLAMYS GOLD PROJECT

REGIS RESOURCES LTD

Hansen Bailey ENVIRONMENTAL CONSULTANTS

Pipeline Corridor

FIGURE 3e



KEY

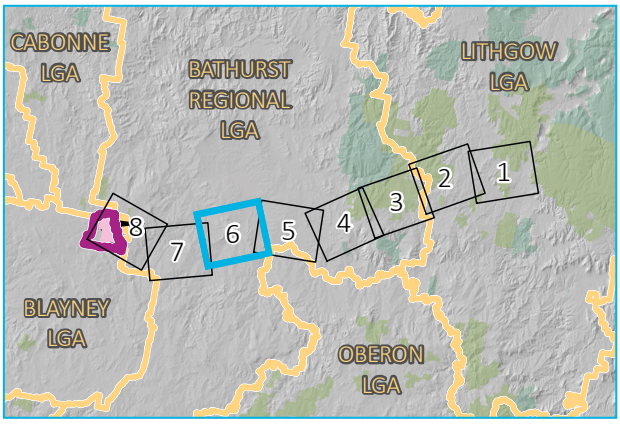
- Rail line
- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Built up area
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment
- Pumping station facility

0 1 2 km

GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

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Pipeline Corridor

FIGURE 3f



KEY

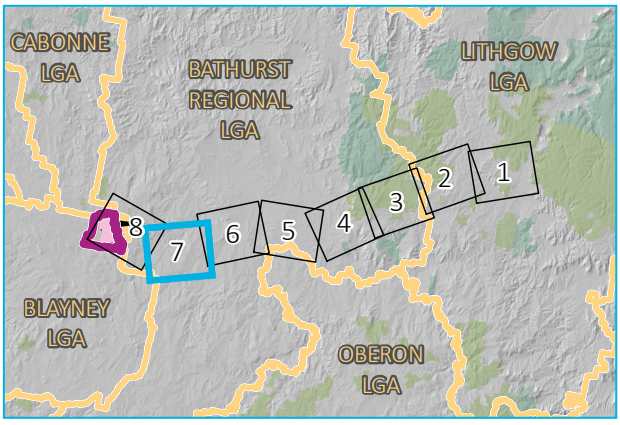
- Rail line
- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment

0 1 2 km

GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

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Hansen Bailey ENVIRONMENTAL CONSULTANTS

Pipeline Corridor

FIGURE 3g



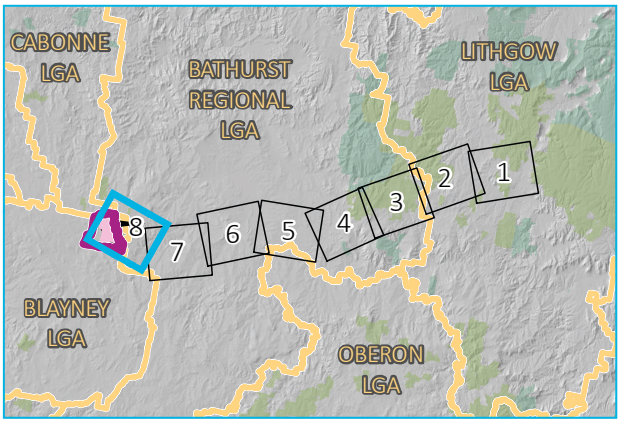
KEY

- Main road
- Local road
- Vehicular track
- Named watercourse
- Gas pipeline
- Crown road (including shared Crown/Council)
- Waterbody
- NPWS reserve
- State forest
- Local government area

Project application area

- Mine development project area (2,513.47 ha)
- Mining lease application area (1,825.27 ha) (Note: boundary offset for clarity)
- Proposed pipeline alignment

0 1 2 km
GDA 1994 NSW Lambert



Source: EMM (2019); Regis Resources (2019); DFSI (2017); GA (2011)

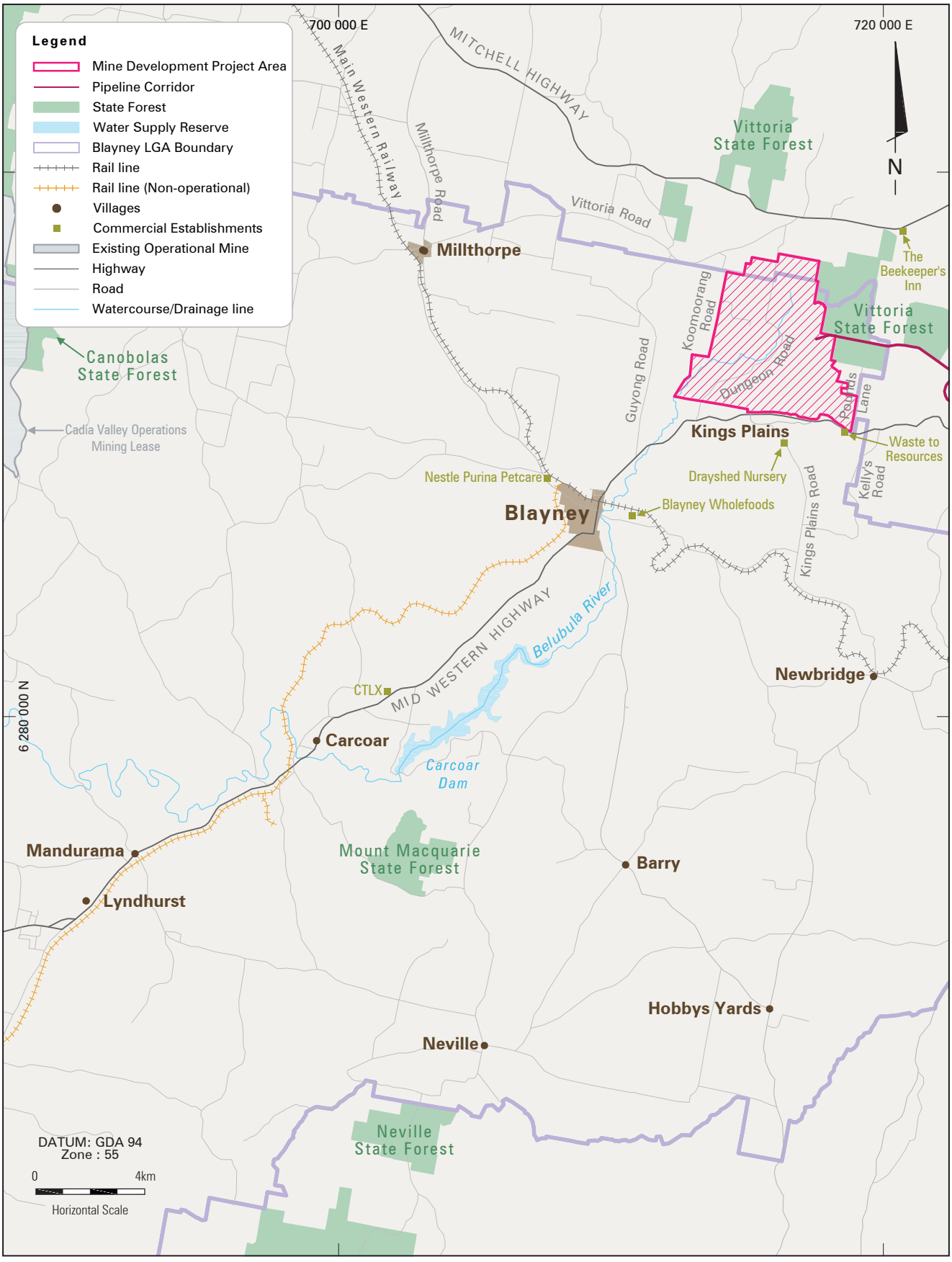
McPHILLAMYS GOLD PROJECT

REGIS RESOURCES LTD

Hansen Bailey
ENVIRONMENTAL CONSULTANTS

Pipeline Corridor

FIGURE 3h

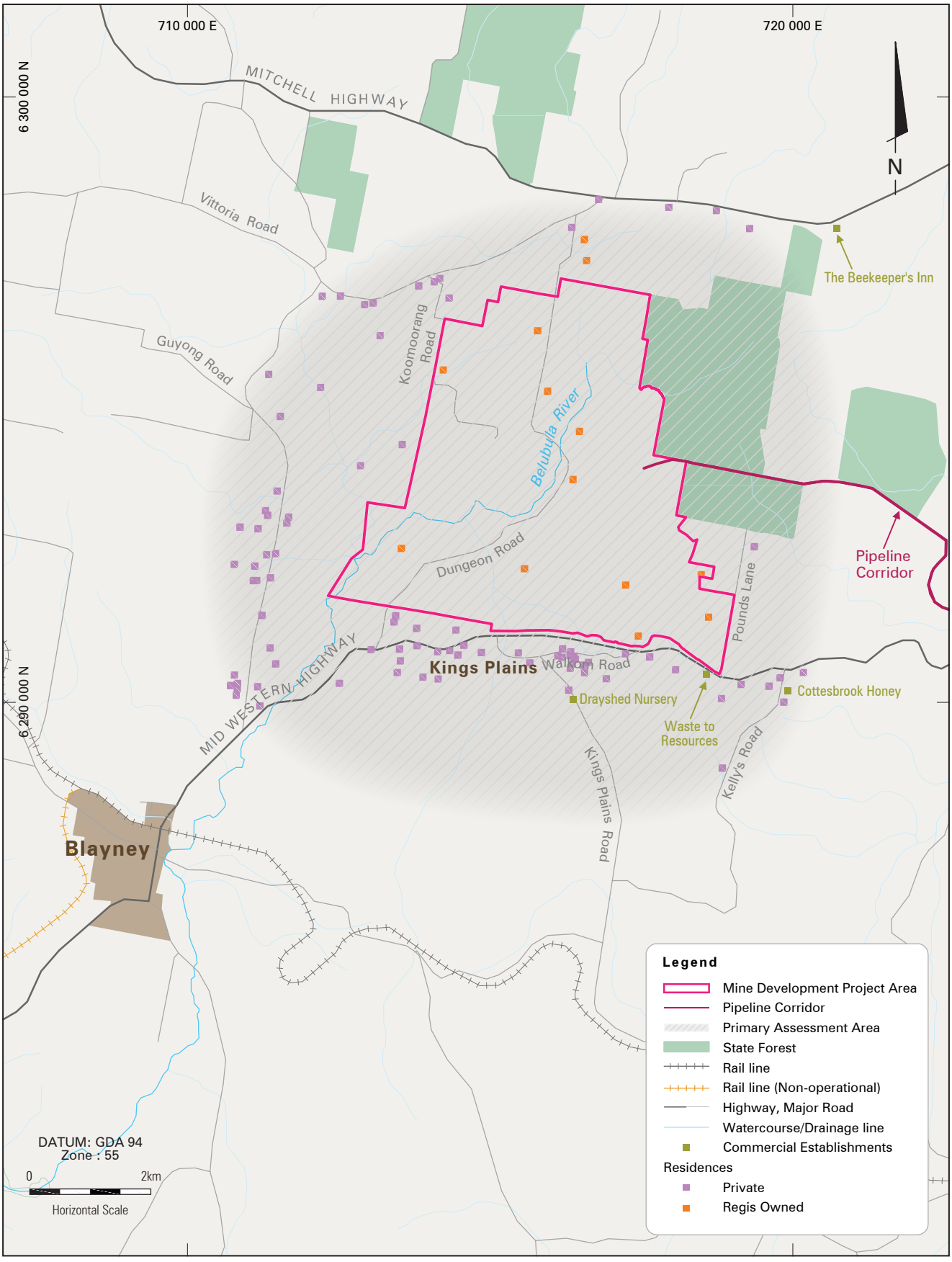


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Local Context Mine Development

FIGURE 4



McPHILLAMYS GOLD PROJECT

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SIA Primary Assessment Area

FIGURE 5

APPENDIX A

Curriculum Vitae of SIA Specialists

Bronwyn Pressland

Principal Social Planner

CURRICULUM VITAE

Areas of Expertise

- Social Impact Assessment and Management;
- Quantitative and Qualitative Social Research;
- Social Risk Identification and Assessment;
- Indigenous Participation Planning;
- Local Content Planning and Management;
- Workforce Housing and Accommodation Management;
- Workforce Recruitment and Training Planning;
- Stakeholder Consultation;
- Social Performance Monitoring and Evaluation;
- World Bank and IFC Standards; and
- Environmental Impact Assessment and Approvals.

Qualifications

- Masters of Environmental Management, Griffith University 1999.
- BBE Urban and Regional Planning, Queensland University of Technology, 1992.

Career Highlights

Bronwyn is a Principal Social Planner with international experience specialising in social impact assessment, community development and community engagement. She has over 20 years of practical experience in social impact assessment with extensive experience in mining and resource development (coal, manganese, bauxite, copper and gold. Bronwyn has experience in the Philippines in social and health impact assessment, resettlement, Free and Prior Informed Consent (FPIC) in line with World Bank and International Finance Corporation Standards (IFC). Bronwyn also has experience in engagement with Traditional Owners and the assessment of significant social impacts on Indigenous communities.

Key project experience includes:

- *Social Impact Assessment – identification, analysis and management of social impacts associated with major developments including copper-gold mining in the Philippines, bauxite mining in Cape York, manganese mining within an Indigenous Protected Area (IPA) of Northern Australia, coal mining throughout Queensland (Qld) and New South Wales (NSW), gold mining activities in NSW, and port and shipping activities within Qld.*
- *Social Impact Management Plans – development of social impact management and monitoring plans for the resources sector across Australia.*
- *Workforce housing and accommodation management – development of tailored strategies for housing and accommodation of significant sized workforces, including the use of Temporary Worker Accommodation Facilities and in-town accommodation.*
- *Community Consultation – design and implementation of community consultation programs incorporating a range of consultation mechanisms for impact assessment, issue management, master planning and policy development.*
- *Local Content Planning and Management – analysis of local industry capability, preparation of local capability plans and advice on local content plans.*
- *Environmental Impact Assessment – extensive experience in the preparation and delivery of environmental impact statements for a range of complex multidiscipline projects.*

Employment History:

HANSEN BAILEY, Brisbane (2007 – present)

Principal Social Planner and Communications Consultant

PLACE Design Group, Brisbane (Feb 2007 – 2007)

Contracting Senior Environmental and Social Planner

JACOBS UK, Leeds (2005 – 2006)

Senior Environmental and Social Planner

Earth Tech Australia, Brisbane (2002 – 2004)

Senior Environmental and Social Planner

URS AUSTRALIA, Brisbane (1998 – 2002)

Senior Environmental and Social Planner

ERM Mitchell McCotter, Brisbane/Sydney (1996 – 1998)

Environmental Planner

Project Experience

Environmental Impact Assessment / Social Impact Assessment (SIA) and Community Consultation

- Boggabri Coal Mine (BCM) (Boggabri, NSW) (Idemitsu) (under preparation) **Social Impact Management Plan (SIMP)** – Preparation of a SIMP for the existing operations at BCM.
- Aurukun Bauxite Project (Aurukun, QLD) (Glencore) (under preparation) – **SIA**. Preparation of an SIA for a substantial greenfield bauxite mining operation nearby the town of Aurukun. Project involves bauxite mining and processing, barging and transhipment activities. Design of a community engagement program for Indigenous and non-Indigenous stakeholder engagement. The SIA will require assessment of the potential social and economic impacts of the project on the relevant Traditional Owners.
- McPhillamys Gold Project (Blayney, NSW) (Regis Resources) (under preparation) – **SIA**. Preparation of an SIA for a greenfield gold mine located outside the town of Blayney in NSW. The SIA is being prepared in accordance with the NSW SIA Guidelines (2017) and supports a development application to the NSW Department of Planning and Environment for a state significant development (SSD).
- McPhillamys Gold Project (Blayney, NSW) (Regis Resources) – **SIA Scoping Study**. Preparation of an SIA Scoping Study for a greenfield gold mine outside the town of Blayney in NSW. The SIA Scoping Study was prepared in accordance with the new NSW SIA Guidelines (2017) and supported an application to the NSW Department of Planning and Environment for Secretary's Environmental Assessment Requirements (SEARs).

Project Experience (cont)

- Tcharawopin Project (Aurukun, Qld) (Glencore) – **SIA and stakeholder engagement**. Preparation of an SIA for a greenfield bauxite mining operation nearby the town of Aurukun within the Aurukun Shire. Project includes bauxite mining, and barging activity in local river systems and coastal zone. Design of a community engagement program for Indigenous and non-Indigenous stakeholder engagement. The SIA will require assessment of the potential social and economic impacts of the project on the relevant Traditional Owners
- Bylong Coal Project (Hunter Valley) (KEPCO) – **Draft Social Impact Management Plan (SIMP).** Preparation of a draft SIMP for the Bylong Coal Project, an underground and open cut mining project located nearby the small rural village of Bylong.
- Bylong Coal Project (Hunter Valley) (KEPCO) – **SIA and stakeholder engagement.** Preparation of a SIA for an underground and open cut mining project located nearby the small rural village of Bylong. The project involved extensive work around workforce accommodation and housing, including a detailed survey of housing and accommodation provision across the region. The SIA involved significant targeted consultation through focus groups with residents of the Bylong Valley, preparation of social impact management actions to address issues such as population decline, workforce housing and accommodation, rural land management. The Response to Submissions (RTS) process has also involved further baseline social surveys (tourism accommodation survey) and additional analysis of the local housing market.
- Groote Eylandt Mining Project (GEMCO) Eastern Leases Project (Groote Eylandt, NT) South 32 – **Assessment of the potential social and economic impacts of the project on the Traditional Owners of the Groote Eylandt Archipelago**. The SIA required consideration of a diverse range of issues including Indigenous use of the project land, spiritual associations with the land and water, long-term maintenance of Indigenous culture, employment and training, distribution of royalties, Commonwealth and Territory Indigenous legislation and regulations.
- Groote Eylandt Mining Project (GEMCO) Eastern Leases Project (Groote Eylandt, NT) South 32 – **Design and implementation of Indigenous consultation strategy** for the project approvals phase of the Eastern Leases Project. The consultation strategy included a significant field based component where Bronwyn conducted land use mapping with Traditional Owners. Consultation included a number of small focus groups with Indigenous women's groups and Indigenous Elders, participation in community events, meetings with education providers, health representatives, child services, emergency services etc. Bronwyn conducted significant consultation with the Indigenous Employees of South 32 on Groote Eylandt including engagement around rehabilitation practices, employment and training.

Project Experience (cont)

- Tampakan Copper-Gold Mine Project (Philippines) (Xstrata) – **Management of the Social Impact Assessment and Environmental Health Impact Assessment studies**. Bronwyn was responsible for managing and working closely with the locally appointed consultants for the conduct of the SIA, in particular the field surveys. Bronwyn contributed to the identification and analysis of social impacts, the drafting of the SIA report and was responsible for ensuring compliance with World Bank and IFC Standards.
- Tampakan Copper-Gold Mine Project (Philippines) (Xstrata) – **Assistance with design and implementation of the community consultation process for project approvals.** Bronwyn was involved in the design of consultation materials, key messages, issues questions and concerns. Preparation of Stakeholder Engagement Plan for the environmental approvals process. Assistance in analysis and response to the findings of significant community consultation such as public hearings. Preparation of the issue response management plan following the completion of the initial phases of stakeholder consultation
- Tampakan Copper-Gold Project (Philippines) (Xstrata) – **Preparation of Briefing Note on obtaining Free and Prior Informed Consent (FPIC) from Indigenous people**. Bronwyn assisted with the preparation of a FPIC briefing note for the project including analysis of World Bank and IFC standards. Bronwyn then assisted with the implementation of key actions around securing FPIC for the project
- Project China Stone (Galilee Basin) (MacMines) **SIA** – **Preparation of a SIA and design and implementation of a community engagement process for the development of a significant open cut and underground mining operation in the remote Galilee Basin**. The SIA involved an extensive community engagement process, labour force supply analysis, local content capability assessment and preparation of a social impact assessment management plan.
- Anglo American (Moranbah, QLD) – **Provision of strategic advice and assistance with the management of social impacts associated with mining operations in the Moranbah region**. This included the provision of assistance with the undertaking of a corporate review of operations using the Anglo American Socio-Economic Assessment Tool (SEAT), conduct of focus groups with residents of Moranbah, documentation of outcomes in the Annual Moranbah SEAT Report.
- Boggabri Coal Project (Boggabri, NSW) – Preparation of SIA for a new open cut mine at Boggabri, NSW.
- Grosvenor Project (Moranbah, Qld) – Stakeholder Consultation Coordinator and SIA Manager. **Design and implementation of a stakeholder consultation program for the preparation of an EIS for the Grosvenor underground mine.** Preparation of the SIA component of the EIS and SIMP. Assistance with the development of workforce accommodation strategy and the development of measures to manage associated potential social impacts.

Project Experience (cont)

- Minyango Project (Blackwater, Qld) – **Stakeholder Consultation Coordinator and SIA Manager.** Design and implementation of a stakeholder consultation program for the preparation of an EIS for the Minyango underground mine. Preparation of the SIA component of the EIS, including the design of the SIA methodology, conduct of focus group discussions with all sectors of the community and preparation of a SIMP.
- Foxleigh Project (Middlemount, Qld) – **Stakeholder Consultation Coordinator and SIA Manager**. Design and implementation of a stakeholder consultation program for the preparation of an EIS for the Minyango underground mine. Preparation of the SIA component of the EIS and SIMP.
- Belvedere Project (Moura, Qld) – **Stakeholder Consultation Coordinator and SIA Manager.** Design and implementation of a stakeholder consultation program for the preparation of an EIS for the Belvedere underground coal mine. Preparation of the SIA component of the EIS.
- Innes Park South Quarry Project (Bundaberg, QLD) – **Project Manager for the preparation of a Material Change of Use Application for the establishment of a new basalt quarry on rural land in Innes Park.** Completion of town planning report and design and implementation of a targeted community consultation process.
- Eagle Downs Project (Moranbah, Qld) – **Stakeholder Consultation Coordinator and SIA Manager.** Design and implementation of a stakeholder consultation program for the preparation of an EIS for the Peak Downs East underground mine. Preparation of the SIA component of the EIS.
- Mount Arthur North Coal Project (Hunter Valley, NSW) – Environmental Planner assisting with the compilation and final production of the EIS document.
- Darling Anabranch Pipeline and Environmental Flows EIS (Murray Darling Basin Commission) – Project Coordinator for planning and environmental approvals/specialist consultation advisor and social impact assessor.
- QNI Yabulu Nickel Refinery Extension Project EIS (QNI Pty Ltd), (Townsville, Qld) – Consultation/Social/Planning Manager for the preparation of an EIS for the refinery extension.
- Dalrymple Bay Coal Terminal Stages 6 & 7 Expansion EIS, (Ports Corporation of Queensland) – **Assistant Project Manager/Land Use Planner/Social Impact Assessor/Consultation Manager.** These roles involved management of multiple stakeholders as well as leading and developing a multidisciplinary design and implementation team.
- Bribie Island Road Upgrade (Main Roads) (Bribie Island, Qld) – Design and implementation of a community consultation program for the identification of a preferred option for road upgrade.
- Lincoln Southern Bypass (Lincolnshire County Council) – Design and implementation of a community consultation program for the conceptual and detailed design of a Southern Bypass road.

Project Experience (cont)

- Alcan Gove Alumina Refinery Expansion Project (Gove, NT) – Design of indigenous and non-indigenous stakeholder consultation program for the EIS. Development of the SIA methodology for the preparation of the EIS.
- Naturelink Cableway EIS – Project Manager/Land Use Impact Assessor/Consultation advisor and Social Impact Assessor.
- Interconnection to the National Grid EIS (Powerlink) – Coordination of land-use and Social Impact Assessment.
- Banyo Defence Land Disposal Study and Masterplan (Department of Defence) – Project Manager for the preparation of a land use concept plan, site constraints and analysis investigation.

Social Planning Studies

- Social Sustainability Assessment of Northern England Coalfield Communities (Northern England Economic Development Board) – Project involved a detailed sustainability assessment of 20 coalfield communities, prioritisation of communities for social infrastructure investment and development of investment programs for high priority communities.
- Preparation of Community Housing and Environmental Health Plans (CHEHP) NSW DAA/DPWS – Social Planner/Community Adviser
- Toomelah/Boggabilla Community Housing and Environmental Health Plan (CHEHP).
- Lightning Ridge/Collarenebri Housing and Environmental Health Plan.
- Gulargambone/Coonamble Aboriginal Community Development Program Early Works Implementation National Aboriginal Health Strategy.

These projects role involved assessment of community environmental health encompassing housing provision and condition as well as access to services and facilities. The role encompassed extensive consultation and negotiations with the Indigenous Community including the management of an Ingenious Working Party. Recommendations were made for the provision of additional facilities and services. Funding mechanisms were identified for the provision of additional housing and services and facilities. Implementation plan for community servicing developed.

Strategic Environmental and Planning Studies

- Regional Monitoring Report (Yorkshire and Humber Assembly UK) – Development of a new monitoring framework for monitoring the environmental economic, built and social development aspects of the Regional Spatial Strategy.
- Yorkshire and Humber Regional Spatial Strategy (Yorkshire and Humber Assembly) – Drafting of 'outcome statements' and background reports for the preparation of the regional planning framework.

Countries Worked In

- Australia (QLD, NSW, NT, VIC), UK, Philippines.
- UK residency visa.

Lauren Jessup

Social Planner

CURRICULUM VITAE

Areas of Expertise

- Social Impact Assessment, Management and Reporting
- Quantitative and Qualitative Social Research
- Stakeholder Consultation

Qualifications

- Hon (Class I) Geographical Science, the University of Queensland, 2016
- Bachelor of Science, the University of Queensland, 2015

Career Highlights

Lauren is a Social Planner with experience in social impact assessment, community development and community engagement in Queensland, New South Wales, Victoria and Western Australia. She holds a Geographical Science degree which included the study of wider social impacts and demographics, an Honours degree of Geography specialising in Social Inclusion and Exclusion regarding large scale infrastructure and has had experience through working at GHD and Hansen Bailey. Currently, Lauren is assisting with social impact assessments and consultation to inform the EIS process for a proposed bauxite mine in the Cape York Peninsula and a proposed gold mine in New South Wales. Lauren also has experience in engaging with Traditional Owners and the assessment of significant social impacts on Indigenous communities.

Employment History

HANSEN BAILEY, Brisbane (June 2018 – Present)

Social Planner

GHD Pty Ltd, Brisbane (January 2017 – June 2018)

Stakeholder Engagement and Social Sustainability Consultant

Project Experience

Social Impact Assessment (SIA)/Community Consultation

- Boggabri Coal Mine (BCM) (Boggabri, NSW) (Idemitsu) (under preparation) Social Impact Management Plan (SIMP) – Preparation of a SIMP for the existing operations at BCM.
- Aurukun Bauxite Project (Aurukun, QLD) (Glencore) (under preparation) – SIA. Providing assistance for the preparation of an SIA, including consultation, for a substantial greenfield bauxite mining operation nearby the town of Aurukun. Project involves bauxite mining and processing, barging and transhipment activities. The SIA will require assessment of the potential social and economic impacts of the project on the relevant Traditional Owners.
- Aurukun Bauxite Project (Aurukun, QLD) (Glencore) (under preparation) – EIS Consultation. Providing assistance for the preparation of EIS consultation, including stakeholder identification, distribution of project materials, provide support to Glencore when on-country, maintain a stakeholder database and consult with stakeholder regarding EIS approvals timeframes.

- Tcharawopin Project (Aurukun, Qld) (Glencore) (complete) – SIA and stakeholder engagement. Providing assistance for the preparation of an Scoping Study and SIA for a greenfield bauxite mining operation nearby the town of Aurukun within the Aurukun Shire. Project included assessing the feasibility of bauxite mining, and barging activities in local river systems and coastal zone. Design of a community engagement program for Indigenous and non-Indigenous stakeholder engagement. The project assessment found this project not feasible.
- McPhillamys Gold Project (Blayney, NSW) (Regis Resources Limited) (under preparation) – SIA and stakeholder engagement. Providing assistance for the preparation of an SIA, including consultation, for a greenfield open cut gold mine operation in Blayney LGA. Project involves gold mining and processing on site. The SIA will require assessment of the potential social and economic impacts of the project on the relevant communities and near neighbours.
- Moranbah North Extension Project (Moranbah, QLD) (AngloAmerican) (under preparation) – Project Coordinator. Providing assistance for the preparation of a Major Environmental Authority (EA), whilst offering assistance to the Project Manager. Project involves extending the existing section of underground longwall mining. Assist with project scheduling and the submission of an EPBC Act Referral and in documenting a response for a request for information.
- Dartbrook Project (Hunter Valley, NSW) (submitted) – Modification SIA desktop report preparation. Providing assistance for the existing Dartbrook Mine through the completion and submission of an SIA for the project modification. Report included updating the social baseline and compiling and assessing project impacts.

GHD project experience includes:

- Business Impact Assessments (internal) – report diagnostics;
- Toowoomba Heritage Tunnel Upgrade Project – stakeholder engagement;
- Sydney Metro – SIA;
- North East Link (NEL) Tunnel – SIA and Options Analysis;
- Argyle Diamond Mine Closure – SIA;
- Moreton Bay Regional Council – community engagement toolbox development;
- Gold Coast Council Waste and Water Management – survey development and generate annual reports; and
- Riverside Drive Property Development – stakeholder engagement.

APPENDIX B

SIA Methodology - Supporting Information

APPENDIX B

1.0 SIA METHODOLOGY

This section provides supporting information on the methodology for the preparation of the SIA. It supplements the summary provided in Section 3 of the SIA. It focuses principally on the scope of the SIA engagement and the implementation of engagement activities, and the prediction and assessment of impacts and opportunities.

1.1 SIA SCOPING

Table 1 demonstrates how the core objectives of the New South Wales (NSW) *SIA Guidelines for State significant mining, petroleum and industry development*[1] (NSW SIA Guidelines) were achieved through the use of a variety of scoping tools and methodology. The scoping methodology is consistent with the requirements of the NSW SIA Guidelines and best practice directions such as Vanclay et al 2015[2]. Scoping was undertaken for the mine development component of the project.

Table 1
Scoping Methodology

Scoping Method	Key Scoping Tasks
Analysis of project components	• Comprehensive analysis of project activities to understand the project dimensions that have the potential to result in social impacts and opportunities. This included visits to the mine development project area and the land located within the project application area.
Literature review and document analysis	• Review of recent relevant research and SIAs to identify findings of relevance to the scope, baseline and assessment of social impacts and opportunities. • Review of published research on social impacts that have resulted from comparable resource projects were referenced, as well as relevant local, state and federal strategic plans and policies.
Stakeholder Analysis	• A thorough analysis of all potentially interested and affected parties was undertaken. Stakeholders identified include: – Residents in the immediately affected area (i.e. Kings Plains residents); – Nearby residents (e.g. residents along Guyong Road); – People residing within and along the pipeline corridor who may be affected by the pipeline development; – Communities in proximity to the mine development (e.g. Kings Plains, Blayney and Millthorpe); – Indigenous people who may have spiritual attachment to the project application area;

[1] DPE 2017

[2] Vanclay, F., Esteves, A.M., Aucamp, I. & Franks, D. 2015.

Scoping Method	Key Scoping Tasks
	– Vulnerable groups within nearby communities (e.g. Blayney who may be adversely impacted by the project); – Landowners located along the Belubula River downstream of the mine development; and – Users of Carcoar Dam.
Preliminary issue scoping engagement with interested and affected parties	• Stakeholder views and knowledge are central to SIA. Hansen Bailey undertook one-on-one face-to-face meetings in April 2019 with near neighbours to inform SIA scoping. Local residents have extensive local knowledge, historical and heritage knowledge, and experience of social impacts. This knowledge was used to inform an understanding of the project's potential social area of influence. • Regis Resources Limited (Regis) also undertook one-on-one consultation with near neighbours, a range of government and non-government organisations and interest groups prior to inform the scoping study. • The outcomes of engagement informed an evidence base for the social impacts requiring further investigation in the EIS. Outcomes also informed the level of assessment assigned to each impact.
Identification of preliminary social area of influence	• The project's social area of influence consists of the people likely to be impacted by the project. Vanclay et. al. (2015) notes that "*Affected peoples include both 'communities of place' and 'communities of interest'. 'The location of affected people frequently does not neatly align with the geographic boundaries or the area of influence determined by the environmental impact of a project"*. • The project's social area of influence was informed through the findings of preliminary scoping engagement and a preliminary analysis of the socio-economic characteristics of nearby communities. • The project's social area of influence is described in Section 5.1 of the SIA.
Socio-economic profiling	• Established public and commercial data sources were utilised to develop a social baseline for the communities of the social area of influence. The social profile is summarised in Section 5 with a full detailed social baseline provided in Appendix F. • This task included the assessment of the impact history of the relevant communities with particular focus on the development of the Cadia Valley Operation (CVO), Browns Creek Mine and the Junction Reefs Mine. • Profiling included the identification and analysis of social networks and connections, economic connectivity between communities as well as physical connectivity e.g. roads and rail.
Impact prediction and analysis	• SIA scoping engagement informed the identification of relevant matters and social impacts and opportunities. A preliminary list of the social impacts and opportunities identified through the SIA Scoping Phase is presented in Appendix C of the SIA.
Assignment of assessment level	• All predicated impacts and opportunities were then assigned an assessment level based on the methodology described in the NSW SIA Guideline.

1.2 SOCIAL AREA OF INFLUENCE

The social area of influence described in Section 5.1 of the SIA was defined following consideration of the:

- Outcomes of the SIA Scoping Phase;
- Project activities proposed;
- Project's geographic location and proximity of neighbouring communities;
- Location of other relevant proposals or projects;
- Location and types of physical and social infrastructure, settlement and land use patterns;
- Potential for social and cultural impacts to occur i.e. the outcomes of the SIA Scoping Phase;
- Social values that might be affected by the project;
- Indigenous social and cultural characteristics;
- Expected geographical distribution of employees and economic benefits;
- Anticipated geographical distribution of potential project impacts and benefits; and
- Findings of scoping engagement.

Community engagement in April 2018 and October 2018 provided insight into the extent of potential project impacts, and allowed the spatial and temporal disaggregation of impacts across different stakeholder groups.

1.3 SOCIAL BASELINE DESCRIPTION

A summary of the investigations undertaken to inform the social baseline study (Section 5 (mine development) and Section 9 (pipeline development) of the SIA, and Appendix F), consistent with the SIA categories in the SIA Guideline (DPE 2017), is presented in Table 2.

Table 2
Social Baseline Investigations

Social Conditions/Values	Investigations
Way of life	• Analysis of demographic characteristics and population projections, including trends over time drawing on Australian Bureau of Statistics (ABS) census data and other data • Analysis of population, dwelling and household projections from the Department of Planning and Environment (DPE) (now known as the Department of Planning, Industry and Environment (DPIE)) • Analysis of labour market conditions drawing on Small Area Labour Market (SALM) data from the Department of Employment, Skills, Small and Family Business (DESSFB) • Assessment of key social indicators • SIA consultation as described in Section 3.5 and Appendix F of the SIA • Local business survey • Analysis of business counts using ABS Census data • Analysis of early settlement patterns and historical development of the Blayney LGA and Blayney township • Review of relevant local and regional planning documents • Review of electronic media and social media
Community	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Desktop analysis of community organisations and non-government agencies • Local business survey • Analysis of community composition • Review of LGA community plans • Review of electronic media and social media
Access to and use of infrastructure, services and facilities	• Analysis of relevant local and regional planning documents • Identification of desired planning outcomes and settlement patterns for the Blayney LGA • Mapping analysis using google earth and google maps • SIA consultation as described in Section 3.5 and Appendix F of the SIA • Identification and analysis of impacts experienced during recent major project expansions
Culture	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Analysis of rural values and rural way of life • Heritage discussions with representative of the local Wiradjuri aboriginal people • Review of findings of Aboriginal and Cultural Heritage Reports[3] prepared for the project • Literature review of local history
Health and Wellbeing	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Review of relevant socio-economic indices including data from the Public Health Information Development Unit (PHIDU) and Western Area Local Health District (LHD)

[3] Ozark 2019b and Landskape 2019

Social Conditions/Values	Investigations
	• Identification of vulnerable groups and locations and analysis of vulnerability indicators • Review of access to health services • Community safety qualitative analysis • Analysis of electronic media and social media
Surroundings	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Ground truthing information and visiting the local area • Analysis of existing service distribution (education, health, community, employment, emergency services and training) • Identification and analysis of ecosystem services within the Primary Assessment Area (PAA) and the Secondary Assessment Area (SAA)
Personal and property rights	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Description and analysis of existing property market trends using a combination of data from Realestate.com.au, SQM Research, Housing Plus NSW and the ABS Census • Conduct of a short-term accommodation survey, real estate survey, and business survey • Identification and analysis of ecosystem services within the Primary Assessment Area and the Secondary Assessment Area
Decision-making systems	• Analysis of Project Community Consultative Committee (CCC) minutes • Review of relevant local planning governance documents • Review of electronic media, including social media • Analysis of community participation in major projects to date (e.g. proposed Blayney Goat Abattoir)
Fears and aspirations	• SIA consultation as described in Section 3.5 and Appendix F of the SIA • Business survey

1.4 IMPACT AND OPPORTUNITIES SIGNIFICANCE ASSESSMENT

This section describes the methodology used to assess the significance of the identified social impacts and opportunities described in Section 6 (mine development) and Section 10 (pipeline development) of the SIA. The significance assessment has been undertaken in accordance with the NSW SIA Guideline (DPE 2017). Impacts identified through consultation were considered in the completion of the assessment. During Round 3 Consultation participants were asked to provide feedback on the assessed perceived significance of specific impacts. Key management measures were also discussed with consultation participants and an opportunity provided for participants to identify new or alternative management measures.

1.4.1 Evaluating Negative Impacts

The social impact analysis used the following four stage process in accordance with best practice:

- Stage 1 – Description of the potential impact demonstrating whether the impact is negative or positive (a social impact or a social opportunity), direct or indirect, long-term or short-term, local or regional.
- Stage 2 – Evaluation of the social risk posed by the social impact with reference to:
  - Stakeholder perceptions of the potential level of social risk posed by the negative social impact (informed through the findings of SIA consultation);
  - Temporal scale of the impact;
  - The likelihood of the potential negative social impact occurring; and
  - The consequence of the potential social impact, that is minimal minor, moderate, major or catastrophic (or reasonable worst-case).
- Stage 3 – Quantification of the social risk[4] using a social risk matrix (likelihood and consequence), before and after mitigations are applied (unmitigated/mitigated risk).
- Stage 4 – Determination of a final significance rating (High, Medium or Low) based on consideration of the aspects described above (i.e. the outcomes of the quantitative social risk analysis and the perceived social risk from the perspective of the stakeholder).

1.4.2 Evaluating Social Opportunities

The evaluation approach outlined in Section 1.4.1 has been used to evaluate the significance of the potential social opportunities of the project by adjusting the approach taken and replacing:

- Level of stakeholder concern with level of stakeholder interest; and
- Social risk with an assessment of likelihood and the scale of improvement or benefit.

1.4.3 Risk Assessment Criteria

The Social Risk Matrix (Table 3) has been used to quantify each social impact and opportunity.

[4] As defined in Vanclay et al (2015) pp vi "*social risk is considered to be both risk (threats) to the success of the project, but also risk (social issues) created by the project, which in turn become threats to the project*."

Table 3
Risk Rating Matrix

			Consequence Level				
			1	**2**	**3**	**4**	**5**
			Minimal	Minor	Moderate	Major	Catastrophic
Likelihood Level	**A**	Almost Certain	A1	A2	A3	A4	A5
	B	Likely	B1	B2	B3	B4	B5
	C	Possible	C1	C2	C3	C4	C5
	D	Unlikely	D1	D2	D3	D4	D5
	E	Rare	E1	E2	E3	E4	E5
Social Risk Rating							
	Low		Moderate		High		Significant

Source: DPE (2017)

The likelihood of any impact or opportunity occurring has been assessed with reference to EIS findings, stakeholder inputs and SIA consultants' experience in assessing and monitoring the impacts of mining projects (Table 4).

The consequence, as defined in Table 5, has been assessed based on how the social impact may be experienced by the relevant stakeholder(s).

Table 4
Likelihood Definitions

Rating	Description
Almost Certain	Very likely to occur or be an opportunity at either a specific stage of the project lifecycle or more broadly
Likely	Likely to occur or be an opportunity at either a specific stage of the project lifecycle or more broadly
Possible	Possible to occur or be an opportunity at either a specific stage of the project lifecycle or more broadly
Unlikely	Unlikely to occur or be an opportunity at either a specific stage of the project lifecycle or more broadly
Rare	Very unlikely to occur or be an opportunity at either a specific stage of the project lifecycle or more broadly

Source: DPE (2017)

Table 5
Consequence Definition

Rating	Social Impact	Social Opportunity
Minimal	• Local, small-scale, easily reversible change on social characteristics or values of the communities of interest	• Local small-scale opportunities emanating from the project that the community can readily pursue and capitalise on
Minor	• Isolated issues or complaint that can be resolved via routine site procedures • Short-term recoverable changes to social characteristics and values of the communities of interest • Minor social harm	• Short-term opportunities emanating from the project
Moderate	• Medium-term recoverable changes to social characteristics and values of the communities of interest	• Medium-term opportunities emanating from the project
Major	• Repeated incidents or community complaints that require significant adjustment to overall site level and business level procedures • Long-term recoverable changes to social characteristics and values of the communities of interest	• Long-term opportunities emanating from the project
Catastrophic	• Significant, widespread and enduring community issue or dissent • Irreversible changes to social characteristics and values of the communities of interest	• Long-term and Intergenerational opportunities emanating from the project

Source: Adapted from the Department of Statement Development, Infrastructure and Planning (QLD). Social Impact Assessment Guideline, July 2014

1.5 SIA CONSULTATION

This section provides supporting information for Section 3.5 of the SIA which describes the SIA consultation process.

1.5.1 Round 1 SIA Consultation

Round 1 SIA Consultation was held over the course of one week in April 2018. Structured interviews were undertaken by Hansen Bailey during this time with selected near neighbours and Kings Plains residents. Near neighbours were contacted by Regis Resources Limited (Regis) and Hansen Bailey and invited to participate in SIA interviews. Face-to-face interviews were conducted with only Hansen Bailey personnel in attendance to establish a degree of separation from Regis. Face-to-face interviews were typically held at the interviewees place of residence. A total of 43 people participated in Round 1 SIA consultation. Twenty-one face-to-face interviews and one small group meeting were held.

Interviews were conducted using a standard interview proforma with set questions around the following themes:

- Existing community issues in the Blayney area;
- Valued attributes of the local and regional area;
- Council community plans, programs and priorities
- Local settlement history;
- The adequacy of existing social infrastructure and services in Blayney and the broader Local Government Area (LGA);
- Land development opportunities across the Blayney LGA;
- Key issues and concerns in relation to the mine development;
- Potential impacts associated with the mine development; and
- Potential opportunities associated with the mine development.

Transcripts were searched to extract comments and identify recurring themes, and qualitative analysis of responses to impacts and opportunities significance assessment was undertaken. Identified management measures were collated and grouped according to thematic areas. Interview participant demographic data was also collated to enable correlation between length of residency, experienced impacts and perceptions of significance of impacts and opportunities.

1.5.2 Round 2 SIA Consultation

Round 2 SIA Consultation involved a series of focus group discussions with the broader Blayney community in October 2018. These discussions focused on:

- Introducing the concept of a social impact;
- Describing the SIA process; and
- Providing an opportunity for participants to identify impacts and management measures.

Focus group discussions were attended and facilitated by Hansen Bailey representatives. The meeting details for Round 2 SIA Consultation are provided in Table 6.

Table 6
Round 2 SIA Consultation Meeting Details

Meeting Description	Location	Date	Participants
Belubula Headwaters Protection Group (BHPG)	Kings Plains	14 October 2018	6
Blayney Shire Council (BSC)	BCC[1]	15 October 2018	11
Focus Group 1	BCC	12 October 2018	16
Focus Group 2[2]	BCC	16 October 2018	7
Focus Group 3	BCC	17 October 2018	21
Focus Group 4	BCC	18 October 2018	10
Focus Group 5	BCC	18 October 2018	7

Notes:

1. Blayney Community Centre

2. Blayney Sports Council representatives

Focus groups were advertised on local billboards, on the BSC Facebook page, in the local Blayney Chronicle newspaper and on the Bathurst radio. Flyers advertising the focus group discussions were also hand delivered to the commercial centre of Blayney and a number of service providers.

The majority of local businesses and service providers were invited to attend the series of focus groups and participation of all interested stakeholders and land owners was also encouraged in the focus group discussions. Each participant acknowledged that information from the discussions was to be collated and used to inform the SIA. All workshop attendees were provided with an opportunity to confirm the minutes of the focus group that they attended.

Round 2 SIA Consultation also included a number of face-to-face interviews with stakeholders, particularly near neighbours to the mine development project area.

A total of 179 people participated in SIA consultation during October 2018.

Pipeline landholders were engaged in February 2019 via telephone interviews conducted by Hansen Bailey following initial contact from Regis. Ten telephone interviews were conducted with directly impacted pipeline landowners, including one telephone discussion with NSW Forestry Corporation.

As with Round 1 SIA Consultation, transcripts were searched to extract comments and identify recurring themes, and quantitative analysis of responses to impact and opportunities significance assessment was undertaken.

1.5.3 Round 3 SIA Consultation

Round 3 SIA Consultation involved workshops and meetings with near neighbours to the mine development and the broader Blayney community. A total of 11 structured workshops were held over the course of one week in May 2019 (Table 7), including:

- Six workshops with near neighbours; and
- Four workshops with the broader Blayney community.

All meetings were held at the Blayney Goldfields Motor Inn function room and were attended and facilitated by Hansen Bailey representatives.

Table 7
Round 3 SIA Consultation Meeting Details

Meeting Description	Date	Participants
Blayney Workshop 1	10 May 2019	11
Near Neighbours Workshop 1	11 May 2019	15
Near Neighbours Workshop 2	12 May 2019	7
Blayney Workshop 2	13 May 2019	4
Blayney Workshop 3	13 May 2019	1
Near Neighbours Workshop 3	14 May 2019	8
Near Neighbours Workshop 4	16 May 2019	5
Blayney Workshop 4	16 May 2019	11
Near Neighbours Workshop 5	16 May 2019	2
Near Neighbours Workshop 6	16 May 2019	9

A separate workshop was also held with representatives of the BHPG.

Blayney Workshops

The Blayney Workshops focused on the presentation and discussion of the predicted social impacts and opportunities of the project for the broader Blayney area, and potential management measures. An invitation to participate in Round 3 SIA Consultation was extended to all previous SIA consultation participants. Participants were invited through emails and telephone calls. Attendance at the workshops included both invited and uninvited participants. All participants were openly welcomed. These workshops generally extended for a period of between two and three hours.

Near Neighbour Workshops

Near Neighbour Workshops focused on the presentation and discussion of the predicted *significant* social impacts of the mine development and the proposed management measures.

All residents of the Kings Plains locality were invited to attend the workshops through a letterbox dropped invitation and an email invitation. A number of near neighbours were also contacted by phone. Regis carried out the letter box drop on behalf of Hansen Bailey. Other near neighbours who had participated in earlier rounds of SIA Consultation were also invited to participate in the Near Neighbour Workshop (i.e. Guyong Road residents). Attendance at the workshops included both invited and uninvited participants. All participants were openly welcomed.

Hansen Bailey provided a presentation on the key findings of the SIA in the first half of each workshop. In the second half of each workshop participants were provided with an opportunity to review the identified social impacts and management measures, the outcomes of the significance assessment, and provide feedback.

These workshops generally extended for a period of between two and three hours.

Presentations

Presentations and discussions were also held with representatives of Blayney Health Council and Health Service, BSC, BHPG, Blayney Rotary, Blayney Men's shed and Millthorpe Village Committee (MVC);

A total of 115 people participated in Round 3 SIA consultation.

APPENDIX C

Scoping Phase Outcomes

APPENDIX C

1 SIA SCOPING OUTCOMES

Table 1 presents the outcomes of preliminary social impact scoping for the mine development component of the project. This summary was prepared in early 2018 and was informed primarily through consultation undertaken by Regis Resources Limited (Regis). The assessment is based on the conceptual mine plan at February 2018. Since the completion of SIA scoping, the conceptual mine plan has changed significantly as has the mine disturbance footprint and the mine project area. SIA Consultation undertaken in 2018 sought to further validate the impacts identified in Table 1.

Table 1
Preliminary Scoping of Social Impacts – Mine Development

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
Way of Life								
Change in rural amenity resulting from the visual impact of the mine development	Likely The mine development is likely to result in significant modification to the existing natural landscape. Aspects of the mine development will be visible from viewing points on neighbouring public and private land	Yes, likely to be significant with regard to project life	No, unlikely to be significant due to it being a localised impact	Yes	Unknown, to be determined through further investigation	Yes, overall the impact is likely to be significant	Primary Assessment Area (PAA)	High concern identified by neighbouring landowners
Change in rural amenity due to intrusive project lighting	Likely The mine development will require lighting for night operations and security reasons. By night, site lighting is likely to be directly visible from some	Yes, likely to be significant as it will be ongoing during construction and operation	Unknown, technical studies in the EIS to identify affected properties	Yes, likely to be significant as existing residents have little experience with lighting impacts	Yes, likely to be significant as it will be a chronic impact	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	Moderate concern identified by neighbouring landowners. Lighting impacts have already been identified as a concern by near neighbours during

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	surrounding perspectives							exploration activities. Stakeholders have also identified concerns in relation to the potential for indirect light (or the glow) to detract from a dark star filled night sky
Disruption to use and enjoyment of private properties	Likely Near neighbours may experience noise and vibration impacts during all development phases. These impacts may disrupt the use and enjoyment of outdoor living area	Yes, likely to be significant as it will be ongoing across the life of mine	Unknown, to be determined based on outcomes of technical EIS studies	Unknown, to be determined through further engagement	Unknown, to be determined through further engagement	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	High concern. Near neighbours identified changes in amenity as a key concern. Existing complaints in relation to noise from exploration activities
Loss of serenity and seclusion	Likely The mine development has the potential to compromise the serenity	Yes, likely to be significant as it will be ongoing	No, unlikely to be significant as it is a localised	Unknown, to be determined	Unknown, to be determined through	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	Given the proximity of the site to the Mid Western Highway this issue has not

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	and secluded nature of the surrounding rural area: by generating a continual flow of workers and visitors to the area; and through adverse changes to residential amenity	across life of mine	impact. However, significance will be confirmed through technical EIS studies	through further engagement	further engagement			been raised to date by near neighbours to the south of the mine development project area (mine project area). However, near neighbours to the north have identified existing impacts from increased traffic on Guyong Road and Vittoria Road associated with local industry expansion
Disruption to use and enjoyment of public lands (e.g. State Forest (SF)) due to changes in amenity	Unlikely SF adjoins the eastern boundary of the mine project area. Initial scoping consultation suggests the SF is rarely used by the regional	No, this is unlikely to be significant as disruption to the SF would be periodic at most	No, this is unlikely to be significant as the SF is not used regularly by local population	No, this is unlikely to be significant as current analysis suggests limited public	No, this is unlikely to be significant as the SF is subject to future logging which would	No, overall the impact is unlikely to be significant	SF user groups	Unsure. Further consultation required

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	population for recreation activities (e.g. camping). The SF is also approved for logging, in the near future			use of state forest	impact public use			
Noise emissions from operations, including blasting activities, impact quality of life	Likely The mine development will involve open cut mining operations and blasting. Mine development activities may impact nearby sensitive receivers	Yes, likely to be significant as it will be ongoing across Project life	Unknown, number of affected properties to be confirmed through technical EIS studies	Yes, likely to be significant due to proximity of neighbours	Unknown, to be assessed through technical EIS studies	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	Near neighbours are concerned about a reduction in residential amenity from project related noise. There are existing concerns in relation to noise from exploration activities
Sleep disturbance from equipment noise and lighting	Likely Construction and operation will both involve 24/7 activities. Near neighbours may experience sleep disturbance as a result of construction and	Yes, likely to be significant as impact occurs principally during construction phase and	Unknown, likely to be localised however extent to be confirmed through	Yes, likely to be significant due to proximity of neighbours	Unknown, to be assessed through technical EIS studies	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	Low concern. One sleep disturbance complaint was received during exploration and this issue was not raised during initial consultation

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	operation phase activities	initial two years of operations phase	technical EIS studies					
Reduced flows in the Belubula River resulting in interruptions and modifications to downstream land use practices	Unlikely The mine development is located in the headwaters of the Belubula River, where flows in the Belubula River are ephemeral. Project infrastructure (tailings storage facility (TSF)) will interact with surface water through catchment area changes and changes in water use. This may result in changes to natural surface water flows into the Belubula River. However, the direct catchment of the mine	Yes, significant as impact has potential to arise over the life of the project	Yes, this is significant as it has the potential to affect people between the mine project area and Carcoar Dam who use the Belubula River for stock water. There are no surface water licences upstream of the Carcoar Dam	Yes, likely to be significant as water quality and availability is a sensitive issue in rural communities	No, this is unlikely to be significant. If impact were to occur it would likely be acute with a short-term consequence	Yes, overall the impact is likely to be significant	Downstream water users, environmental groups, and NSW Farmers	Some concern. Water availability in agricultural communities is a frequently raised issue of concern

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	project area represents only a small percentage of the total Belubula catchment. Design of the mine development provides for diversion of upstream catchment water around infrastructure and into the Belubula River							
Changes in upstream surface water quality impact downstream waters users and environmental values in the Belubula Catchment	Unlikely The TSF has been designed to contain leachate and address risks associated with structural failure. Design of the TSF includes appropriate containment of waste rock and stockpiles to prevent water quality contamination	No, this is unlikely to be significant as impacts are unlikely due to TSF design, however impact has potential to occur across the mine life	No, this is unlikely to be significant as the impact is unlikely to occur and if it does occur will be localised. Containment of polluting materials is a prerequisite	Yes, likely to be significant as water quality and availability is a sensitive issue in rural communities	Unknown, yet to complete technical EIS modelling	Yes, overall the impact is likely to be significant. However, this is likely to be a perceived impact rather than physical impact	Downstream landowners including any water users, near neighbours, environmental groups, NSW Farmers	Issue not yet raised, however water quality and availability are known sensitive issues in rural communities

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
			for project approval					
Changes in groundwater availability result in operational impacts to neighbouring landowners' bores	Unlikely Findings of preliminary technical assessment indicate the mine development will result in minimal water drawdown in neighbouring bores. Groundwater intercepted by the open cut operation will be licenced and the volume is anticipated to be within sustainable limits	No, this is unlikely to be significant based on a preliminary technical assessment. However, the impact has the potential to occur across all mine development phases	No, this is unlikely to be significant as few, if any, stakeholders are predicted to be impacted	Yes, likely to be significant as water quality and availability is a sensitive issue in rural communities. Issue will be sensitive regardless of likelihood	Unknown, further assessment required to determine the number and use of private bores on neighbouring land	Yes, overall the impact is likely to be significant However, this is likely to be a perceived impact rather than physical impact	Landowners with groundwater bore licences within the Primary Assessment Area	During initial consultation the NSW Farmers and neighbouring landowners raised concerns in relation to the potential for the mine development to impact flow rates and water availability in existing private bores. NSW Farmers Federation have also raised concerns in relation to impacts to groundwater flows

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
Culture and Community								
Physical changes to the landscape and environment within the mine project area adversely impact people's beliefs and values	Likely The mine development will result in changes to the natural environment within the mine project area and some people do not believe that the positive impact from mines outweigh the negative impacts	Yes, likely to be significant as across the life of mine	Yes, likely to be significant. Whilst the impact is confined to land within the mine project area, stakeholders across the PAA may experience impacts	Unknown, further assessment required to understand community values	Unknown, further assessment required to understand community values	Yes, overall the impact is likely to be significant	Near neighbours and long-term residents of the Blayney Local Government Area (LGA)	Issue has been raised by one stakeholder, who expressed significant concern
Cumulative impacts associated with other significant operations in the area	Unlikely Unlikely due to absence of other significant projects in the Local Area. Potential cumulative impacts relate primarily to construction phase workforce	No, this is unlikely to be significant as the impacts are confined to construction stage only	Yes, likely to be significant. across the Blayney LGA	Unknown, to be determined through SIA	Unknown, to be determined through SIA	Yes, overall the impact is likely to be significant	Blayney LGA, visitors to the region, and low income households	Blayney Shire Council (BSC) indicated some concern in relation to the potential for cumulative impacts on short term accommodation

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	accommodation demand in the event the Flyers Wind Farm Project occurs concurrently with the mine development. Cumulative noise and dust issues are unlikely given the absence of other significant projects in proximity	and likely in only one area						during the construction phase
Labour draw from the non-mining sector	Likely Open cut mining activities attract skilled and semi-skilled labour from other industry sectors where there are transferable skills. The mine development may result in material labour draw from the local agricultural sector and local government sector	No, this is unlikely to be significant as the impacts are confined to construction phase and initial recruitment for operations phase	No, this is unlikely to be significant as the impacts are likely to be confined to the Blayney LGA which has a low unemployment rate. Consultation suggests there may be	Yes, this is likely to be significant as the Blayney LGA has a low unemployment rate and there is no readily available labour pool. BSC is already	No, this is unlikely to be significant as the impacts are understood to have recently occurred during the construction and commission-ing of the extension to	Yes, overall the impact is likely to be significant	Existing business operations (including agricultural) in Blayney LGA, and the BSC	BSC representatives expressed some concern in relation to the potential loss of staff to mining

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
			residual mining experience in the LGA and neighbouring LGAs following workforce reductions at Cadia Valley Operation (CVO)	experiencing issues	CVO. The impact was manageable			
Stress on capacity of some local service providers to meet demands of additional temporary and/or permanent population	Unlikely A large proportion of the construction and operations phase workforces are expected to be drawn from the Blayney LGA and neighbouring LGAs	No, this is unlikely to be significant as the impacts are confined to construction phase	No, this is unlikely to be significant as there are a range of services and facilities available in nearby regional centres to	No, this is unlikely to be significant as resilience anticipated to be high due to experience from CVO expansion	No, this is unlikely to be significant as labour and skills are anticipated to be sourced from within the region	No, overall the impact is unlikely to be significant	Local service providers	Not identified as an issue to date

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
			support Blayney					
Reduced availability of short-term accommodation for visitors to Blayney and Millthorpe	Likely The mine development workforce may compete with visitors for short-term accommodation in Blayney. It is likely that the supply of short-term accommodation in Blayney will be taken up by the mine development workforce	No, this is unlikely to be significant as the impacts are confined to construction phase	No, this is unlikely to be significant as the impacts are localised and impacts will be reduced through local recruitment	Unknown, to be determined through further engagement	Unknown, to be determined through further engagement	Yes, overall the impact is likely to be significant	Business owners and operators in Blayney LGA	Issue not identified to date, however previous project experience (i.e. CVO) suggests it may be an issue. This issue should be closely managed
Upward pressure on the rental market and housing prices in Blayney and neighbouring centres to the detriment of lower income earners	Unlikely Given the size of the mine development workforce and the number and size of urban centres within commuting distance of the mine project area this impact is unlikely	No, this is unlikely to be significant as the impacts are largely confined to construction phase	No, this is unlikely to be significant as the impacts are localised	Unknown, further assessment required	Unknown, further assessment required	Yes, overall the impact is likely to be significant	Lower socio-economic sector in Blayney and existing private renters	Issue not directly identified by stakeholders to date. BSC is seeking opportunities to develop land in Blayney for residential development in

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
								order to support future growth of the centre. However, nearby Orange City has previously experienced housing affordability issues as a result of workforce accommodation demands associated with major projects
Divergent community identities in Blayney	Unlikely It is unlikely that the mine development and workforce will result in changes to the existing social order in Blayney. Blayney is already home to a sizable mining workforce associated with the nearby CVO. The magnitude of any	No, this is unlikely to be significant. If it does occur it is likely to arise during initial stages of operations phase and then stabilise	No, this is unlikely to be significant as the impacts are confined to Blayney township	No, this is unlikely to be significant as it is anticipated that resilience to this potential impact will be high due to history of mining in the area	No, this is unlikely to be significant as it is anticipated that resilience to this potential impact will be high due to history of mining in the	No, overall the impact is unlikely to be significant	Blayney residents and visitors	Not identified as an issue of concern to date

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	change will depend on the size of the local workforce			(e.g. CVO expansion and long-term operation of the Blayney Abattoir)	area and the long-term operation of the Blayney Abattoir			
Impact of wage disparity on Blayney community	Unlikely In 2011 the mining sector was the top industry of employment in the Blayney LGA suggesting the resident population has experience in dealing with mining wage disparity and resilience to associated impacts	No, this is unlikely to be significant and confined to initial stages of operations	No, this is unlikely to be significant as the Blayney community is already affected by wage disparity	No, this is unlikely to be significant as it is anticipated that resilience to this potential impact will be high due to history of mining in the area	No, anticipate that resilience to this potential impact will be high due to history of mining in the area	No, overall the impact is unlikely to be significant	Blayney residents	Issue not raised to date
Withdrawal of economic and community benefits following mine closure	Likely The closure of the mine will result in a loss of economic activity and business opportunities,	Yes, this is likely to be significant at mine closure	Yes, this is likely to be significant for the Blayney LGA and	Unknown, Blayney LGA has some experience with major	Yes, this is likely to be significant	Yes, overall the impact is likely to be significant	Residents, business operators and community service	Issue not raised to date

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	reduced employment opportunities, and potential for population loss across the Blayney LGA		potentially adjoining LGAs	industry closure (i.e. the closure of the Blayney Abattoir and Browns Creek Mine)			providers in Blayney LGA	
Adjustments to business, social infrastructure and local governance arrangements following mine closure	Likely Mine closure will necessitate adjustments across a number of sectors in the Blayney LGA (where the bulk of demographic and economic impacts will accrue), but also in neighbouring LGAs	Yes, this is likely to be significant at mine closure	Yes, this is likely to be significant for the Blayney LGA and potentially adjoining LGAs	Unknown, Blayney LGA has some experience with major industry closure i.e. the closure of the Blayney Abattoir and Browns Creek Mine	Yes, this is likely to be significant	Yes, overall the impact is likely to be significant.	Principally residents, business operators and community service providers in Blayney, LGA but also likely in neighbouring LGAs	Unknown, however issues have been raised during mine closure planning for other major projects
Environment								
Hazard and risks to public safety from transport, use and	Unlikely The mine development will involve the use	Yes, this is likely to be significant but	Yes, this is likely to be significant as	Yes, this is likely to be significant as	Yes, this is likely to be potentially	Yes, overall the impact is	Adjoining landowners, near	The use of cyanide has been discussed at each meeting the

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
storage of cyanide on site	transport, storage and onsite use of cyanide. There are likely to be perceived health and safety risks associated with the transport, storage and use of cyanide on site. Cyanide has been used in Australia for 40 years. The transport and use of cyanide are heavily regulated	it is also likely to be an isolated single incident. However, duration of impact will be dependent on the incident type	the worst-case scenario incident could have an impact on a broad area	stakeholders are likely to continue to perceive potential impacts	significant as there is the potential to significantly alter public perception of the Proponent's social licence	likely to be significant	neighbours and the general public	Proponent has had with stakeholders. Stakeholders have indicated little concern. However, studies of other gold mining operations suggest this may become a key issue of concern. Public perception of cyanide and the location of the site within an agricultural setting is likely to heighten stakeholder sensitivity to the issue
Changes in exposure to dust and noise for	Likely The mine development will generate noise and dust. Further	Yes, this is likely to be significant as it will be ongoing	Unknown, assessment still to be completed	Yes, this is likely to be a significant change for	Unknown, further investigations required	Unknown, further assessment required	Near neighbours	This issue was frequently identified in initial consultation

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
neighbouring land holders	assessment is required to understand the extent of impact and impacted properties	across Project life		any affected resident				
Reduced public safety on local road network due to Project induced increase in traffic volumes	Likely During the construction phase, there will be increased heavy vehicle traffic on the Mid Western Highway between Bathurst and Blayney. During both construction and operations general mine traffic is likely to increase along some local roads and the Mid Western Highway	Yes, this is likely to be significant, particularly during construction but ongoing across Project life	Yes, this is likely to be significant and may affect multiple roads across a broad area and different user groups	Yes, this is likely to be significant as the Mid Western Highway is the main access route from Blayney to Bathurst/ Sydney	Yes, this is likely to be significant as it will be ongoing across project life but it will be most significant during construction	Yes, overall the impact is likely	Road users across the Blayney LGA	Identified as a concern by Kings Plains residents in relation to access into Kings Plains. Previous project experience suggests issue will be of concern to local stakeholders and road users
Health and Wellbeing								
Stress and anxiety associated with uncertainty about project timing and	Likely The Proponent has purchased a significant portion of land within the	Yes, this is likely to be significant and will be	No, this is unlikely to be significant as it is localised	Yes, this is likely to be significant	Yes, this is likely to be significant and will be	Yes, overall the impact is likely to be significant	Landowners within and neighbouring	There is existing evidence that this impact has already been experienced

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
potential impacts (environmental/ amenity) causes distress to near neighbours	mine project area. However, it is likely that the remaining landowners within the mine project area and also some adjoining landowners are experiencing stress and anxiety as a result of uncertainty around the mine development and the development schedule	ongoing until project determination			chronic until project approval process completed		the mine project area, Landowners with views across the mine project area	by stakeholders during early project exploration activities. Previous experience suggests this issue is often not articulated until later in the approvals process
Dust deposition causes distress to landholders due to nuisance factor	Likely The mine development may result in degradation of local air quality through exposure and handing of overburden during the construction phase. Adjoining landowners and near neighbours	Unknown, to be determined through technical EIS assessments	Unknown, to be determined through technical EIS assessments	Yes, this is likely to be significant although the local community is used to some dust generation given the existing	Unknown, to be determined through technical assessments	Yes, overall the impact is likely to be significant	Adjoining landowners and near neighbours	Adjoining residents and near neighbours identified dust as a concern, however there have been no complaints in relation to dust from current exploration activities

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	may experience dust at a nuisance level during construction.			agricultural setting				
Personal and Property Rights								
Property acquisitions	Likely Properties within mine project area still require acquisition. Potential that some additional properties may be afforded voluntary acquisition rights due to operational impacts	Yes, this is likely to be significant and will be ongoing for acquired properties	Unknown, assessment still to be completed	Yes, this is likely to be a significant change for any affected resident	Unknown, further investigations required	Unknown, further assessment required	Landowners within the mine development project area and near neighbours	High concern. Frequently identified as an issue during initial consultation
Disruption to property access and road users	Likely Impact confined principally to construction phase. The mine development will require the realignment of Dungeon Road. The mine development will also require the	No, this is unlikely to be significant as it will be a short-term disturbance during construction phase.	Yes, this is likely to be significant as both Dungeon Road and Mid Western Highway will be impacted	Yes, this is likely to be significant as Dungeon Road provides access to some properties and the	Unknown, pending further studies	Yes, overall the impact is likely to be significant	Road users, landowners on Dungeon Road and Kings Plains residents	Some concern. Raised during initial consultation

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	construction of a new intersection on the Mid Western Highway with resulting interruptions to traffic flows	Dungeon Road would be realigned for perpetuity		Mid Western Highway is a significant traffic route				
Changes in property values and reduced opportunities for property sale	Unknown Extent of acquisition zone for the mine development is not yet known. Potential for interest in local property to increase as project related employees seek to move closer to the mine project area	Unknown, possibly confined to early stages of the mine development	Unknown, further research required	Yes, this is likely to be significant	Yes, this is likely to be significant and may impact personal health and wellbeing, aspirations, as well as personal finances	Yes, overall the impact is likely to be significant	Neighbouring landowners	Issue raised during initial consultation. Some stakeholders perceive that the mine development will have a negative impact on property values
Reduced local agricultural production due to loss of agricultural land	Unlikely The mine development does involve disturbance of potential agricultural land. No land within the mine project area is	Yes, this is likely to be significant as it extends over the life of the project	No, this is unlikely to be significant as impacts are localised	Unknown	No, this is unlikely to be significant	Yes, overall the impact is likely to be significant	Local agricultural industry, NSW Farmers Federation	NSW Farmers identified an interest in understanding the area of agricultural land to be acquired

What is the social impact?		How significant is the social impact likely to be in the absence of mitigation?					Affected people/groups	What do potentially affected people or groups think and/or feel?
		Is it likely to be significant with regard to?				Is the impact significant overall?		
Unmitigated Impact	**How likely is the impact without mitigation? Why?**	**Duration**	**Extent**	**Sensitivity**	**Severity**			
	identified as Biophysical Strategic Agricultural Lane, however productive land (higher land capability class) within the mine development area will be affected. There is no Critical Industry Cluster land impacted by the mine development							for the mine development
Increased seismic activity in local area from mining activity with resulting impacts on private property	Unlikely The potential for mining activity to increase risk of seismic activity in the local area is considered low	No, this is unlikely to be significant as seismic activities are short events	Unknown, further technical studies to assess	No, this is unlikely to be significant as residents in Blayney LGA have some experience with seismic activity	Unknown, further technical studies to assess	Yes, overall the impact is likely to be significant	Near neighbours	Raised as an issue by a resident with experience living near another gold mining operation

APPENDIX D

SIA Consultation Findings

APPENDIX D

1 SIA CONSULTATION FINDINGS

1.1 INTRODUCTION

This section provides a summary of the findings of stakeholder engagement undertaken to inform the SIA. It includes a summary of the outcomes of Round 1 and Round 2 SIA Consultation. Round 3 SIA Consultation informed an iterative review of the predicted social impacts and management measures and is reflected in the significance assessment outcomes described in Section 8 of the SIA and presented in Appendix G. A comprehensive list of issues, impacts and opportunities raised throughout all rounds of consultation is provided in Attachment A.

Consultation allowed stakeholder inputs on social baseline characteristics, perception of potential social impacts and benefits and stakeholder views on mitigation of social impacts and enhancement of social benefits.

1.2 FINDINGS OF ROUND 1 SIA CONSULTATION

Round 1 SIA Consultation constituted engagement for the scoping phase of the project and was undertaken by Hansen Bailey during April 2018.

1.2.1 Issues Raised by Local Government

Table 1 lists the key issues raised by local government representatives during Round 1 SIA Consultation. Additional consultation was also undertaken with Bathurst Reginal Council (BRC), Orange City Council (OCC), Cowra Shire Council (CSC), Cabonne Council (CC) and Lithgow City Council (LCC) by Regis Resources Limited (Regis) and is described in the EIS (EMM 2019).

Table 1
Summary of Issues Raised by Local Government

Stakeholder	Questions and Issues Raised
Blayney Shire Council (BSC)	• Mine development water supply options • Project approval process • Project development schedule • Voluntary Planning Agreement (VPA) • Future use of mine project area post mining (business development opportunities with potential benefits for the Local Government Area (LGA) • Potential for delivery of improvements to infrastructure, services and facilities in the Blayney LGA through the VPA • Local employment and procurement opportunities

Stakeholder	Questions and Issues Raised
	• Workforce accommodation arrangements • Mine access arrangements • Potential impacts of the mine development project area (herein mine project area) (i.e. noise, dust, visual, lighting and groundwater)

1.2.2 Issues Raised by Other Stakeholders

Table 2 lists the key issues and opportunities raised by other stakeholders during initial consultation to inform the SIA Scoping Study for the mine development. These issues, concerns and opportunities informed the preliminary identification and assessment of social impacts.

Table 2
Summary of Issues Raised by Other Stakeholders

Issues and Opportunities Raised	Stakeholders
Environment	
Potential loss of agricultural land	• Near neighbours and Environmentally Concerned Citizens of Orange (ECCO)
Potential impacts on groundwater resources	• Landowners/Lessee within, near neighbours, NSW Farmers, Blayney Town Association and ECCO
Potential impacts on surface water resources	• Near neighbours
Flooding and potential impacts on Tailings Storage Facility (TSF) and other mine project area infrastructure	• Near neighbours
TSF location, design and management	• Near neighbours, NSW Farmers, Blayney Rotary and ECCO
Waste product composition	• ECCO
Mine project area energy use and opportunities for use of solar energy	• ECCO
Mine project area surface water management	• Near neighbours and ECCO
Cyanide use and management	• Near neighbours, NSW Farmers, Blayney Rotary and Blayney Town Association
Vegetation removal on the mine project area	• NSW Farmers
Concern that the project may result in an incident similar to Browns Creek Mine	• NSW Farmers
Mine project area rehabilitation process	• ECCO
Groundwater inflow to the pit and management	• ECCO
Personal and Property Rights	

Issues and Opportunities Raised	Stakeholders
Potential for property devaluation in adjoining areas	• Near neighbours
Changes in property accessibility due to road closures and changes in mine project area access arrangements	• Landowners within and near neighbours
Potential impacts of vibration on built structures	• Near neighbours
Potential for the project to increase seismic activity in the locality with resulting impacts on private property	• Near neighbours
Potential property acquisition for pipeline development	• Near neighbours and Blayney Rotary
Potential impacts of mine development on downstream water users	• ECCO
Impacts of blasting on the Belubula River	• ECCO
Health and Wellbeing	
Stress and anxiety due to current property acquisition process	• Landowners within mine project area
Uncertainty in relation to potential for future property acquisition by the Regis	• Near neighbours
Stress and anxiety in relation to potential future impacts of the mine development on lifestyle and ability to claim compensation	• Near neighbours
Potential impacts of dust on resident health and wellbeing	• Near neighbours
Potential for sleep disturbance due to construction and operation noise	• Near neighbours
Way of Life, Community	
Potential impacts of vibration on amenity	• Near neighbours
Noise impacts of the mine development	• Near neighbours, NSW Farmers and ECCO
Impacts of lighting on amenity and ‘dark sky’	• Near neighbours, NSW Farmers and ECCO
Potential visual impacts on the surrounding landscape and residential amenity	• Near neighbours and ECCO
Tightening of local housing market due to increased demand for accommodation during mine development construction phase.	• Near neighbours
Increased traffic on local and regional road network and potential impacts on road safety particularly for pedestrian and cyclists	• Near neighbours
Mine access arrangements	• Near neighbours and Blayney Town Association
Infrastructure, Services and Facilities	

Issues and Opportunities Raised	Stakeholders
Increased demand for short-term accommodation during the construction phase of the mine development with resulting impacts on accommodation availability for visitors to Blayney	• Near neighbours
Raw water supply options and capacity to supply outside the mine project area	• Near neighbours
Opportunities	
Future employment opportunities	• Near neighbours
Local employment opportunities	• Blayney Rotary
Potential for mine development to stimulate the local and regional economy	• Business owners
Procurement opportunities for local and regional businesses	• Business owners
Post mining use of the mine project area presents potential business opportunity with benefits for the LGA	• Near neighbours

1.3 FINDINGS OF ROUND 2 SIA CONSULTATION

The findings of Round 2 SIA consultation undertaken to inform the SIA are described in the following sections. Round 2 SIA consultation for the mine development was undertaken by Hansen Bailey in October 2018. Engagement with directly affected pipeline landholders was undertaken in February 2019.

1.3.1 Engagement with Blayney Shire Council

Table 3 describes the findings of engagement with BSC representatives.

Table 3
Findings of Engagement with BSC

Stakeholder Input	BSC
Social baseline	• Strong agricultural industry • Blayney's history and the closure of the abattoir seen as a catalyst for change in the town • Divide in community between people who wanted the abattoir to stay operational and between people who prefer the current industry in Blayney • Strong sense that Blayney residents like Blayney the way that it is • Support for the project will come from increased benefits of employment, training, business vitality, population growth, and economic diversification • Effects of current drought on families' wellbeing and livelihoods in the region are highly evident in the LGA

Stakeholder Input	BSC
	• Perception that the town did not benefit from Cadia Valley Operations (CVO) when workers were living in town. However, Blayney benefits significantly from CVO financial contributions through the VPA and donations • Very low market interest in housing development • Very high interest in purchasing homes in Blayney LGA • BSC is planning to progress residential development in Blayney to assist with housing demand • BSC has a strong local focus on increasing the availability of both housing and vocational training, higher education and employment pathways • Childcare services are in short supply in Blayney • Blayney is in close proximity to major regional centres (i.e. Bathurst and Orange) and most local residents either work or shop in these centres • There is an identified need for business development and business diversification • Blayney LGA is developing and experiencing change through an influx of retirees moving into the area from cities (i.e. Sydney)
Perceived impacts and opportunities	• Project will generate local employment opportunities which would be very positive for social and economic wellbeing of the LGA • Project would stimulate other businesses to upskill • Project would support development of local business opportunities • Regis financial contributions through the VPA, funding and donations would support improvements to local road networks and the main street. This would increase the aesthetic value of Blayney and promote higher levels of tourism • Negative impacts of the project on housing capacity, skills, small business labour are difficult to manage • Regis needs to demonstrate the project benefits for Blayney in order to ensure ongoing community acceptance of mining operations in the LGA • The mine development could be a negative visual element on the journey into Blayney for locals and tourists • Concern that Blayney will become a drive-through town and tourism will decline due to the visual impact of the mine • There will be implications for Regis if project benefits do not accrue to Blayney and instead accrue to the surrounding areas e.g. Orange. Local people may reject the mining industry and the relationship between Regis and the community could become strained. • Concern in relation to the potential environmental impacts of the TSF, particularly on the Belubula River • Concern that the project may impact water quality and quantity in the Belubula River, Carcoar Dam and downstream water users • Concern that the project life is quite short and associated economic benefits will accrue over a short time frame
Suggested mitigation, management and enhancement measures	• Support marketing campaigns to attract families to Blayney LGA • Advertise the character and services of Blayney to attract workforce and support tourism

Stakeholder Input	BSC
	• Encourage the project workforce to live locally by providing a range of housing options • Strengthen retail development through increased local participation and local spend • Ensure the project workforce is aware of the local educational opportunities available to encourage the workforce to reside in Blayney • Manage local business expenditure, involvement and employment loss to the project • Address and satisfy all mentioned environmental issues and develop a compensation program (i.e. replant all trees) • Support local business during the tender and procurement process to increase participation rates • Co-operation with BSC and other stakeholders in relation to the development of education, training and employment pathways • Corporate sponsorship of community activities and events

1.3.2 Engagement with BSC Sports Council

Table 4 describes the findings of engagement with the BSC Blayney Sports Council.

Table 4
Findings of Engagement with Blayney Sports Council

Stakeholder Input	Blayney Sports Council
Social baseline	• Housing supply in Blayney is low, and demand is increasing • Blayney has a larger sporting culture and capacity than the Blayney villages • Blayney has capacity to increase sporting teams, but lacks specific ages to fill teams. Blayney loses participation to the regional centres (i.e. Bathurst and Orange) • Swim club is at capacity • Sharing of fields and courts between different sports makes it harder to organise training • Shift rosters and a general lack of time limit effort, participation and interest by newcomers in sporting and recreational clubs
Perceived impacts and opportunities	• The current approvals process timeframe does not provide businesses or schools sufficient time to train people for mining roles • Concern that a lack of available housing in Blayney will impact the number of workers who can reside in Blayney • There is a high elderly population in Blayney who reside in houses due to a lack of alternative accommodation options (including smaller houses). The need for housing and the potential influx of workers could be a catalyst for elderly to rethink their living arrangements. • Increased opportunities to secure corporate funding towards the redevelopment of sporting facilities

Stakeholder Input	Blayney Sports Council
	• Shift work roster may prevent project workforce from participating in local sports and recreation • If there is no increase in participation from project workforce, some of the Blayney sporting teams may no longer be able to operate • Potential resident population growth would support greater diversity in sporting teams and, and game times. Blayney is experiencing a decline in sport participation primarily because people do not want to play sport on their weekend
Suggested mitigation, management and enhancement measures	• Suggest percentage commitment to local employment • Engagement and program development with Regis for sporting participation • Regis to promote the benefits of sporting groups for health and for meeting people in town

1.3.3 Engagement with BSC Health Council

Table 5 describes the findings of engagement with a representative of the Blayney Health Council (BHC).

Table 5
Findings of Engagement with BHC

Stakeholder Input	BHC
Social baseline	• The BHC is a voluntary initiative that takes an interest in the general public in every way possible
Perceived impacts and opportunities	• Project induced stress and anxiety • Cumulative impacts such as the effects of light, noise, dust and fumes from the mine development and other industrial projects in the area • People typically move to the area to get away from urban related health issues. Concern that a mining project will deter newcomers from the area • Impact of light emissions on sleep, particularly for shift workers
Suggested mitigation, management and enhancement measures	• Potential to receive further funding for medical related sectors of community • An opportunity to promote mental health awareness and introduce presentations to the local community

1.3.4 Engagement with Near Neighbours

Table 6 describes the findings of engagement with near neighbours. Table 6 includes any mitigation and management strategies suggested by stakeholders during consultation. The findings of engagement for Kings Plains is presented separately in Table 7 to accurately capture impacts and benefits that are specific to the directly affected residents.

Table 6
Findings of Engagement with Near Neighbours

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
• Near neighbours' value: – A quiet and serene environment – Family/ 'forever' homes – Open spaces and vistas – Industry and business investments – Property values • Properties rely on groundwater and rainwater • There are a number of school bus stops located on Vittoria Road, Guyong Road, Mid Western Highway and Walkom Road • Blayney Abattoir history and the effects of the abattoir closure on the community	• Effects on way of life due to a combination of project related noise, lights, blasting, traffic and/or dust impacts • Changes to rural character due to changing views, noise levels and land use • Potential for dust and other particulates to impact human and stock health (e.g. increased respiratory problems and dust in drinking (tank) water and bores) • Potential for increased traffic volumes and noise from project equipment and vehicles • Potential for increased demand on community services due to some of the project workforce residing in Blayney • Change in community demographics due to influx of mine employees. This could change the dynamic in town. BSC could be more focused on providing services for families or younger persons for example • Hazard and risks to public safety from transport, use and storage of cyanide on the mine project area. This may impact near neighbours, road users and the wider spread community • Changing land use and potential mining impacts outside of the mine project area has the potential to reduce neighbouring property values and reduce the attractiveness of the location to potential buyers • Potential for mining activity to increase the occurrence of seismic activity in the local area with resulting impacts on private property (i.e. structural damage to properties, unstable land etc.) • Potential environmental impacts due to use of cyanide in processing facility	• Regis should acknowledge that the project is likely to have noise and dust impacts, regardless of levels predicted in the EIS, and engage with local land owners to discuss mitigations • Offer landholders acquisition rights • Ensure that stakeholders are aware the EIS is on exhibition • Encourage workforce to reside locally • Communicate mine project area emergency management protocols to emergency service providers • Change method of processing or process the cyanide outside of the mine project area so that it is not used and/or stored in the area • Limit use of Guyong Road for project workforce

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
	• Potential environmental impacts due to location of the TSF on the Belubula River • Disruption to use and enjoyment of private properties due to cumulative changes in biophysical environment. Property owners anticipate that noise may interrupt family or social activities, or affect enjoyment of the local environment • Mining industry employment and mining related business opportunities for Blayney LGA	

Table 7
Findings of Engagement with Kings Plains Residents

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
• Kings Plains residents' value: – A quiet and serene environment – Family/'forever' homes – Open spaces and vistas – Industry and business investments – Dark night skies – Seclusion – Community 'feel' – Sense of safety – Caring community – Proximity to regional centres	• Significant visual impacts of the project for Kings Plains residents, users of the Mid Western Highway and residents to the north and west of the mine project area • Anxiety and stress related to uncertainty about the project and potential impacts • Loss of local population and disruption of social networks if families choose to leave or are acquired by Regis • Potential for project impacts to disrupt and devalue property • Potential for the project to impact the Belubula River and downstream water users, as well as water quantity and water quality in Carcoar Dam • Impacts on groundwater accessibility and rural livelihoods • Impact of project induced community conflict on community cohesion	• Consultation with Kings Plains Rural Fire Brigade (RFB) to identify any improvements to fire prevention/management on Regis owned land • Majority of Kings Plains residents' wish to see the access road location moved to improve public safety • Regis should offer impacted residents property acquisition at market price

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
– Intergenerational ties (i.e. several property owners have multi-generational attachments to their land) – Neighbours close but not too close • Future aspirations to continue living and farming in the location • Distrust in Regis due to perceived inconsistencies in project information provision and a lack of transparency	• Loss of valued local residents (and historical connection to location) due to project related property acquisition activities • Concern in relation to the impact of the project on the health and wellbeing of near neighbours and in particular the cumulative impacts of the project and drought on mental health • A lack of comparable property options, if residents were forced to relocate • Blasting, vibrations and earth moving may damage the structural integrity of homes • Health effects of dust from the mine project area. There is concern that dust emitted from the mine project area (particularly the TSF) may contain heavy metals resulting in the contamination of adjoining land (agriculture and residential) and impacting human health • There are residents in Kings Plains who may be more vulnerable to health issues from dust as a result of existing health conditions (e.g. respiratory, cardiac). There are also a number of young children and older people residing in Kings Plains • Hazard and risks to public safety from transport, use and storage of cyanide within the mine project area. This may impact near neighbours, road users, and the wider spread community • Sleep disturbance from noise and lighting equipment. This is of particular concern to shift workers who reside in Kings Plains • Disruption to use and enjoyment of private properties due to cumulative changes in biophysical environment. Property owners anticipate that noise may interrupt family or social activities, or affect enjoyment of the local environment • Short project life and magnitude of benefits accrued to Blayney LGA • Perception that life of mine will be extended to accommodate Regis' satellite deposits	• Regis should provide support to local residents to move once construction commences, if residents decide they can't live near the mine

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
	• Reduced environmental values of the local area due to vegetation clearance (e.g. loss of bird life) • Impact of project activities on way of life e.g. blasting limiting and/or impacting horse riding activities • Loss of productive agricultural land and impacts on supporting agricultural industries • Impacts to rural values and the rural way of life • Adverse changes in the character and amenity of Blayney townships due to influx of mine workers • Potential for increase in health and wellbeing services due to specific health demands of shift workers (e.g. mental health) • Existing impacts to health and wellbeing and way of life do to demands of project	

1.3.5 Outcomes of Blayney Workshops

Broader Community

Table 8 summarises feedback collected during Round 2 SIA Consultation workshops held with the broader community. Table 8 includes any mitigation and management strategies suggested by stakeholders during consultation.

Table 8
Stakeholder Contributions to the SIA

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
Community Values		
• High level of importance placed on healthy waterways and surrounding environment • Carcoar dam used as a recreational area • Value placed on the quality of Carcoar dam for fishing • Drought conditions pose issues for farmers financially and for their stock as hay and water become scarcer • Strong rural values in the community - sweeping landscapes and tranquil lifestyle • Primarily and agricultural and industry-based town • Strong divide on community perception as to whether the town has changed for the better or worse since the closure of the abattoir • Strong sense of place and a sense of tranquillity • Rural landscape and sweeping vistas are valued • Close proximity to regional centres of Bathurst and Orange • Strong community support and every member of the community is willing to lend a hand	• Potential change in the character and identity of Blayney due to influx of mine workers • Potential surface water and groundwater contamination risk associated with water from the pipeline • Loss of farming families due to property acquisition • Population growth if project workforce and families live locally • Cumulative impact of loss of agricultural land and drought conditions making it harder on local farmers to uphold their reputation (i.e. stock come from clean rural environment) • Stock will have less water if groundwater or bore levels decrease due to the project • Impact of the project on water quality and quantity in the Belubula River and for downstream water users, including Carcoar Dam. • Visual impact of the project on users of the Mid Western Highway • Health risks associated with dust from the mine project area • Annoyance factors associated with dust from the mine project area and due to prolonged drought • Environmental impacts of potential TSF failure	• Corporate funding and sponsorship of community events • 'Offset' environmental program • Remediate the pit and rehabilitate the mine project area • After mine closure, develop the mine project area into a recreation or community space where people can go • Encourage part time positions for the project, so that farmers can keep their livelihood and work at the mine also • Encourage workforce to live locally • Increase housing supply • Relocation of TSF to reduce potential impacts on water resources • Promote the healthy environment and beautiful landscapes of Blayney • Establishment of the Project Community Consultative Committee (CCC) • VPA and corporate spend through • Keep the community informed of the project, and demonstrate genuine interest and participation

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
• Aging population and high proportion of population in the lower socio-economic group • Increasing vulnerable population with higher drug dependency prevalent • The project has been a catalyst for a noticeable strain on some people of the community	• Increased financial burden to farmers in the area • Potential to exacerbate existing cumulative mining industry impacts on social cohesion (due to non-local workers) and housing availability • Concern regarding water resource management and where water is drawn from to compensate for project needs • Concern in relation to the funding of community infrastructure and services at mine closure	• Put up screens so motorists on the Mid Western Highway do not experience a visual impact • Increase support to vulnerable groups, such as the elderly
Housing		
• Insufficient affordable housing for lower-income households in Blayney • 'Buyers' market' for purchase of housing, but market awaiting stimulation of new development • Demand for a more diverse range of available housing options (i.e. one-bedroom units, family homes etc.) • Not enough elderly housing and aged care available • Limited social housing and housing support services available in the Blayney LGA, however housing market is attractive to the lower socio-economic households	• Project will stimulate housing market as operational workforce moves into local towns • Blayney should be in a comfortable position to benefit from the project, however more housing is required • Project may have negative impacts on housing availability and affordability in Blayney particularly if construction/operations overlap • Anticipate increase in property prices and demand on the market, making it harder for locals to enter the property market • Potential reduction in property values for near neighbours • Potential for construction workforce to use local short-term accommodation reducing accessibility for extended family or special/unforeseen events	• Encourage families to settle in Blayney town and the villages • Encourage BSC involvement in further developments

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
Economic		
• Mining operations and personnel can contribute significantly to local business trade • Tourism has increased in the Blayney LGA villages • Community generally complacent about levels of tourism • Since the abattoir closure, Blayney has diversified (i.e. through industry) in a positive manner	• Labour draw expected for manufacturing industry, trade and small business. • Potential to discourage tourism • Population growth will increase local spend • Livelihood impacts for downstream landowners due to changes in the quality and quantity of water in the Belubula River	• Support BSC initiatives to welcome new workforce. • Support education programs to support the services trades, particularly the local manufacturing industry • Encourage workers to settle locally and contribute to community and business networks, events and school initiatives • Request one to two years' trade experience to reduce the impact on businesses who have invested in training workers • Increase opportunity for local business to apply and be successful in the tender process where possible • Explore opportunities to contribute to an interactive community educational asset that illustrates the project and the mining industry, including opportunities for training and employment pathways
Social infrastructure and services		
• Blayney offers a limited number of community facilities. The community facilities in Blayney present well, however patronage and participation needs to be increased • The Blayney Multipurpose Heath Service (BMPHS) deals with specific cases and majority of people in Blayney would prefer to go to Bathurst for their health care or for emergencies • Significant challenges recruiting and retaining experienced staff in local businesses	• Increased workers result in increased demands for health services • Increased demand for specialist health services (e.g. mental health services due to prevalence of shift workers in the community) • Increased local population would be positive, but may see increased need for childcare • Project personnel based locally will increase demand for emergency services and policing • Additional traffic on Mid Western Highway requiring additional traffic policing	• Regis could partner with Blayney High School to deliver mining industry related training • Corporate investment from Regis could contribute to the extension and or maintenance of the MPHS • Regis should commit to health service provision for the project workforce to reduce reliance on local services • Prior notice to police and emergency services of construction workforce ramp up and project commencement

Social Baseline	Project Impacts and Benefits	Mitigation and Management Strategies Suggested by Stakeholders
• Majority of residents do use services outside of Blayney for cost and convenience purposes or for a wider range • Enrolments at Blayney High School perceived to focus on lower socio-economic groups in Blayney, with other residents accessing private schools in Orange and Bathurst • Millthorpe Public School is very popular and has high enrolments • Blayney Public School has traditionally had low enrolments; however recent steady increase suggests residents are returning to the school. • Limited childcare or family support services in Blayney. Childcare pricing is unaffordable • Perception of mining workforce behaviour • Stigma around shift work and concern for mental health of workers	• Emergency service provision is adequate for the population size, however, if Blayney's population increases, emergency service provisions will need to be increased • Community group and community organisation participation decline if locals move due to the commencement of the project • Potential to increase local spend • Potential for increase in community event participation with additional project workforce • CVO mining experience leads people to believe that the project workforce will not reside in Blayney; or that the project will be of the same scale as CVO and place burden of demand upon all of the accommodation and goods in town	• Engagement with police and emergency services ahead of operations to ensure co-operation protocols are in place • Need for consultation between Chifley Police and Blayney Ambulance and Project regarding emergency response plans, traffic management plans and storage of dangerous goods • Involvement with the beautification and maintenance of social infrastructure in Blayney

1.3.6 Engagement with Pipeline Landholders

Engagement with pipeline landholders was conducted via telephone interviews. Key issues and concerns raised by pipeline landholders include:

- Expectations that in the future landholders may have access to the pipeline water;
- Disruption to agricultural operations during pipeline construction;
- Land degradation over time with resulting impacts to agricultural operations (e.g. a reduction in the land available for cattle grazing and cropping); and
- The increased potential for a biosecurity risk.

Pipeline landholders identified that the project would increase employment opportunities within the Central West Region of NSW.

1.3.7 Service Providers

Blayney is a local service centre in the Central West Region of NSW. Blayney is also serviced by Bathurst and Orange services where necessary. Engagement with service providers included interviews with:

- Chifley Police District;
- Central West Zone 1 – Blayney Ambulance Station;
- Kings Plains Rural Fire Brigade (RFB);
- Canobolas Zone Rural Fire Service (RFS);
- Blayney Health Council and MPHS;
- Blayney Family Medical Practice;
- Blayney High School;
- Cabonne Child Care Services, including Blayney Out of School Hours Care (Oosh);
- Millthorpe Primary School;
- Blayney Early Learners;
- Blayney Pre-School;
- Housing Plus;
- Meals on Wheels;
- Can Assist; and
- Blayney Abundant Life Church.

Education

Key inputs from education service providers are summarised in Table 9.

Table 9
Education Providers Contributions to the SIA

Key Factors	Provider Inputs
Capacity of Local Services	• Existing shortage of childcare and pre-school services in Blayney LGA. Plans to increase vacation care in the area. Millthorpe has recently opened a new childcare to cater for increasing need • Millthorpe Public School is at capacity. Millthorpe Public School offers integrated classes for children with disability. Future plans for the school are under review by the NSW Department of Education • Adequate capacity within the region's high school network. Capacity of Blayney High School is volatile due to its proximity to regional centres of Bathurst and Orange • Childcare in Blayney has capacity for most years as there is a trend for parents to utilise childcare closer to their work in regional centres • Shrinking enrolment in Blayney High School, and low retention rate in year 10-12
Potential Impacts	• Preference for residents to use education outside of Blayney LGA or in the villages due to perceptions/stigma of Blayney High School • Inadequate childcare services may lead workforce families to reside in regional centres as opposed to Blayney
Potential Opportunities	• Support and enhance interaction between the local education network • Support delivery of apprenticeship programs or traineeships for industry based employment. Ability to up skill high school aged children • Provision of career mentoring services at Blayney High School • Offer educational interactive tours and presentations of mine development to promote career choices • Develop list of roles and jobs that exist for mining, including detailed descriptions and contact details, allowing direct links to employment and options for students • Support development of mining based education prior to mining construction and operation, including the importance of education for mining based roles
Suggested mitigation, management and enhancement measures	• Regis to engage with Blayney High School to explore potential opportunities to enhance learning pathways in mining including trades and apprenticeships • Funding support for childcare or the establishment of vacation care

Emergency Services

Key inputs from emergency service providers, including the Chifley Police District, Canobolas RFS, Kings Plains RFB and the Blayney Ambulance are summarised in Table 10.

Table 10
Contributions from Emergency Service Providers to the SIA

Key Factors	Provider Inputs
Capacity of Local Services	• Chifley Police District services Blayney. Blayney is serviced by one sergeant and one officer, previously the area was serviced by an additional two officers. The district is currently looking to employ. Typically, in the Blayney LGA villages one staff member operates on a call out basis. All areas are staffed by one vehicle. The current district staffing arrangement has not increased alongside population increase and therefore there is a noticeable gap in service provision • Adequate capacity in police and ambulance services to meet project-related demand. Should population increase, services may require additional staff • RFB capacity has strengthened through local volunteer involvement in Kings Plains. Local equipment is also available at Canobolas RFS • Blayney health service offers GP's on site, a visiting service (psychologist), x-ray services twice a week and dental starting three days a week in early 2019 • Existing shortage of aged care in Blayney. Services and elderly living at capacity • Ambulance service demand generated by larger regional centres, not from the Blayney villages
Potential Impacts	• Potential for increased demand on police and ambulance services for minor incident response • Potential for increased response times from emergency services to residents or workers • Risk of limited health service access and potential for poorer health outcomes in Blayney if there is a significant increase in permanent population and in the instance where the medical service is not able to increase capacity • Potential loss of Kings Plains RFB due to decline in rural land owner participation resulting from project acquisition • Advanced notice required for ambulance and police participation in familiarisation of the mine project area including mine project area based exercises
Potential Opportunities	• Increased police appearances and “face-time” with the local area for heavy vehicle or equipment escorts • Potential establishment of a local agreement describing how Regis will work with ambulance, police and RFS • Potential to establish management routine exercises between Regis and police, ambulance and RFS services to manage response times • Project induced population increase may give be a catalyst for an increase in staff at ambulance, police and RFS services

Key Factors	Provider Inputs
	• Continued support of RFB by project employees (volunteering), with potential to improve access to localised training sessions • Maintain strong self-reporting and safety culture with respect to road and driver safety • Potential opportunities associated with project-related improvements to transport infrastructure • Potential for an increase in the number of Registered Nurses and medical staff employed at MPHS if families move into the area • Opportunity to build relationships with existing Kings Plains RFB and provide support as necessary for training exercises and incident response
Suggested mitigation, management and enhancement measures	• Regular meetings of local emergency service providers on the Local Emergency Management Committee (Health, Ambulance, Police, RFS, BSC) in the lead-up to construction, and into operations • Communicate emergency management protocols to emergency service providers for the mine project area • Establish a protocol with the Canobolas RFS for the provision of unimpeded access to the mine project area for the delivery of RFS services • Establish a protocol with Canobolas RFS for the use of mine project area mining/earthmoving equipment during emergency incidents (e.g. bush fires within the mine project area, or at a nearby location) • Encourage employee policies that enable emergency services personnel to be released from duties to attend emergency calls and to perform crucial volunteer actions • Participate in the Canobolas Zone Bushfire Management Committee to remain informed of activities. • Provide a copy of the mine project area Fire Management Plan to the Canobolas Zone RFS

Non-Government Organisations

Key inputs from Non-Government Organisation (NGO) service providers, including Housing Plus, Meals on Wheels, Can Assist and Abundant Life are summarised in Table 11.

Table 11
NGO Contributions to the SIA

Key Factors	Provider Inputs
Capacity of Local Services	• Housing Plus has a 10 unit complex in Millthorpe, typically occupied by aging population • Can Assist offers financial support to cancer patients and their families in need. The capacity of this organisation is limited to funds donated, but majority of families in need are provided with a nominal amount of funds per year

Key Factors	Provider Inputs
	• Meals on Wheels has limited staff and volunteers, but there is an identified need for help in the community. Currently 10 volunteers deliver meals once a week
Potential Impacts	• Increased demand and limited capacity for identified vulnerable groups within the social housing, medical and aged care sectors • Overshadowing of potential younger workforce may implicate that there is not as much demand in community
Potential Opportunities	• With additional land opportunities in Blayney, affordable social housing could provided • Population increase could lead to increased participation in NGOs and an increase in number of volunteers, or funding-based initiatives to assist NGO's work in community • Opportunity to promote proactive self-health care and the importance of nutrition

1.3.8 Community Groups

Key inputs from community groups, including the Rotary, Men's Shed and Probus clubs, the Millthorpe Village Committee and the Belubula Headwaters Protection Group (BHPG) are summarised below.

Rotary, Men's Shed and Probus

Blayney Rotary, Men's Shed and Probus clubs were engaged through individual club meetings. At these meetings a project overview presentation was provide followed by a short opportunity for discussion. All participants at the meetings expressed an interest in understanding the project components and the EIS process. Table 12 summarises comments made during these meetings with regards to the project's potential impacts and opportunities.

Table 12
Blayney Clubs Input to the SIA

Inputs on Project Impacts	Inputs on Project Opportunities
• Concern that the community is only informed when Regis wants to communicate with them. There is a lack of steady flow of information for the community • Concern expressed that benefits will likely accrue outside of Blayney LGA due to the small population size of Blayney and the small business sector • Orange and Bathurst LGAs are likely to be more popular residential locations for the workforce • Impacts of mine closure given the short project life. Will the workforce leave Blayney when the mine closes?	• Economic benefits • Opportunity for Regis to ensure mining delivers benefits to Blayney LGA • Local employment. Noting that Regis should develop local employment criteria to encourage project workforce to reside locally • Population growth. Project presents an opportunity to attract new residents to Blayney which would be positive for businesses, services and sporting clubs • Economic benefits for short-term accommodation providers during the construction phase

Inputs on Project Impacts	Inputs on Project Opportunities
• Impacts to near residents in Kings Plains • Environmental impacts on the Belubula River due to the location of the TSF • Potential environmental impacts associated with use of cyanide	• Possible catalyst to stimulate residential housing growth in Blayney

Millthorpe Village Committee

Table 13 summarises the outcomes of SIA consultation with the Millthorpe Village Committee (MVC). During SIA consultation the MVC provided several inputs for the social baseline, impacts and opportunities and also management measures.

Table 13
Findings of Engagement with Millthorpe Village Committee

Stakeholder Input	Millthorpe Village Committee
Social baseline	• Construction of the Cadia East Project (CEP) occurred in parallel with a strong push by Millthorpe to attract tourists to the village. Experienced impacts in Millthorpe during the CEP included: – A shortage of accommodation. Accommodation in Millthorpe was booked out for two years significantly affecting the availability of accommodation of visitors to Millthorpe Village – Road safety issues. Workforce road safety issues were managed through the implementation of breathalysers and by siting staff on local roads to visually track personnel that were driving too fast – Litter. Increase in rubbish in town during CVO construction – Economic return. People in Millthorpe invested in houses and rented them to the CVO project workforce – Financial over extension. Some business owners in Millthorpe overextended themselves during the construction phase of CEP. Once construction ended and the workforce departed the demand for services no longer existed impacting the financial performance of many businesses • Today, Millthorpe Village is a hugely popular location for visitors and residents. Families are choosing to reside in the locality due to increased education performance and the modernisation and availability of restaurants and stores • The recent reintroduction of daily passenger service between Sydney and Millthorpe is significant for the local tourism industry
Perceived impacts and opportunities	• Cumulative impacts in the event that the project coincides with further planned expansion at CVO • Potential impacts to LGA tourism industry given recent investment in Orange360 and experienced impacts of CEP • Concern that the LGA will miss out on any workforce local spend • Concern that an increase in traffic on the local road network will reduce road safety and public safety • Concern that the likely shift arrangements of the mine workforce will not support positive health and wellbeing and therefore the workforce will place additional pressure on local mental health resources

Stakeholder Input	Millthorpe Village Committee
	• Potential impact of wage disparity on cost of living, particularly the cost of rental accommodation • Concern that Millthorpe may be more attractive to the workforce as a residential location than Blayney. This project induced population growth may impact the 'small community feel' of the village • Concern that the project workforce will utilise local roads (e.g. Vittoria and Guyong Road as a short-cut to the mine project area) • Disruption to local traffic flows due to construction vehicle movements • Impact to local roads and Millthorpe village character if freight or construction vehicles drive through town
Suggested mitigation, management and enhancement measures	• Educate both people and businesses of the short-term and long-term risks of over-extending themselves if a project comes to fruition • Educate and provide support to near neighbours experiencing mental health issues and to the workforce in relation to shift work hours • Advocate for BSC to infill a dozen blocks of land in Millthorpe for people to build houses on • Include selection criteria in workforce applications to understand how many people may want to live or move into Millthorpe Village for planning purposes • Turn the mine into a tourist attraction i.e. incorporate a turn out bay to allow people to drive in, stop and look at the mine. Promote an educational centre located within the mine project area that provides historical information about Blayney and gold mining, and about the process of gold mining • Conduct mine open days to enable people to visit the mine • Focus on delivering positive engagement with the community • Where possible, give preference to local business including local accommodation in the project procurement process • Design contracts that enable small businesses to tender • Work to ensure a positive legacy is left in the LGA following mine closure

Belubula Headwaters Protection Group

The BHPG is a voluntary organisation established in 2018 in response to the project. The BHPG has a current membership of over 80 people[1] and the majority of active members are near neighbours to the mine project area. For this reason, many of the perceived impacts and benefits of the project raised by the BHPG mirror those of near neighbours.

Since establishment in 2018, the BHPG has raised many and varied issues in relation to the project. The BHPG has been very active on social media and has a face book page. In May 2019 the BHPG also facilitated a community information session for interested residents of Blayney LGA.

[1] Based on information provided to Hansen Bailey by the BHPG.

Table 14 describes the findings of Round 2 SIA Consultation with BHPG. This was the first of two meetings held by Hansen Bailey with the BHPG for the purpose of the SIA. The first meeting focussed on providing members with an understanding of the SIA process and the project approvals process rather than a discussion of impacts and benefits. The second meeting provided an opportunity for the discussion of the predicted social impacts. The broader issues and concerns raised by the BHPG during EIS consultation, through social media, at the community information session and at the Regis Community Information Sessions are not included in this list of issues.

Table 14
Engagement Findings of the BHPG

Stakeholder Input	Belubula Headwaters Protection Group (BHPG)
Potential Impacts	The following project specific issues and concerns were identified and discussed: • Blasting and potential impacts on the structural integrity of nearby homes. • Potential impact of the mine on the value of neighbouring properties (property values; the number of prospective buyers should a landowner seek to sell; and duration for a sale to be completed). • Health and wellbeing impacts - Impacts experienced to date: – Members noted the stress and anxiety experienced by some near neighbours to date due to project uncertainty and uncertainty in relation to the severity of potential impacts and the potential need to relocate away from the area. – One member highlighted the personal distress they were experiencing as they reflected on the potential loss of a lifetimes work (in reference to having spent time developing land and a home for the future). – The project was described as 'emotionally draining' to date for near neighbours. – Some concern was raised in relation to the current impact of the project on relationships within family groups. – One member reflected on the amount of personal time to date they had spent on understanding the project and potential impacts and expressed distress at the loss of this time which had been at the expense of doing other important tasks e.g. studying, personal finances, social commitments. • Health and wellbeing impacts - Long term health impacts – Concern was raised in relation to the potential long-term health impacts (mental health, depression, stress and anxiety) likely to be experienced by near neighbours due to the uncertainty around project approval and the timeframe for a determination. • Location of the TSF on the headwaters of the Belubula River and the potential for TSF failure and downstream contamination of surface water. Attendees cited the recent TSF incident at the

Stakeholder Input	Belubula Headwaters Protection Group (BHPG)
	CVO, highlighting that nothing is fail proof and the risks to surface water are significant. • Potential economic impacts for downstream property owners if the project results in the contamination of the Belubula River. • Potential environmental implications (i.e. flora, fauna, water) of TSF failure. • Potential for dust emissions from the TSF to contaminate adjoining land, impact private property and adversely affect human and animal health. • Concern that the mine may operate for longer than the proposed 15 years. Attendees perceived there was considerable likelihood that the mine life would be extended given that Regis has other exploration areas across the Blayney LGA. • Kings Plains residents perceive that they have few if any options now as to the future. Some members indicated that they feel helpless. • Concern that if existing residents of Kings Plains wish to move out of the local area there is little land available in the LGA with similar natural, physical and economic attributes as the land they currently own. • Concern that the people of Blayney township do not understand the potential visual impacts of the mine and how visible the mine components will be from the Mid Western Highway. • Concern was raised that Regis did not understand the value of the existing lifestyle to Kings Plains residents and hence the sensitivity of some impacts for near neighbours (e.g. the potential risk of injury to livestock e.g. impact to horses as a result of blasting activities).
Potential Opportunities	• Increase in local job opportunities. • Potential increase in local spend if the project workforce resides locally.
Communication Concerns	The following issues were raised in relation to project communications to date: • Concern that Regis has not followed through on what they said and promised. • Concern that Regis does not recognise how important it is to communicate with near neighbours. • Perception that Regis does not appreciate the difference between a project located in a residential area and a project in the middle of nowhere (e.g. remote western Australia). • Regis communicated timelines for project approval that seem unrealistic. Regis needs to be realistic with their timelines to reduce feelings of uncertainty. • Late notification of the community drop-in sessions held in September and October 2018. • People want open and continuous engagement with Regis.
Suggested mitigation, management and enhancement measures	• Regis to create visual montages at various stages of the project for both residents and users of the Mid Western Highway to gain an understanding of the visual impact. • Property acquisition for those residents that want to leave.

Stakeholder Input	Belubula Headwaters Protection Group (BHPG)
	The following suggestions were made to reduce feelings of uncertainty and improve project communications: • Provide continued engagement with effected residents and those that want to be kept up to date with the project (i.e. monthly meetings, or phone calls with persons). • Communicate the approvals timeframe to interested persons and keep people informed of any changes to the timeframe. • Provide interested and affected persons with the outcomes of the environmental modelling studies (e.g. noise, air, surface water and groundwater). • Provide open and continuous engagement based on consistent messages to support mutual trust. • Regis should hold a public meeting to discuss the project. • Provide face-to-face and one-on-one meetings with near neighbours to present and discuss key project impacts (e.g. visual, noise, dust etc., prior to lodgement of the EIS).

1.3.9 Business Community

This section provides an overview of the key findings of discussions and surveys undertaken with the business community to inform the SIA, including a Business Survey, a Short-Term Accommodation Survey and a Real Estate Agent Survey.

Short-term accommodation

Several short-term accommodation providers in Blayney LGA, including hotels and motels, were surveyed in October 2018. Majority of short-term accommodation providers identified high occupancy rates throughout the year, with the exception of coinciding major Regional events where accommodation is typically at full capacity i.e. Bathurst 1000. All surveyed short-term accommodation providers in Blayney LGA expressed interest in providing accommodation to the project workforce. Several accommodation providers highlighted their role in accommodating the Cadia East Project workforce, demonstrating their experience with mining workforce requirements.

Real Estate Agencies

In Blayney LGA, real estate agents identified the lack of available housing stock and the lack of diversity within housing stock as a major concern for the facilitation of a project workforce. During the project construction phase real estate agents identified a number of hotels and motels in the Blayney LGA that are experienced in housing large workforces. Real estate agencies in the Blayney LGA acknowledged that the project could act as a catalyst for the area and restimulate the housing market.

Local Businesses

The findings of the Business Survey are presented in Appendix E of the SIA.

1.3.10 Aboriginal Community

A local (Blayney) representative of the Wiradjuri Aboriginal people participated in a telephone interview to inform the SIA. The findings of the telephone discussion are provided in Table 15. The vulnerabilities of the Aboriginal population in Blayney LGA were also explored in discussion with service providers and community organisations including Housing Plus. Engagement undertaken with Registered Aboriginal Parties (RAPS) for the mine development and pipeline development has been captured through the Cultural Heritage Assessment process described in Appendix P and Appendix Z of the EIS.

Table 15
SIA Input from the Aboriginal Community

Stakeholder Input	Aboriginal Community
Social Baseline	• Blayney has a very small Aboriginal population in, many of which do not identify • Blayney is valued as it is a small town, yet it is still close to regional centres; it has a beautiful landscape and a nice community feel • Blayney does not need a mine to thrive. Blayney has a steady population and since the closure of the abattoir the community has demonstrated resilience • There is a proportion of residents in Blayney LGA from a lower-socio demographic who experience circumstances similar to that experienced by some Aboriginal residents in the LGA • How Regis manages its workforce and integrates the workforce into the community will determine the extent to which vulnerable sectors of the community are impacted • Aboriginal cultural activities in Blayney LGA include NAIDOC week celebrations and provision of language programs in Blayney High School. • Lack of mental health services for children in Blayney, as well as transport to basic services
Perceived impacts	• Environmental impacts of the project, particularly any impact to the Belubula River system • Potential impacts to the section of the Belubula River that passes through Blayney, particularly given BSC recent initiatives to develop a walking path along the river • Change in landscape from rural to mining • Further loss of connection to Aboriginal land
Opportunities	• Employment for Aboriginal people • Potential opportunity to develop the final void after closure into a social or educational experience
Suggested mitigation, management and enhancement measures	• Actions that minimise impacts to Blayney character • Opportunities for Regis to support Wiradjuri initiatives • Cultural awareness training of the workforce

ATTACHMENT A

Table A1
Issues and Concerns Raised During All Rounds of SIA Consultation

No	Issues/Concerns Raised	Reference
Project Timing		
1	Lack of certainty around whether Regis will pursue approval for the project given ongoing delays in releasing conceptual mine plan.	SIA Section 4.2
2	Lack of certainty in relation to life of mine. Stakeholders perceive that the mine operation will continue beyond 10 years as (Regis) identifies additional resources either within or outside the existing mine mine project area.	SIA Section 4.2
3	Lack of available information in relation to the project approvals process, approvals timing and project construction schedule.	SIA Section 4.2
4	Concern that the EIS does not include an assessment of the potential impacts associated with the future development of other gold deposits currently under exploration by Regis and located in the Blayney LGA (e.g. Discovery Ridge).	SIA Section 4.2
5	Concern that Regis will seek to fast track the approvals process at the expense of the community given the project delays Regis has experienced to date.	SIA Section 4.2.
6	Concern in relation to the management of the mine development following mine closure and the potential for Blayney LGA to be left with an environmental and economic legacy once the mine closes.	SIA Section 4.3 in the SIA
7	Lack of certainty in relation to the project approvals process and the timing of a project determination decision.	SIA Section 4
EIS Consultation Process		
8	Inconsistent communication from Regis in relation to the release of the conceptual mine layout.	SIA Section 4.3
9	Lack of information around the opportunities available to stakeholders to review relevant documents and provide feedback to Regis in a timely manner.	SIA Section 4.3
10	Community has insufficient project information to enable informed comment about the project.	SIA Section 4.3
11	Concern in relation to the perceived dissemination of inconsistent information to nearby landholders.	SIA Section 4.3
12	Perception that Regis's consultation process shows a lack of respect for local landholders. Local landholders consulted only after regional groups e.g. ECCO consulted. Local landholders attended ECCO meeting in an effort to find out information.	SIA Section 4.3
13	Distrust in Regis and environmental assessment process due to delays in release of conceptual mine plan and progress of negotiations with different landowners.	SIA Section 4.3
14	Concern that stakeholders will not be provided with adequate time to review the conceptual mine plan and to provide feedback and identify key issues.	SIA Section 4.3

No	Issues/Concerns Raised	Reference
15	Concern that stakeholders will not be provided with adequate time to review and respond to EIS technical studies during the approvals process.	SIA Section 4.3
16	Frustration with the property acquisition and compensation contracts, specifically where restrictions are placed on comments landholders are permitted to make publicly about the project.	SIA Section 4.3
17	Perception that affected landholders have been left out of the consultation process due to chosen distribution area for Community Information Sheet 1.	SIA Section 4.3
18	Concern that Regis has not followed through on what they said and promised.	SIA Section 4.3
19	Concern that Regis does not recognise how important it is to communicate with near neighbours.	SIA Section 4.3
20	Perception that Regis does not appreciate the difference between a project located in a residential area and a project in the middle of nowhere e.g. rural western Australia.	SIA Section 4.3
21	Regis has communicated project approval timelines that seem unrealistic. Regis needs to be realistic with their timelines to reduce feelings of uncertainty.	SIA Section 4.3
22	Late notification of the community drop-in sessions held in September and October 2018.	SIA Section 4.3
24	Concern that many residents are uninformed about the project and therefore unable to make an informed comment on the potential impacts and opportunities of the project.	SIA Section 4.3
25	Inconsistent project messaging from Regis in relation to the technical aspects of the project.	SIA Section 4.3
26	Near neighbour perception that Regis will not deliver on proposed management measures due to perceived lack of comprehensive engagement to date.	SIA Section 4.3
27	Concern raised in relation to the accountability for the implementation of identified social impact management measures	SIA Section 4.3
Traffic and Transport		
28	Potential increase in heavy vehicle traffic through Blayney and resulting impacts on pedestrian safety and the image of Blayney as a tourist destination.	EIS Appendix Q
29	Potential for increased road incidents on the Mid Western Highway due to a combination of increased traffic, speed and fatigue.	EIS Appendix Q
30	Road safety issues on the Mid Western Highway arising from the addition of over dimensional vehicles (ODV) during the construction phase.	EIS Appendix Q
31	Potential for increased traffic on Guyong Road during operations with resulting impacts on road safety.	EIS Appendix Q
32	Changes in local accessibility and increased travel times due to closure of Dungeon Road.	EIS Appendix Q

No	Issues/Concerns Raised	Reference
33	Safety concerns in relation to the siting of the mine access intersection and proximity to the Walkom Road intersection. This issue is of particular concern during shift change.	EIS Appendix Q
34	Safety concerns in relation to interactions between school bus services and mine traffic during shift change over.	EIS Appendix Q
35	Potential for increased traffic on Vittoria Road and resulting impacts to the condition of the road.	EIS Appendix Q
36	Potential for increased traffic on the Mid Western Highway and resulting impacts on road safety.	EIS Appendix Q
37	Potential for changes in school bus service routes due to blasting activities.	EIS Appendix Q
38	Potential for increased traffic on local roads due to road closures associated with project blasting activities.	EIS Appendix Q
39	Concern in relation to the condition of local road networks and the potential impact of additional project vehicle movements on these roads.	EIS Appendix Q
40	Safety concerns in relation to the proposed position of the mine project area access road.	EIS Appendix Q
41	Ongoing concern regarding the location of the mine access intersection and the implications for road safety.	EIS Appendix Q
42	Potential for mining activity (including the amenity bunds) to distract to drivers on the Mid Western Highway with potential impacts on road safety.	EIS Appendix Q
43	Impact of permanent closure of Dungeon Road on traffic volumes on Guyong Road.	EIS Appendix Q
44	Potential for Walkom Road to experience an increase in traffic as people seek to avoid the intersection construction work on the Mid Western Highway.	EIS Appendix Q
45	Cumulative impact from CVO workforce and project workforce on traffic volumes on Guyong Road.	EIS Appendix Q
Health and Wellbeing		
46	Potential health impacts arising from the inhalation/ingestion of mine project area dust which may be contaminated with heavy metals.	SIA Section 6.3
47	Concern was raised in relation to the extent to which the project was currently (May 2019) impacting relationships within family groups.	SIA Section 6.3
48	Concern was raised in relation to the potential long-term health impacts (mental health, depression, stress and anxiety) likely to be experienced by near neighbours due to the uncertainty around project approval and the timeframe for a determination.	SIA Section 6.3
49	Stress and anxiety currently experienced by near neighbours due to a range of factors including: project approval uncertainty; uncertainty in relation to project timing; uncertainty in relation to the nature and extent of potential impacts outside of the mine project area.	SIA Section 4.2
50	Stress and anxiety currently experienced by near neighbours and landholders located downstream of the mine project area due to project uncertainty and an inability to progress aspirations for property.	SIA Section 4.2

No	Issues/Concerns Raised	Reference
51	Direct and indirect impacts of shift work arrangements on the health and wellbeing of employees, and the functioning of their families.	SIA Section 4.2
52	Potential for groundwater contamination from dust and cyanide use and resulting impacts on personal, stock and environmental health.	EIS Appendix K
53	Potential health impacts (particularly respiratory impacts) associated with dust emissions.	EIS Appendix M
54	Concern in relation to the absence of a 'buffer zone' around the mine project area to minimise impacts outside of the mine project area on near neighbours.	EIS Chapters 10 and 11
55	Concern that naturally occurring asbestos may be present within the mine project area and could be disturbed through project activities with potential health impacts for near neighbours.	EIS Appendix M
56	Concern that the construction workforce will generate increased demand for health services in the Blayney LGA and this impact has the potential to be a cumulative impact if major works are commenced at Cadia Mine.	SIA Section 6.2
57	Perceptions of social isolation for some residents due to Regis property acquisition, particularly to the north and east of the mine project area boundary.	SIA Section 6.3
58	Existing and deteriorating health and wellbeing of near neighbours due to stress and anxiety in relation to the project.	SIA Section 6.3
59	Cumulative impact of existing drought conditions on air quality and the implications for human health (on the magnitude of the impact).	SIA Section 6.3 and EIS Appendix M
64	One person raised that the dust and noise levels are not compliant during 'extreme and unforeseen weather events'. With the occurrence of drought, prevailing winds and climate change people asked how air quality and dust can be accurately modelled.	EIS Appendix M
65	Some near neighbours have heightened sensitives to dust due to existing health conditions. There is concern that the project will exacerbate these health conditions.	EIS Appendix M
Environment		
66	Uncertainty in relation to Regis capacity and commitment to manage project environmental impacts once construction commences.	SIA Section 4.3
67	Loss of biodiversity value within the mine project area due to clearing and construction of mine infrastructure.	EIS Appendix N
68	Displacement of native species and changes in local birdlife due to clearing activities.	EIS Appendix N
69	Lack of faith in the Regis to deliver a successful mine project area rehabilitation program.	SIA Section 4.3
70	Potential for contamination of surface water in the Belubula River due to unauthorised releases, poor flood management or TSF failure.	EIS Surface Water Report
71	Impact of pit operations including blasting on water quantity and quality in the Belubula River.	EIS Appendix L
72	Potential risks to the environment (waterways) associated with storage and use of cyanide in the mine project area.	EIS Appendix J, EIS Appendix R

No	Issues/Concerns Raised	Reference
		and EIS Chapter 18
73	Erosion management at waste rock emplacement areas and potential impacts on water quality.	EIS Appendix H and EIS Chapter 7
74	Potential impacts to water quantity and quality in groundwater bores that are located beyond the mine project area.	EIS Appendix K
75	Potential for permanent changes to the local groundwater regime from open cut mining.	EIS Appendix K
76	Request for 'Make Good Agreements' (MGA) for groundwater to manage groundwater impacts outside of the mine project area.	EIS Appendix K
77	General lack of confidence in mining companies to protect water resources from mining impacts (Cadia Mine and Browns Creek Mine incidents cited as examples).	SIA Section 4.3
78	Blasting and potential impacts on the structural integrity of nearby homes.	EIS Appendix L
79	Location of the Tailings Storage Facility (TSF) on the headwaters of the Belubula River and the potential for TSF failure and downstream contamination of surface water.	EIS Appendix J
80	Potential environmental implications of TSF failure.	EIS Appendix D and EIS Appendix R
81	Potential for dust emissions from the TSF and mining operations to contaminate adjoining land, impact private property, pollute rainwater tanks, and adversely affect human and animal health.	EIS Appendix M
82	Concern that the project water supply from the proposed pipeline will not be suitable for cattle consumption and therefore poses a risk to water quality in the Belubula River in the event of an accidental release into the river system.	EIS Appendix J
83	Potential cumulative impacts of historical, existing and proposed mining operations in the Blayney Shire on river systems (Belubula and Lachlan River).	EIS Chapter 37
84	The potential for failure of the Tailings Storage Facility (TSF) and resulting impacts on the Belubula River (water quality, water quantity, environmental values), downstream water users, water quality in Carcoar Dam and recreational use of Carcoar Dam.	EIS Appendix J and EIS Appendix K
85	Uncertainty in relation to the future availability of water in the Belubula River given the location of the Tailings Storage Facility (TSF) on the Belubula River.	EIS Appendix J
86	Concern in relation to mine project area water management practices - in particular how excess water will be managed if Regis is required to take a fixed volume of water at all times from the proposed new water supply pipeline from Centennial Coal operations.	EIS Chapter 9
87	Potential impact of the TSF on the existing natural springs located within the mine project area. These springs are considered by some focus group participants to be essential to the flow of water in the Belubula River and highly valued by downstream landowners.	EIS Appendix K

No	Issues/Concerns Raised	Reference
88	Potential for reduced water flows into Carcoar Dam due to the location of the TSF on the Belubula River and potential impacts to natural springs.	EIS Appendix J and EIS Appendix K
89	Potential for dust emissions from the TSF and possible impacts to the health of people and animals.	EIS Appendix M
90	Potential environmental, economic and social impacts of cyanide use in the mining operation. It was noted that use of cyanide is an old-fashioned method. Focus group participants cited concern in relation to the potential for cyanide contamination of the Belubula River and groundwater resources.	EIS Appendix R and EIS Chapter 18
91	Concern that the use of pipeline water for dust suppression may impact rehabilitation success due to the residual salt content.	EIS Appendix J and EIS Appendix U
92	Concern that the direct use of the pipeline water within the mine project area or an unplanned release from the pipeline may lead to the contamination of ground and surface water in the mine project area.	EIS Appendix J, EIS Appendix K and EIS Appendix X
93	Potential changes in flood regimes due to project induced changes in the quantity and quality of water in the Belubula River.	EIS Appendix J
94	Potential impacts of a major rainfall event on the mine project area and in particular the capacity of the TSF and water storage system to deal with the volume of water.	EIS Appendix D and EIS Appendix J
95	Stakeholders consider that any potential impact to water sources (i.e. creeks, springs, river and bores) should be considered a significant impact.	SIA Section 8
96	Potential for mine development to increase erosion in creek embankments outside of the mine project area due to changes in surface water flows.	EIS Appendix J
97	Impacts to aquatic and terrestrial ecology and fauna due to changes in water quality and quantity in creek systems outside of the mine project area and the Belubula River.	EIS Appendix N
Visual		
98	Permanent loss and/or changes in vistas from private landholdings.	EIS Appendix M and SIA Section 6.3
99	Concern in relation to the permanent loss of rural landscape.	EIS Appendix M and SIA Section 6.3
100	Concern that the mine will significantly detract from the attractiveness of Blayney as a tourist destination due to its location at the 'entrance' to Blayney and visibility from the Mid Western Highway.	EIS Appendix M and SIA Section 6.2 and Section 6.3
Hazard and Safety		
101	Public safety issues associated with the transport, use and storage of cyanide	EIS Appendix R

No	Issues/Concerns Raised	Reference
102	Impact of Dungeon Road closure on accessibility for rural bushfire brigade in emergencies.	SIA Section 6.2 and Section 6.3 and EIS TIA
103	Potential for TSF failure.	EIS Appendix D
104	Public safety issue associated with blasting and the potential for fly rock to impact road users (Mid Western Highway).	EIS Appendix L
Community		
105	Potential for property acquisition activities to result in a loss of long-term residents who have connection to the locality.	SIA Section 6.3
106	Project may lead to significant population decline in Kings Plains with resulting impacts for long term community sustainability.	SIA Section 6.3
107	Displacement of existing residents from Kings Plains due to uncertainty in relation to project impacts, or as a result of the predicted severity of project impacts.	SIA Section 6.3
108	Concern that the project will lead to conflict within the Kings Plains community and the erosion of community cohesion due to divergent viewpoints amongst residents.	SIA Section 6.3
109	Population decline in Kings Plains may impact volunteer base for Kings Plains (RFB).	SIA Section 6.3
110	Potential for Blayney to lose its small country town feel due to an influx of mine workers.	SIA Section 6.2
111	Concern that the long-term economic benefits of the mine, given its relatively short mine life, will not outweigh the potential adverse impacts experienced by near neighbours and the broader community.	EIS Appendix DD, SIA Section 6.2
112	Concern that an increase in disposable income may contribute to an increase in drug and alcohol consumption in Blayney with resulting adverse social impacts.	SIA Section 6.2
113	Changes in the socio-economic character of Blayney as mine wages are dispersed throughout the community.	SIA Section 6.2
114	Concern that the project will result in Blayney township becoming “just another mining town”.	SIA Section 6.2
115	Potential for project to exacerbate existing impact of shift work arrangements on participation rates in sporting organisations.	SIA Section 6.2
116	Potential for project to exacerbate existing impact of shift work arrangements on rates of volunteerism in the community.	SIA Section 6.2
117	Some concern was raised that the incoming workforce may exhibit a different set of values to the broader Blayney community leading to a change in the character and sense of community in the Blayney township.	SIA Section 6.2
118	Disruption to existing social connections due to the potential closure of Dungeon Road.	SIA Section 6.3
119	Potential impacts to the culture of both the Indigenous and agricultural community.	SIA Section 6.2
120	Concern that the project and the presence of an action group is generating conflict between residents contributing to a greater divide within the community.	SIA Section 4.2 and SIA Section 6.3
121	Concern that fragmentation of the Kings Plains community could also force a loss of historic knowledge within that community.	SIA Section 6.3
Way of Life		
122	Reduced residential amenity due to the use of Dungeon Road during the construction phase.	SIA Section 6.3

No	Issues/Concerns Raised	Reference
123	Potential impacts to future lifestyle aspirations due to uncertainty in relation to project timing and impacts.	SIA Section 4.2 and Section 6.3
124	Increasing stakeholder frustration due to an inability to control the project and impacts.	SIA Section 4.2 and Section 6.3
125	Impact of mine project area lighting on dark sky.	EIS Appendix S and SIA Section 6.3
126	Concern that light emissions from the project will impact residential amenity of nearby private properties.	EIS Appendix S and SIA Section 6.3
127	Changes to residential amenity due to the combined effects of noise and vibration from mine blasting activities, traffic, landscape changes, dust).	EIS Appendix L
128	Adverse changes in the standard of living for near neighbours due to changes in residential amenity.	SIA Section 6.3
129	Stress and anxiety to stock (horses) from blasting activities (noise and vibration).	EIS Appendix L
130	Potential health and safety issues for landowners if stock (horses) become frightened during routine blasting activities.	EIS Appendix L
131	Potential for increased dust deposition with resulting impacts on rain water quality and longevity of rainwater tank filters. This is a significant issue as the majority of near neighbours are reliant on tank water.	EIS Appendix M
132	Reduction in enjoyment of outdoor evening activities (fire pit etc.) due to noise from the mine project area and changes in dark skies due to mine lighting.	SIA Section 6.3
133	Lifestyle disruption due to road closures for blasting activity.	EIS Appendix L and EIS Appendix Q
134	Sleep disturbance due to noise from mine operations.	EIS Appendix L and SIA Section 6.3
135	Potential for property acquisition to result in loss of long-term family connection to the local area.	SIA Section 6.3
136	Disruption/severance of existing, and sometimes informal property management relationship (e.g. sharing of infrastructure including water supply infrastructure due to land acquisition).	SIA Section 6.3
137	Potential disruption to the agricultural operations of downstream landholders due to changes in water quality and quantity in the Belubula River.	SIA Section 6.2 and Section 6.3
138	Damage to private property due from blasting activities.	EIS Appendix L and SIA Section 6.3
139	Reduced property values and corresponding reduction in local housing market interest leading to economic implications for landowners who decide they cannot live with the mine and need to sell.	SIA Section 6.3
140	Concern that the project will slowly erode the attributes of Kings Plains that are highly valued by existing residents i.e. serenity, vistas, clean air, cohesive community to the point where these attributes no longer exist.	SIA Section 6.3
141	Potential impacts to way of life due to changes in water quality and quantity in bores located outside of the mine project area.	SIA Section 6.3

No	Issues/Concerns Raised	Reference
142	Concern that project related noise management actions will focus on the management of noise inside residences at Kings Plains which does not reflect the predominantly outdoor lifestyle of most residents.	SIA Section 6.3
143	Concern that displaced landowners may find it difficult to secure alternative land in the Blayney LGA due to existing land supply and property values	SIA Section 6.3
144	Kings Plains residents perceive that they have few if any options now as to the future. Some members indicated that they feel helpless.	SIA Section 4.2 and Section 6.3
145	Concern that the people of Blayney township do not understand the potential impacts and opportunities of the mine.	SIA Appendix D
146	Concern that Regis does not understand the extent to which near neighbours value their existing lifestyle and hence the sensitivity of some impacts for near neighbours e.g. the potential risk of injury to livestock (horses) from blasting activities.	SIA Section 4.3 and Section 6.3
147	Potential for the project to impact housing affordability in Blayney LGA.	SIA Section 6.2
148	Changes in housing affordability have the potential to impact vulnerable households in Blayney township.	SIA Section 6.3
149	Potential increase in demand for local services and facilities e.g. childcare services, medical and emergency services.	SIA Section 6.3
150	Potential for cumulative impacts on short-term accommodation, the housing market and service and facility provision in Blayney LGA.	SIA Section 6.3
151	Concern that near neighbours will be confined to their residences due to external amenity impacts.	EIS Appendix L and SIA Section 6.2
152	Residents believe that too much weighting is being placed on the amenity bunds as a solution managing the noise and visual impacts of the project.	EIS Appendix L
153	Concern that the proposed southern amenity bund will increase highway noise for some near neighbours.	EIS Appendix L
154	Potential impacts to animal health and wellbeing due to air quality, noise and blasting impacts with flow on impacts to people's livelihoods and way of life.	EIS Appendix L
155	Potential impact to operations of the Bathurst Soaring Club and use of the existing airstrip on the mine project area.	SIA Section 6.3.7
156	Concern that the project will result in the loss of prime agricultural land with flow-on impacts to regional agricultural industry productivity and the viability of locally based agricultural businesses.	EIS Appendix I and SIA Section 6.2
157	Incompatibility of mining with existing private property activities (e.g. commercial enterprises).	SIA Section 6.2 and Section 6.3
158	Concern that the project may draw on the local agricultural workforce and result in agricultural enterprises (i.e. farms) becoming neglected in favour of higher mine wages.	EIS Appendix DD and SIA Section 6.2
159	Cumulative impacts of mining on water supply for the Blayney LGA and future water security options under consideration (e.g. the pipeline proposed by Central Tablelands Water to connect Carcoar Dam with Lake Rowlands).	EIS Appendix J and EIS Chapter 9
160	Potential disruption to agricultural activities and resulting economic impacts due to a reduction in surface water flows in the Belubula River.	EIS Appendix DD
161	Potential economic impacts for downstream landowners due to any disruption of existing agricultural operations which may result from changes in the quality and quantity of water in the Belubula River.	EIS Appendix DD and SIA Section 6.2

No	Issues/Concerns Raised	Reference
162	Existing limitations on residential land supply in Blayney will impact the number of potential employees attracted to Blayney as permanent residents.	SIA Section 5.4
163	Concern that the limited availability of residential housing located in Blayney township may constrain the number of project employees who could live locally during the project operations phase.	SIA Section 5.4
164	Potential for the project to result in increased incidents on the Mid Western Highway, in turn increasing call-outs from the Kings Plains RFB.	EIS Appendix Q
165	Concern that Kings Plains RFB is ill-equipped to respond to a cyanide incident on the Mid Western Highway.	EIS Appendix R and SIA Section 6.3
166	Potential for the project to impact the supply of housing available in Blayney township for locals and/or other potential buyers.	SIA Section 6.2
167	Concern that changes in the landscape and community, and impacts to the natural environment will reduce people's sense of ownership and attachment to place.	SIA Section 6.3
168	Cumulative impacts of multiple industrial land use (i.e. Cadia Valley Operations (CVO), Purina and SeaLink) on the character and amenity of Blayney LGA.	SIA Section 6.4
169	Impacts to way of life due to the amount of time spent on understanding the project and potential impacts and expressed distress at the loss of this time which had been at the expense of doing other important tasks.	SIA Section 4.2 and Section 6.3
170	Potential for changes in the rural character and amenity of Blayney township due to project induced increase in activity in town including increased through traffic. This may also have a negative impact on the attractiveness of the location as a tourist destination.	SIA Section 6.2
171	Perception that the mine life (10 years) is not long enough to deliver lasting benefits to the Blayney Shire and hence project benefits do not outweigh the potential negative impacts for nearby neighbours.	EIS Appendix DD
172	Potential for labour draw from small businesses in Blayney with resulting impacts on ability of small businesses to operate and/or supply services to the project. Local businesses may experience difficulty retaining skilled and/or trained employees once the project construction phase commences.	SIA Section 6.2
173	Potential for groundwater impacts outside of the mine project area to affect long-term viability of agricultural operations on nearby private properties.	SIA Section 6.2 and Section 6.3
174	Potential for further wage disparity in Blayney due to influx of worker on mine wages.	SIA Section 6.2
175	Concern that the stated economic benefits of the project will not eventuate and Blayney LGA will miss out on the economic benefits of the project due to the proximity of the mine project area to Bathurst and Orange.	EIS Appendix DD
176	Potential for project workforce demand to increase the price of flights out of Bathurst and Orange airports for local residents.	SIA Section 6.2
177	Concern that the project will reduce the attractiveness of Blayney LGA as a tourist destination, leading to a reduction in the number of tourists visiting Blayney and the villages with flow-on impacts to the economy.	SAI Section 6.2
178	Concern that Regis will employ a fly-in-fly out workforce and few economic benefits will therefore accrue to Blayney as a result of the project	SIA Section 2.2
179	Concern that increased competition from the project and other operations in Blayney LGA will force local business owners to increase wages to retain a workforce.	SIA Section 6.2

No	Issues/Concerns Raised	Reference
180	Potential economic and social impacts if the project affects water quality or quantity in Carcoar Dam and reduces the dam's attractiveness as a tourist destination and local recreation facility.	SIA Section 6.2
181	Concern that business expectations in relation to local procurement will not be met.	SIA Section 6.2
182	Concern that a lack of available and suitable housing in Blayney township will limit the number of employees who can live locally, adversely impacting the economic benefits accruing to the Blayney LGA.	SIA Section 6.2
183	Impact of mine closure, specifically the withdrawal of economic benefits in the form of employment, local investment and procurement.	EIS Appendix DD and SIA Section 6.5
184	Potential for the price of goods and services in Blayney township to increase as a result of resident population growth and an increase in the number of households on mining wages.	SIA Section 6.2
185	Concern that mine employees will not spend their wages locally (i.e. in Blayney), particularly if they do not live in Blayney.	EIS Appendix DD
186	Concern that the project construction phase will create an economic bubble for local businesses that cannot be sustained following the transition to operations.	SIA Section 6.2
187	Potential impact of labour draw on the operation of Blayney Shire Council.	SIA Section 6.2
188	Concern that the project will be classified as a 'priority user' in terms of electricity supply and that the Kings Plains locality may lose power and/or have to pay higher rates associated with power.	The power line is subject to a separate approval process.[2]
Opportunities		
189	Project will bring more money into Blayney community and increase local spend which will be positive for small business.	EIS Appendix DD
190	Local employment opportunities.	EIS Appendix DD and SIA Section 2.2
191	Improved services and facilities in Blayney as a result of corporate social investment.	EIS Appendix DD and SIA Section 6.2
192	Opportunity for agricultural operators to supplement income with mine employment.	EIS Appendix DD and SIA Section 6.2
193	Increased procurement opportunities for local businesses if Regis focusses on local-buy.	EIS Appendix DD and SIA Section 6.2
194	Increased rates for Blayney Shire Council as a result of population increase and change in land use from agriculture to mining.	EIS Appendix DD
195	Opportunities for local people to improve skills through additional training opportunities.	EIS Appendix DD and SIA Section 6.2

[2] Consultation has commenced with the electricity provider to ensure a suitable power supply can be provided without impacting on other users.

No	Issues/Concerns Raised	Reference
196	Economic benefits for short-term accommodation providers during construction phase.	EIS Appendix DD and SIA Section 6.2
197	Increased resident population in Blayney township as people move to the location to take up employment on the project.	EIS Appendix DD and SIA Section 6.2
198	Potential increase in resident population of Blayney during project operations with resulting positive impacts for the community, service providers with respect to the pool of volunteers, schools and sporting groups.	EIS Appendix DD and SIA Section 6.2
199	Potential for support from Regis to build local business capability and procurement readiness.	SIA Section 6.2
200	Potential for improved diversity in available local employment opportunities (i.e. Indigenous employment, employment opportunities for women).	SIA Section 6.2
201	Increased workforce capability due to provision of training and education programs or increased funding and investment for local business.	SIA Section 6.2
202	Displacement of Kings Plains residents may provide an opportunity for new people to move into the Kings Plains area filling vacated properties.	SIA Section 6.2
203	The project may attract new residents to Blayney LGA which may in turn support growth in the smaller villages of the LGA.	SIA Section 6.2
204	The project may attract tourists to the locality with positive benefits for the local tourism industry.	SIA Section 6.2
205	The project may increase the number of households in the Blayney LGA who receive mining wages. This in turn will contribute to an increase in local spend.	EIS Appendix DD
206	The project presents an opportunity for new businesses to start-up in Blayney township and for business located in other areas to open branch offices in Blayney.	SIA Section 6.2
207	Project induced population growth in Blayney LGA, particular an influx of new families to the Blayney township, could increase resident involvement in local sport, expand the available volunteer pool and support growth in local schools.	SIA Section 6.2
208	The project may attract new businesses to Blayney which may utilise available space in the industrial area of Blayney.	SIA Section 6.2
209	Potential opportunity for business based in Bathurst and Orange to establish branch offices in Blayney in order to deliver services to the mine during both the construction and operations phases.	SIA Section 6.2
210	The project will generate local employment opportunities and may provide entry level positions or “Cleanskin” roles.	EIS Appendix DD and SIA Section 6.2
211	The project may be a catalyst for local people to promote the lifestyle and range of services and facilities in Blayney. This may help to new residents and project employees to the Blayney LGA.	SIA Section 6.2
212	Cumulative investment and revenue benefits from the project, any proposed expansion of CVO and Flyers Creek Wind farm.	SIA Section 6.2
213	The project has the potential to be a tourist attraction supporting the role of Blayney as a tourism destination. There may be opportunities to market the mine location as an educational attraction for tourists and school students, depending on how the mine project area access is designed (e.g. provision of a viewing platform).	SIA Section 6.2

APPENDIX E

Local Business Survey

MCPHILLAMYS GOLD PROJECT

SUMMARY REPORT
BUSINESS SURVEY OUTCOMES

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July 2019

For:

LFB Resources NL
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Appendix A Business Survey

ABBREVIATIONS LIST

ABS	Australian Bureau of Statistics
Bathurst LGA	Bathurst Region Local Government Area
Blayney LGA	Blayney Local Government Area
BSC	Blayney Shire Council
Business Survey	McPhillamys Gold Project Business Survey
CVO	Cadia Valley Operations
LGA	Local Government Area
Lithgow LGA	Lithgow City Local Government Area
NSW	New South Wales
Regis	Regis Resources Limited
SIA	Social Impact Assessment
SSD	State Significant Development
The project	McPhillamys Gold Project

MCPHILLAMYS GOLD PROJECT
BUSINESS SURVEY REPORT

for
LFB Resources NL

1 INTRODUCTION

1.1 OVERVIEW

This document presents the key findings of the McPhillamys Gold Project (the project) Business Survey conducted by Hansen Bailey.

1.1.1 Purpose and Objectives

The Business Survey was undertaken to inform the:

- Social baseline component of the Social Impact Assessment (SIA);
- Likely procurement and supply chain assumptions for the project; and
- The development of suitable strategies to address potential barriers to local industry participation in the project.

The objectives of the Business Survey were to:

- Understand the qualitative socio-economic baseline of local business conditions in Blayney LGA;
- Identify barriers to local business participation in potential project procurement opportunities; and
- Inform the development of management recommendations in relation to project procurement for consideration by Regis Resources Limited (Regis).

1.2 THE PROJECT

LFB Resources NL a 100% wholly owned subsidiary of Regis Resources Limited (Regis) is seeking State Significant Development (SSD) consent for the construction and operation of the McPhillamys Gold Project, a greenfield open cut gold mine (mine development) and associated water supply pipeline (pipeline development) in the Central West of New South Wales (NSW). The mine development component of the project is located approximately 8 km north-east of Blayney within the Blayney and Cabonne Local Government Areas (LGAs).

Water will be supplied to the mine via a pipeline approximately 90 km long, transferring surplus water from Centennial's Angus Place Colliery and Springvale Coal Services Operations, and Energy Australia's Mt Piper Power Station near Lithgow, to the mine. The pipeline development is proposed across the Bathurst Regional LGA (Bathurst LGA), Lithgow City LGA (Lithgow LGA) and a small portion of the Blayney LGA to facilitate the beneficial use of otherwise surplus water and to provide a reliable water source for the project.

2 METHODOLOGY

This section outlines the methodology for the conduct of the Business Survey, specifically the design and implementation of the Business Survey.

2.1 METHODOLOGY

2.1.1 Survey Design

The Business Survey was designed by Hansen Bailey to allow for open-ended responses and qualitative information, as well as the quantitative statistics necessary to categorise business responses.

2.1.2 Register of Businesses

Blayney Shire Council (BSC) provided Hansen Bailey with a register of businesses operating in the Blayney LGA. The register was supplemented with business listings available on the BSC's *Business Directory* online and desktop research. The business register was 'cleaned' to exclude government operated businesses and community organisations.

The final register of businesses contained 131 business listings for Blayney LGA.

2.1.3 Survey Implementation

The Business Survey was administered by telephone. Prior to survey commencement, Hansen Bailey distributed an email to businesses, where a contact email was known, to notify business owners/managers of the intention to conduct a telephone survey. Regis personnel also distributed a flyer, prepared by Hansen Bailey, advertising the business survey to businesses located in the main street of Blayney.

The survey was administered by Hansen Bailey between 22 March to 1 April 2019. However, during the survey period some businesses identified time constraints and asked for an electronic copy of the survey to complete in their own time and return to Hansen Bailey via email. This was completed for select businesses.

2.1.4 Analysis

The Business Survey involved the design and implementation of a business survey and analysis of key findings. Data analysis was completed over the course of a week using excel to develop graphs and tables. A copy of the survey is included in Appendix A.

2.2 RESPONDENTS

During the survey period a total of 123 businesses were contacted and a total of 50 business surveys were completed. Several businesses listed had disconnected phone numbers and other businesses were found to be non-operational. A total of eight businesses were not contacted due to the timeframe of the business survey.

According to the ABS data in 2018 there were 790 registered businesses (including entries and exits) in the Blayney LGA. The largest proportion of businesses were agricultural, forestry and fishing industry businesses (46%, 361 businesses) and the next largest proportion, construction industry businesses (12%, 96 businesses). Of the 361 agricultural, forestry and fishing industry businesses 266 (74%) were “non-employing businesses”, which are typically self-managed agricultural businesses. Of the 790 registered business in the Blayney LGA in 2018, 520 (66%) were “non-employing businesses”.

The anticipated sample size for the survey was calculated based on businesses that employed one or more staff. There were 270 employing businesses in the Blayney LGA in 2018, and 50 surveys were completed. Therefore, the sample size is approximately 20% of Blayney LGA businesses, noting that some survey participants were “non-employing businesses”.

The lower number of respondents from the total registered businesses in Blayney LGA is considered to have limited impact on the key results of the survey, as the intention of the survey was to gain a qualitative understanding of business conditions rather than conduct a statistically valid study.

3 SUMMARY OF KEY FINDINGS

3.1 OVERVIEW

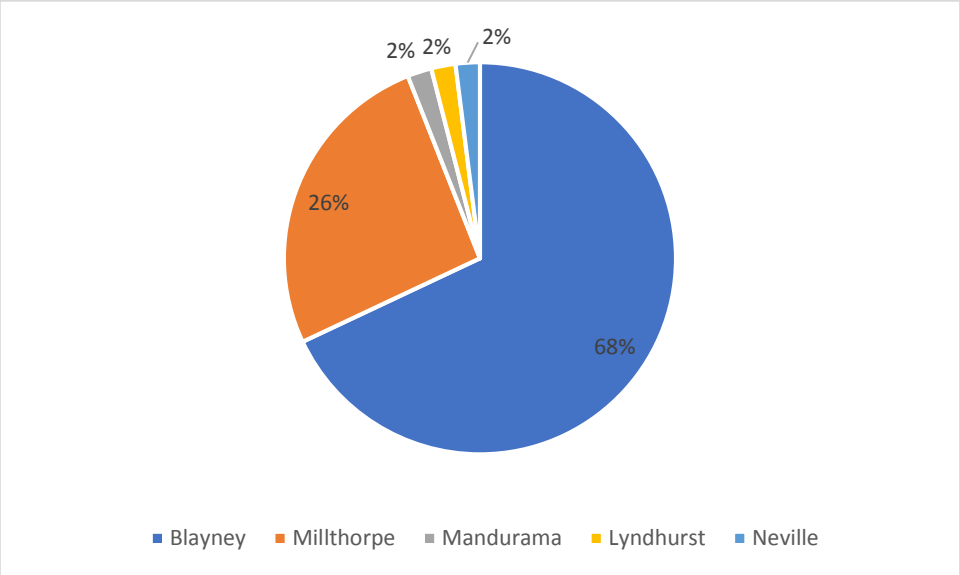
This section provides an overview of the key findings of the Business Survey.

3.2 CHARACTERISTICS OF SURVEYED BUSINESSES

3.2.1 Location

Of the 50 businesses surveyed, 68% of businesses were based in Blayney township, 26% were based in Millthorpe and 2% were each based in Mandurama, Lyndhurst and Neville. A higher response rate from Blayney based businesses was anticipated as Blayney township has the largest commercial centre in the LGA.

Graph 1
Location of Businesses Surveyed



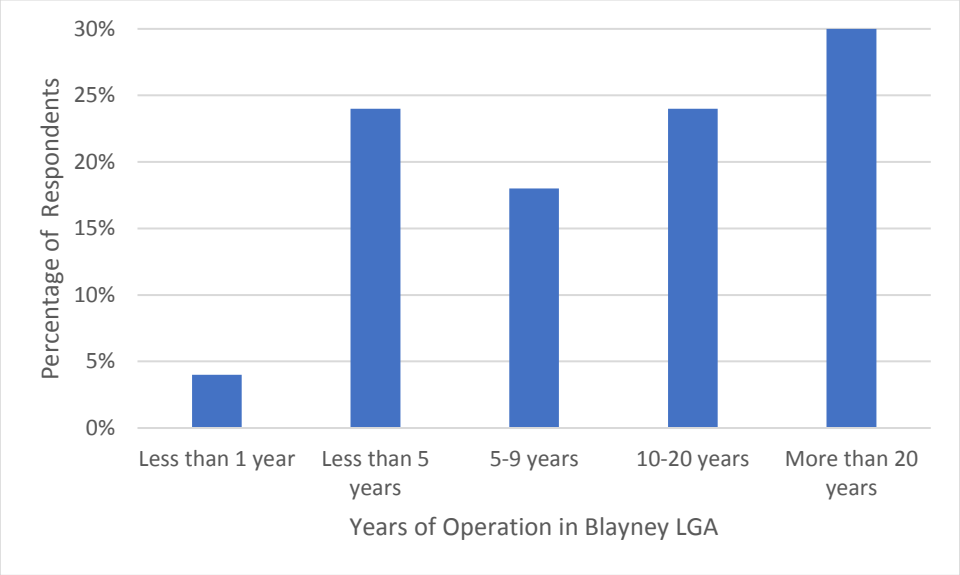
Ten businesses had business offices or outlets in other geographic locations. Of these businesses, four had offices in Bathurst. Other business locations included Orange and unspecified locations.

3.2.2 Business Operational Life

Survey respondents were asked to identify the number of years the business had been in operation in the Blayney LGA. The majority of businesses surveyed have been located in the Blayney LGA for more than 20 years (30%). Approximately 24% of businesses have operated

in the Blayney LGA for 10-20 years (24%). An equal proportion of new businesses have been in operation for less than 5 years (24%).

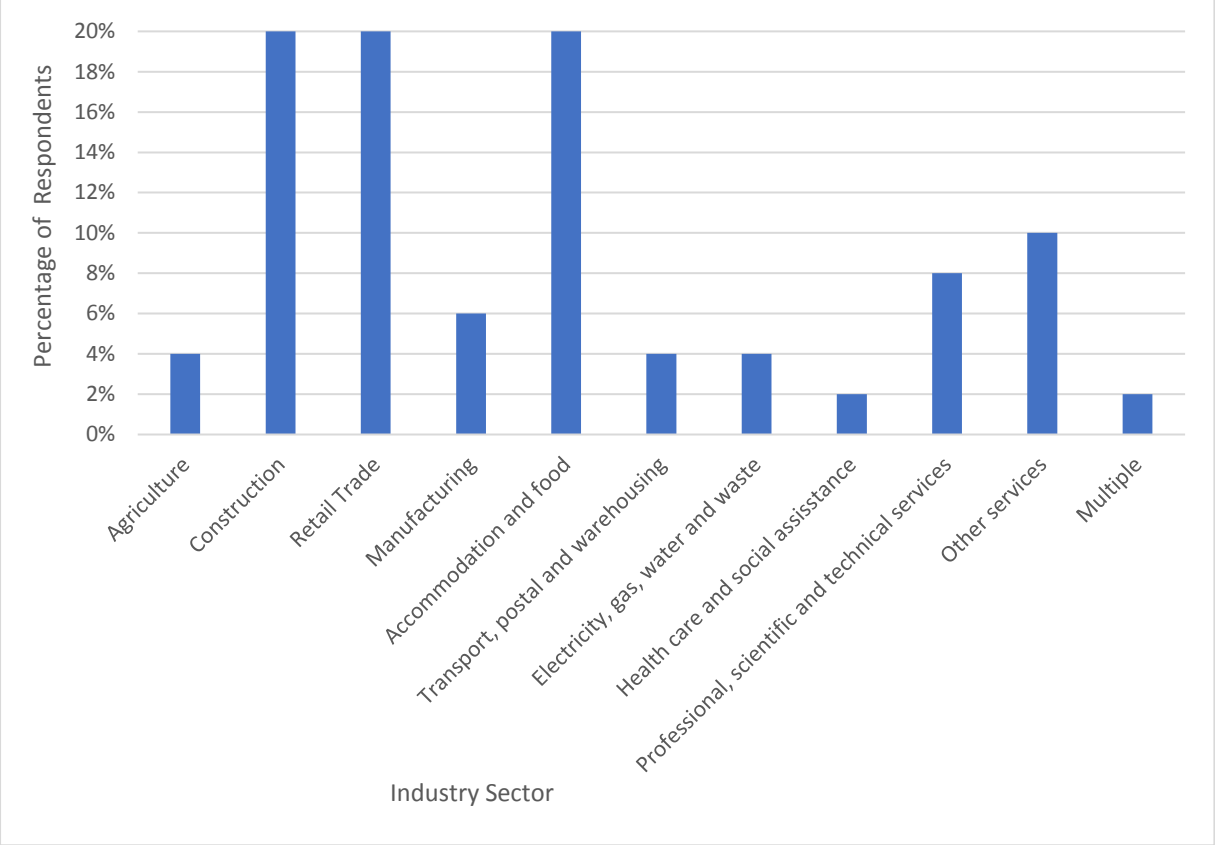
Graph 2
Business Operational Life



3.2.3 Industry

Of the 50 survey respondents, the majority of businesses were engaged within the construction, retail trade and accommodation and food industry sectors. The main areas of retail business were machinery and plant hire.

Graph 3
Industry of Businesses Surveyed

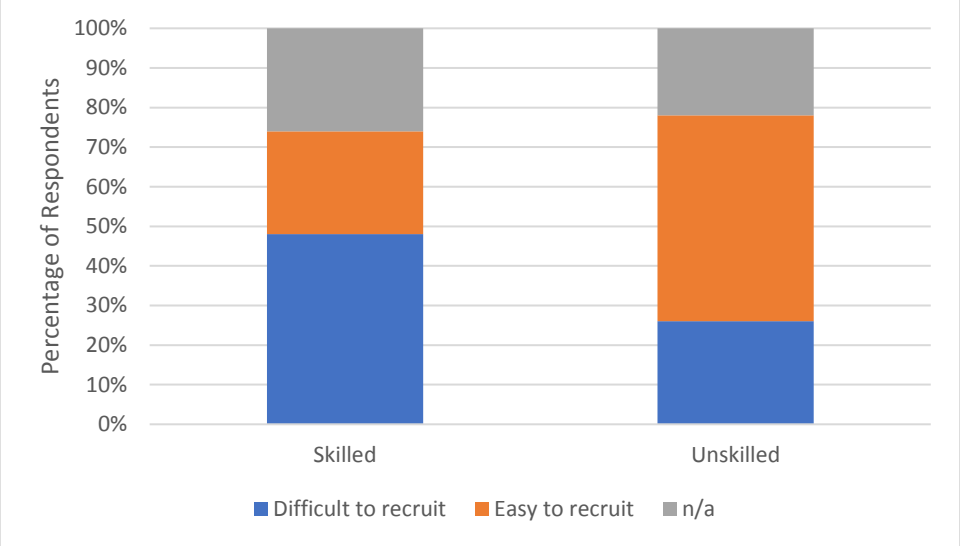


3.3 SURVEY FINDINGS

3.3.1 Recruitment of Labour

Survey respondents were asked how easy it was to recruit skilled and unskilled labour for their business. Graph 4 presents the survey results. In the Blayney LGA, 48% of survey respondents indicated that it was difficult to recruit skilled labour and 26% had difficulty recruiting unskilled labour. Respondents attributed difficulties recruiting both skilled and unskilled labour to the small unemployed population base and the aging demographic of Blayney LGA.

Graph 4
Recruitment of Skilled and Unskilled Labour



3.3.2 Business Conditions

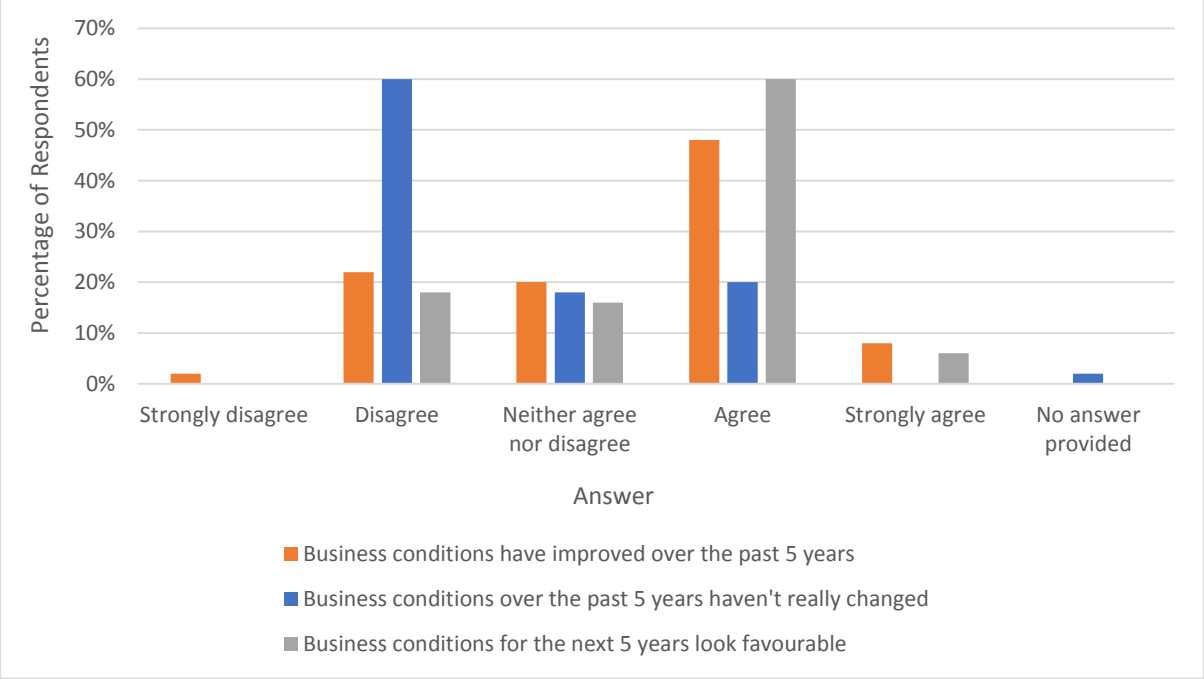
Survey respondents were asked the extent to which they agreed that:

- Business conditions have improved over the past 5 years;
- Business conditions over the past 5 years haven't really changed; and
- Business conditions for the next 5 years look favourable.

Graph 5 presents the survey results. More than half of the businesses surveyed (56%) agreed or strongly agreed that conditions in the LGA have improved over the past five years. However, several of these respondents considered that business conditions in Blayney LGA have only improved slightly. Around 24% of businesses surveyed disagreed and strongly disagreed that business conditions in Blayney LGA had improved over the last five years.

Only 20% of respondents agreed that business conditions over the past five years hadn't really changed. Business conditions look favourable for the next five years according to most surveyed business (60%), however numerous businesses noted that Blayney LGA business conditions looked favourable due to the potential occurrence of the project.

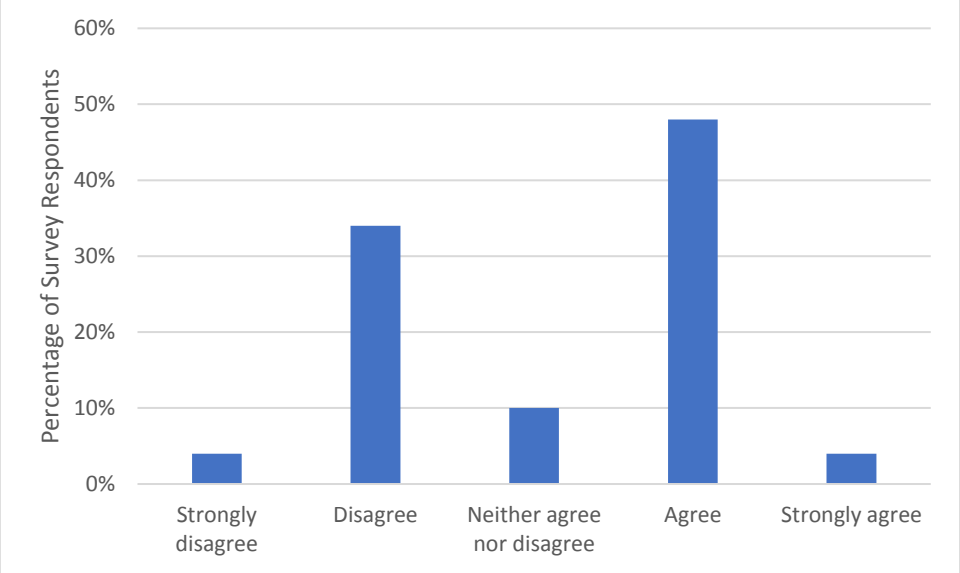
Graph 5
Business Conditions in Blayney LGA



3.3.3 Benefits from Mining Activity

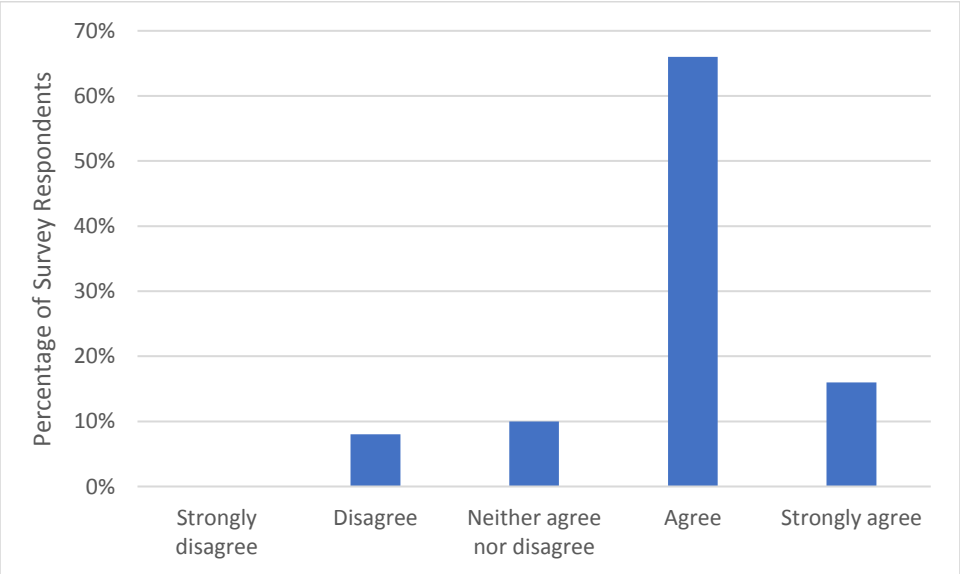
Respondents were asked the extent to which their business directly or indirectly benefits from the existing mining activity. In Blayney LGA, more than half (52%) of surveyed respondents identified that their business directly or indirectly benefits from existing mining activity (Graph 6). In general, these respondents noted that the benefits were associated with Newcrest's existing Cadia Valley Operations (CVO). Thirty-eight per cent of respondents disagreed that their business benefited from mining activity. The majority of businesses that disagreed were generally aligned with the following industry sectors: construction, accommodation and food, and professional, scientific and technical services industries.

Graph 6
Business Directly or Indirectly Benefits From Existing Mining Activity



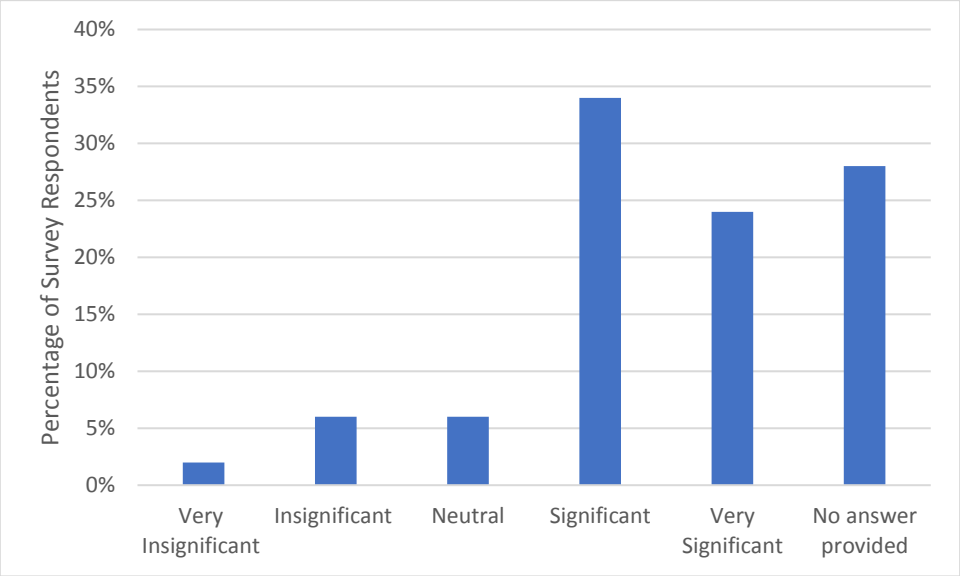
Survey respondents were asked if they thought the Blayney LGA economy benefits from surrounding mining activity. The majority of businesses agreed and strongly agreed (82%) that the Blayney LGA economy benefits from existing mining activity in the area (Graph 7).

Graph 7
Benefit to Blayney LGA Economy From Existing Mining Activity



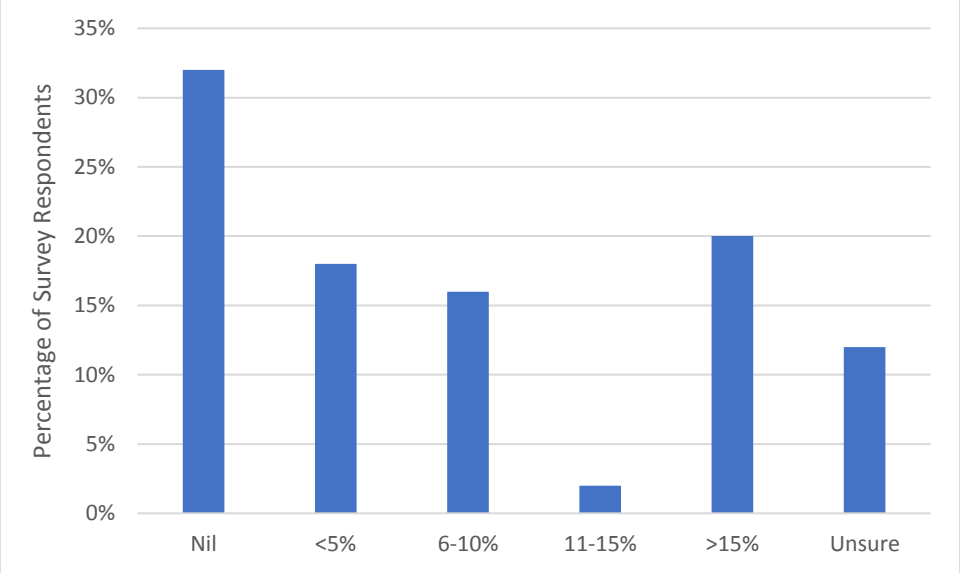
Of the respondents that agreed or strongly agreed that the Blayney LGA economy benefits from mining activity, 34% believe that the contribution to the economy is significant and 24% believe that the contribution is very significant (Graph 8). Only 6% of respondents answered that the contribution to the LGA's economy was insignificant. A number of respondents indicated that mining activity in the LGA did not contribute to the economy, and were unable to identify examples where existing operations had contributed. It is possible that some of the survey participants with recently established businesses were not operating in the LGA at the time of the Cadia East Project and were therefore unaware of the associated business opportunities. Twenty-eight per cent of respondents did not answer if they believed that the Blayney LGA economy benefits from mining activity as they were unsure of the answer and chose to not answer rather than identify as neutral.

Graph 8
Significance of the Contribution of Mining to the Economy



Survey respondents were asked whether a percentage of their annual turnover could be attributed to the surrounding mining industry (Graph 9). In Blayney LGA, 32% of businesses surveyed did not attribute any of their annual turnover to the mining industry, whilst 18% attributed less than 5% of their annual turnover to mining through indirect spend (i.e. mining workforce may shop locally etc). Twelve per cent of respondents were unsure. The majority of respondents who attributed greater than 11% of their annual turnover to mining are aligned with the construction industry (64%). These respondents typically noted that they have already had procurement opportunities with the project, whilst others noted experienced benefits from CVO.

Graph 9
Existing Annual Business Turnover Attributed to Mining

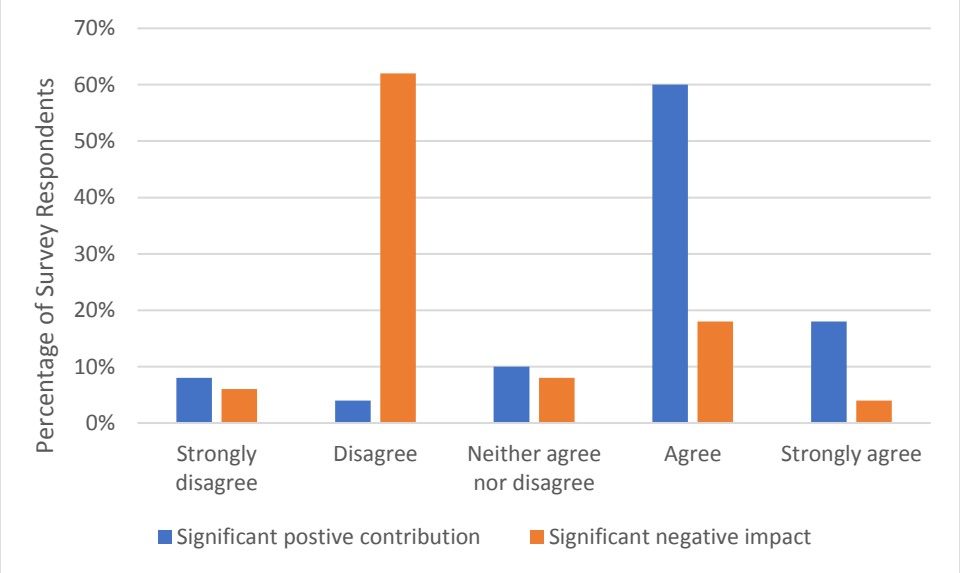


3.3.4 Project Impacts

Respondents were asked the extent to which they thought the project would make a significant positive contribution to the economy of the Blayney LGA (Graph 10). The majority of respondents agreed or strongly agreed (78% in total) that the project would make a significant positive contribution to the Blayney LGA economy. A number of survey respondents expressed significant expectations in relation to the potential magnitude of economic benefits associated with the project. Other respondents acknowledged the potential economic benefits, but cautioned Regis against raising business expectations in relation to benefits, in case these expectations cannot be met.

Respondents were then asked the extent to which they thought the project would have a significant negative impact on the economy of the Blayney LGA. Only 18% of respondents agreed or strongly agreed that the project would have a significant negative impact on the LGA's economy. The majority of these respondents perceived that the economic benefits of the project would be distributed outside of Blayney LGA, and business owners within the LGA would receive little economic benefit. Concern was raised by several respondents that the economic impacts of the project may give rise to a sharp increase in local housing prices, with the existing low house prices viewed as a positive for the Blayney LGA. One respondent also indicated that the project may have a negative impact on the agriculture sector of the Blayney LGA economy due to labour draw and loss of productive agricultural land.

Graph 10
Impacts and Benefits of the Project for the Blayney LGA Economy



Respondents were asked whether they thought the project would generate new business opportunities for their business:

- Approximately 68% of respondents expect that the project will generate new business opportunities for their business;
- Thirty per cent of respondents do not believe that the project will generate new business opportunities; and
- Around 2% of respondents were unsure.

Of the businesses that do expect the project to generate new business opportunities for their business, 29% are in the construction industry sector, 24% are in retail trade industry sector and 21% are in the accommodation and food industry sector.

Potential Positive Impacts

Survey respondents were asked to identify the impacts and opportunities of the project for the Blayney Shire business community. The main opportunities identified included:

- Local procurement opportunities;
- An increase in local spend from the project workforce;
- Population increase and an increase in demand for services and infrastructure;
- Potential for new faces and new ideas in town; and
- Employment opportunities and opportunities for work experience or trades through mining collaboration with the schools.

Whilst majority of respondents were confident that the project would make a significant positive contribution to the Blayney LGA business community, several respondents highlighted that the economic benefits experienced by the business community would only be short-term due to the project life (approximately 15 years).

Potential Negative Impacts

Respondents were asked to comment on the potential negative impacts of the project on the business community in the Blayney LGA. Many respondents considered that the project would only have benefits for the Blayney LGA business community, however several respondents noted that the project could adversely affect the environment and the lifestyle of near-neighbours to the mine project area.

Potential negative project impacts raised by respondents include:

- Mine closure impacts on the business community (i.e. the impact of the withdrawal of any economic benefits);
- An increase in the value of land and commercial floor space in Blayney. The project may drive up property values and commercial rents reducing access for new businesses and displacing existing business who may not be able to afford the rent increase;
- A reduction in tourism numbers with impacts to the local tourism industry. There is concern that the presence of the project may adversely impact visitor perceptions of the local area, resulting in reduced patronage. Further, the project may adversely change the character and amenity of Blayney township and the villages, as well as the community feel with resulting impacts on visitor experience; and
- Potential for Blayney LGA to miss out on any economic benefits from the project, particularly if the majority of the project workforce chooses not to reside in Blayney LGA.

Suggested Management and Enhancement Measures

When asked if Regis could take any actions to manage adverse impacts and ensure positive benefits to the Blayney LGA survey respondents suggested to keep everything local, as much as possible.

Respondents also suggested that Regis could:

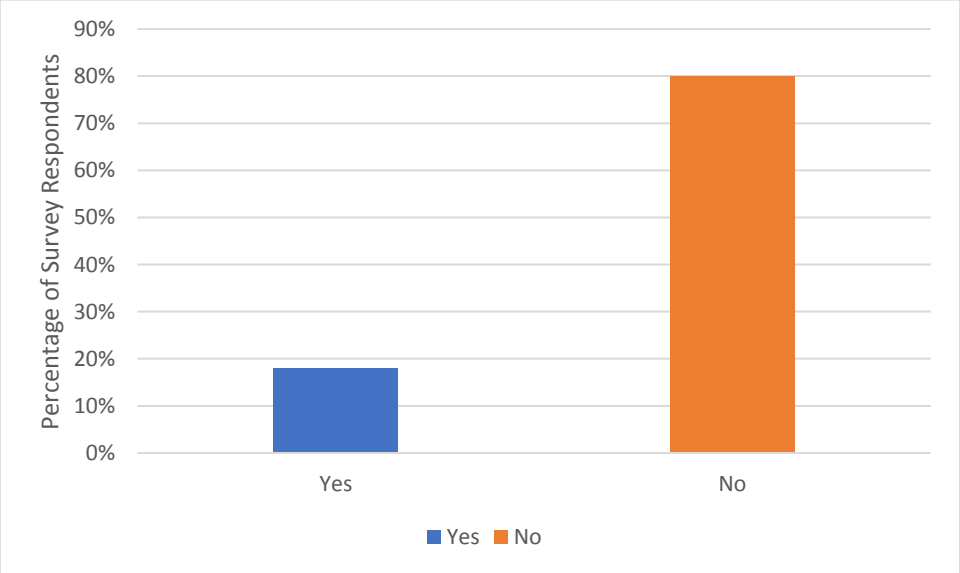
- Encourage the workforce to live locally;
- Support residential land and housing development in Blayney to ensure attractive housing is available to the incoming workforce;
- Implement a local content program for the procurement process of the construction and operations phases to ensure economic benefits accrue to Blayney LGA; and
- Ensure workforce demand for short-term accommodation does not reduce access to short-term accommodation for visitors to the region.

Direct Impacts to Local Businesses

Respondents were asked if they thought the project would have a negative impact on their business (Graph 11). The majority of respondents (80%) did not believe that the project would have a negative impact on their business. The 18% of respondents who anticipate that the project will negatively impact their business were concerned that the project would:

- Result in labour draw from local businesses, thus local businesses would need to spend money and time training new employees;
- Have a negative impact on agricultural productivity, resulting in impacts to agricultural businesses;
- Attract non-local tradespeople to the Blayney LGA who may then seek to provide services to local residents in between their construction phase shift roster, potentially taking business opportunities from existing local businesses; and
- Lead to a reduction in tourist visits in Blayney LGA.

Graph 11
The Project Will Have A Negative Impact On My Business



4 CONCLUSION

The Business Survey analysed a variety of statistical data and the responses of 50 businesses in the Blayney LGA. The findings of the Business Survey indicate that there are existing mining business opportunities in the LGA, however there are barriers to existing businesses participating in these opportunities, specifically managing local business expectations.

The business diversity and the number of established businesses in Blayney LGA indicates that the local economy has the potential to capitalise on the presence of the project and the associated injection of economic benefit. In Blayney most businesses have some familiarity with the potential economic benefits of mining activity, having experienced the benefits of the Cadia East Project construction phase several years ago.

Many surveyed businesses within the LGA have been operational in the LGA for more than 20 years; there are also numerous new businesses (i.e. operational in the LGA for less than 5 years).

Respondents indicated difficulty in recruiting skilled labour, and whilst it may be easier to recruit unskilled labour, local businesses didn't necessarily want or need to employ unskilled labour. Most businesses were open to training people if required, but the majority of businesses have not had to recently recruit.

The project has the potential to draw skilled and semi-skilled labour from small businesses in the Blayney LGA. A combination of the small local labour pool and the presence of a significant number of small business operations (i.e. businesses with fewer than five employees) suggests that any labour drawn could impact business viability and the capacity of some businesses to competitively participate in the project supply chain.

The principal mechanisms Regis could take to support the Blayney LGA business community to capitalise on the potential economic benefits of the project include:

- Preparation of a Local Content Plan and a commitment to buying local where possible across all phases of the project; and
- Managing future business expectations by keeping the local business community informed of project timing, the goods and services required for the project and the procurement process.

* * *

for
HANSEN BAILEY





Bronwyn Pressland
Principal Social Planner

Peter Hansen
Director

APPENDIX A

Business Survey

MCPHILLAMYS GOLD PROJECT – BUSINESS SURVEY PROFORMA

Part 1 - Interview Participant Details

Participant/s Names	
☐ Business Owner	☐ Business Manager
Business Name	
Business Address	

Suburb	**State**		**Postcode**
Business Phone Number		**Email:**	

Part 2 - Survey

1. In which town is your business located?

☐ Blayney	☐ Millthorpe	☐ Carcoar
☐ Kings Plains	☐ Mandurama	☐ Lyndhurst
☐ Neville	☐ Newbridge	☐ Other

2. Does your business have offices or outlets in other geographic locations? If Yes – where?

☐ Bathurst	☐ Cowra	☐ Molong
☐ Orange	☐ Lithgow	☐ Other?

3. How many years has your business operated in the Blayney LGA?

☐ Less than 1 year	☐ Less than 5 years	☐ 5-9 years
☐ 10-20 years	☐ More than 20 years	

4. Which of the industry sector is your business most closely aligned with?

☐ Agriculture	☐ Construction	☐ Professional, scientific and technical services
☐ Mining	☐ Retail Trade	☐ Administrative and support services
☐ Manufacturing	☐ Accommodation and food	☐ Public administration and safety
☐ Electricity, gas, water and waste	☐ Transport, postal and warehousing	☐ Education and training
☐ Health care and social assistance	☐ Arts and recreation services	☐ Other services

5. Is it currently easy to recruit skilled (experienced) labour for your business?

☐ Yes	☐ No –Why?

6. Is it currently easy to recruit unskilled (inexperienced) labour for your business?	
☐ Yes	☐ No –Why?

7. How strongly do you agree or disagree with each of the following statements about business conditions in the Blayney LGA:					
a) Business conditions have improved over the past 5 years	strongly disagree	disagree	neutral	agree	strongly agree
b) Business conditions over the past 5 years haven't really changed	strongly disagree	disagree	neutral	agree	strongly agree
c) Business conditions for the next 5 years look favourable	strongly disagree	disagree	neutral	agree	strongly agree

8. Thinking about existing mining activity in the Blayney Shire and neighbouring Shires please tell us the extent to which you agree or disagree with the following statements:					
a) My business directly or indirectly benefits from existing mining activity	strongly disagree	disagree	Neither agree or disagree	agree	strongly agree
b) The Blayney Shire economy benefits from surrounding mining activity	strongly disagree	disagree	Neither agree or disagree	agree	strongly agree
c) If you strongly agreed or agreed to the previous question: how significant do you think the contribution of mining is to the Blayney Shire economy?	Very insignificant	Insignificant	Neither significant or insignificant	Significant	Very significant
9. What, if any, percentage of your annual turnover can be attributed to the surrounding mining industry?	Nil	<5%	6-10%	11-15%	>15%

10. Thinking about McPhillamys Gold Project to what extent do you agree or disagree with the following statements:					
a) The project will make a significant positive contribution to the Blayney Shire economy	strongly disagree	disagree	Neither agree or disagree	agree	strongly agree
b) The project will have a negative impact on the Blayney Shire economy?	strongly disagree	disagree	Neither agree or disagree	agree	strongly agree

11. Thinking about the impacts and opportunities of the McPhillamys Gold Project:	
a) What do you think the potential <u>positive impacts</u> of the project could be for the Blayney Shire business community? Are there any actions Regis could take to ensure these positive impacts occur?	
b) What do you think the potential <u>negative</u> impacts of the project could be for the Blayney Shire business community? Are there any actions Regis could take to manage these potential negative impacts?	

12. Do you expect the McPhillamys Gold Project to generate new business opportunities for <u>your</u> business?	
☐ Yes	☐ No

13. Do you expect the McPhillamys Gold Project to have any negative impact on your business? If Yes please briefly describe the impacts and tell us why?	
☐ Yes	☐ No

End of survey

APPENDIX F

Social Baseline Study

APPENDIX F

1 SOCIAL BASELINE STUDY

1.1 INTRODUCTION

Appendix F provides a detailed analysis of the socio-economic characteristics of the social area of influence of the McPhillamys Gold Project (the project). Appendix F focusses principally on the social area of influence of the mine development component of the project.

Appendix F presents a detailed social baseline analysis of the Secondary Assessment Area (SAA) (Blayney Local Government Area [LGA]) with comparison to the relevant components of the (LGAs) of the Regional Assessment Area (RAA) and the Statistical Area (SA) of the Central West Region (Central West SA4). The RAA includes Bathurst Regional LGA (Bathurst LGA), Orange City LGA (Orange LGA), Cabonne LGA, Cowra LGA. Housing information is also provided for the Lithgow LGA as this LGA, in addition to the Bathurst LGA, is likely to provide short-term accommodation for the workforce associated with the pipeline development

Appendix F provides supporting information to the social baseline discussion presented in Section 5 and Section 9 of the SIA. The indicators presented have been selected based on the findings of the SIA Scoping Phase.

1.1.1 Statistical Geography

Table 1 summarises the Australian Bureau of Statistics (ABS) statistical geography which corresponds to the local and regional communities in the project's social area of influence. Data are provided for Urban Centres/Localities (UCL) (according to availability), LGAs and the Statistical Area 4 (SA4) Region.

Table 1
Study Area Statistical Geographies, 2011 and 2016

Local Communities		LGAs and Regions	
2011	**2016**	**2011**	**2016**
Blayney (UCL115020)	Blayney (UCL115018)	Blayney (LGA10850)	Blayney (LGA10850)
Millthorpe (UCL121074)	Millthorpe (UCL121075)	Bathurst Regional (LGA10470)	Bathurst Regional (LGA10470)
Wallerawang (UCL115149)	Wallerawang (UCL115146)	Orange City (LGA16150)	Orange City (LGA16150)
Portland (UCL115116)	Portland (UCL115114)	Cabonne (LGA11400)	Cabonne (LGA11400)
		Cowra (LGA12350)	Cowra (LGA12350)

Local Communities		LGAs and Regions	
2011	**2016**	**2011**	**2016**
		Lithgow LGA (LGA 14870)	Lithgow LGA (LGA 14870)
		Central West (SA4 103) (The Region)	Central West (SA4 103) (The Region)

Source: ABS 2012 and 2017.

The UCL boundaries described in Table 1 align with the urban footprint of each of the listed settlements i.e. Blayney township and Millthorpe Village.

ABS statistical geography data is also supplemented with available postcode data. Postcode data is provided for the postcode areas of Blayney (2799), Millthorpe (2798), Cowra (2794), Orange (2800), Bathurst (2795) Lithgow (2790), Portland (2847) and Wallerawang (2845) (RESIDEX 2019 and 2019a).

1.2 POPULATION CHARACTERISTICS

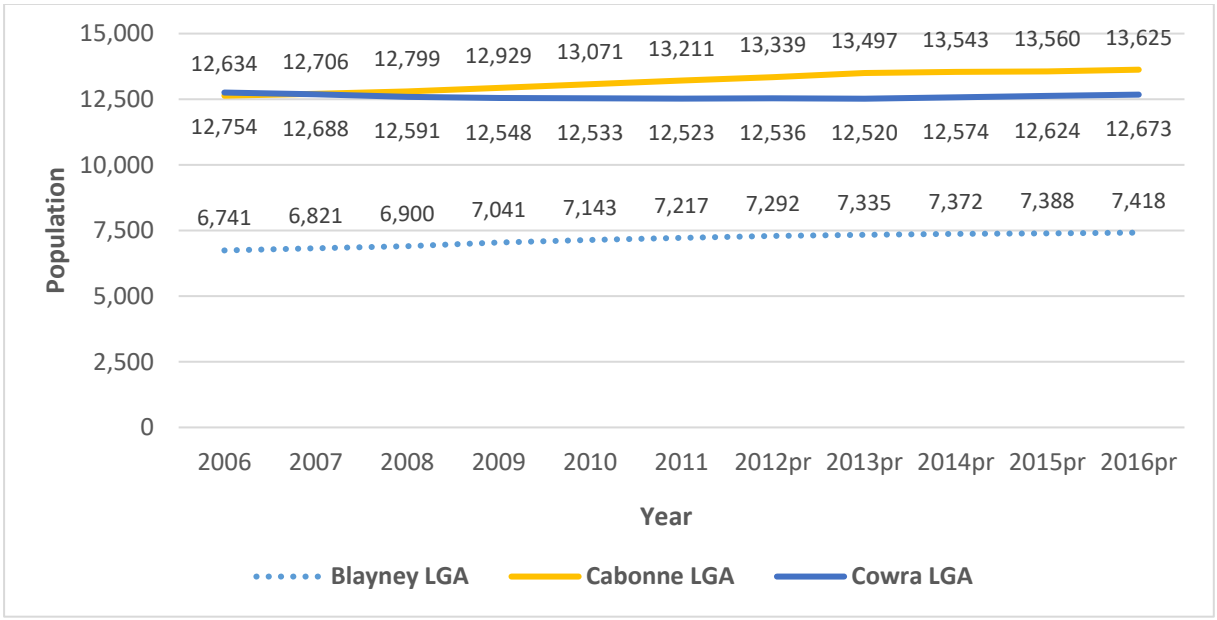
1.1.1 Population

The estimated resident population (ERP) of Blayney LGA in 2018 was 7,342. The recorded 2016 ABS Census ERP for Blayney LGA was 7,257 people (ABS 2017), representing 6.8% of the total population of the RAA at that time. Within the Blayney LGA, the town of Blayney (UCL) had a population of 2,963 people in 2016, representing approximately 40.8% of the Blayney LGAs population. Millthorpe, the second largest settlement in the Blayney LGA had a population of 735, equivalent to 10.1% of the Blayney LGAs population (ABS 2017).

Graph 1 presents annual population growth from 2006 to 2016 for the LGAs of Blayney, Cabonne and Cowra. Graph 2 presents similar statistics for the LGAs of Orange and Bathurst Region. Table 2 presents population change between 2006 and 2016 for the Blayney LGA and the LGAs of the RAA.

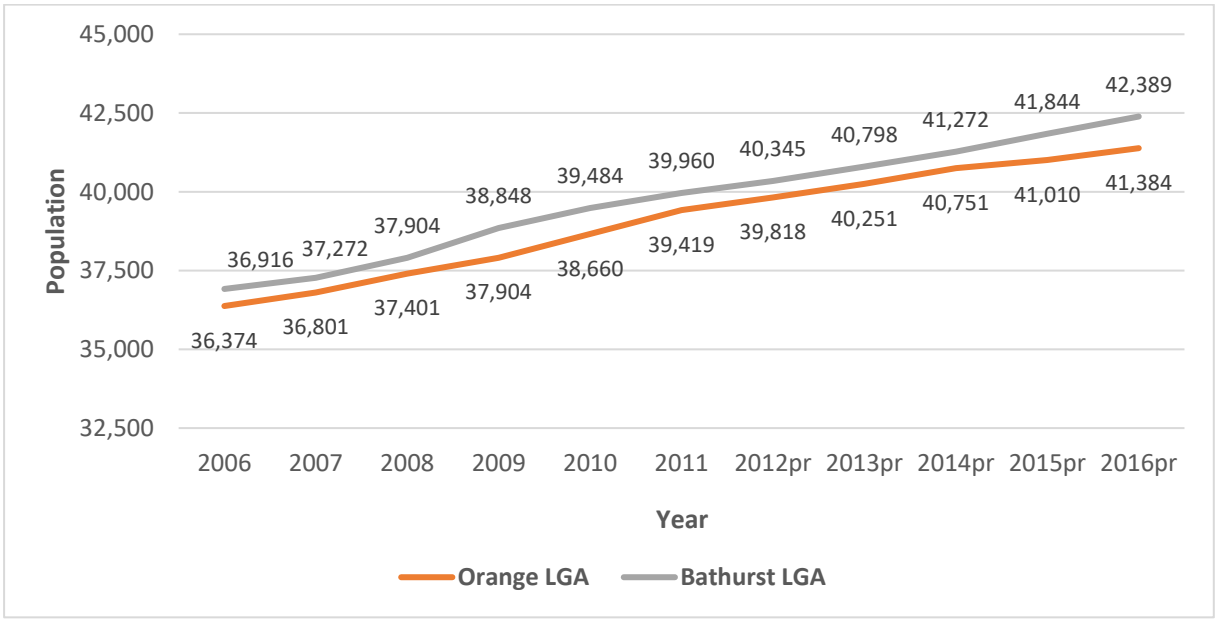
Analysis of population data shows a steady but small population increase (10%) in the Blayney LGA between 2006 and 2016. The Blayney LGA experienced a smaller population increase than the neighbouring LGAs of Orange and Bathurst (13.8% and 14.8%, respectively) but a similar increase to that experienced in the Cabonne LGA (ABS 2017a). The population of Cowra LGA declined by 0.6% between 2006 and 2016. The population growth experienced in the regional centres of Bathurst and Orange together with the relatively flat growth in the surrounding rural areas, reflects the growing trend of people moving out of rural areas to regional centres and people undertaking a “tree-change” (i.e. moving from the cities to rural regions).

Graph 1
Population Growth – Blayney, Cabonne and Cowra LGAs



Source: ABS 2017a.

Graph 2
Population Growth – Orange and Bathurst LGAs



Source: ABS 2017a.

Table 2
LGA Population Change 2006 – 2016

Geographic Area	Change 2006-2016	
	%	Number
Blayney LGA	10.0	677
Orange LGA	13.8	5,010
Bathurst LGA	14.8	5,473
Cabonne LGA	7.8	991
Cowra LGA	-0.6	-81

Source: ABS 2017a.

Future Population Trends

Table 3 presents the New South Wales (NSW) Department of Planning and Environment (DPE) (now known as the Department of Planning, Industry and Environment (DPIE)) population projections to 2036 for the SAA and the RAA. Table 3 shows that all LGAs of interest (Blayney, Orange, Bathurst, Cabonne and Cowra LGAs) are expected to grow at a slower rate than NSW between 2016 and 2036. However, Bathurst, Cabonne and Orange LGAs are expected to grow at a significantly faster rate than Blayney LGA. The anticipated population growth in Cabonne LGA is likely attributable to the proximity of the LGA boundary to the regional centre of Orange and the opportunity it presents for rural lifestyle with urban connectivity.

Table 3 shows that the major centres of Bathurst and Orange are likely to continue to attract people, potentially at the expense of the surrounding rural localities. In the absence of external promotional factors, the Blayney LGA is expected to experience a significantly slower growth rate than both NSW and the Regional NSW rates[1], while Cowra LGA is predicted to experience a significant population decline.

The findings of SIA consultation indicate that several of the Blayney villages, in particular Millthorpe and Carcoar, have experienced recent population growth, primarily due to the growing attractiveness of the village locations and their proximity to regional centres. This population growth is anticipated to continue as demand for the rural village lifestyle increases and connectivity with neighbouring regional centres and Sydney continues to improve e.g. reinstatement of rail passenger service at Millthorpe.

[1] Regional NSW includes the planning regions of Central Coast, Central West and Orana, Far West, Hunter, Illawarra-Shoalhaven, New England-North West, North Coast, Riverina-Murray, South East and Tablelands (DPE 2019).

Table 3
Population Projections for the Secondary and Regional Assessment Areas

Geographic Area	2016	2026	2036	Change 2016-2036 (%)
Blayney LGA	7,450	7,750	8,000	7.4
Orange LGA	41,600	45,450	48,750	17.2
Bathurst LGA	43,300	49,550	55,250	27.6
Cabonne LGA	13,850	15,600	17,200	24.2
Cowra LGA	12,350	11,750	10,900	-11.7
Regional NSW	3,066,050	3,306,850	3,503,700	14.3
NSW	7,748,000	8,844,700	9,925,550	28.1

Source: DPE 2019.

Age and Gender

The median age of residents within the SAA and RAA was 42 years of age and 41 years of age respectively. Both the SAA and the RAA had higher median ages than NSW median age of 38. Table 4 shows key age and gender indicators for the areas of interest.

Table 4
Age and Gender Indicators, 2016

Location	% Males	Median Age (persons)	<15 years (persons)	>65 years (persons)
Blayney UCL	49.3	39	20.3	18.6
Blayney LGA	49.8	42	20.6	18.5
Orange LGA	48.6	37	21.1	16.7
Bathurst LGA	50.1	37	19.6	16.4
Cabonne LGA	50.1	43	21.5	19.8
Cowra LGA	49.4	47	17.3	24.8
Central West SA4	49.8	41	19.8	19.4
NSW	49.3	38	18.5	16.3

Source: ABS 2017.

All areas of interest have slightly higher proportions of persons under 15 years of age and over 65 years of age, compared to NSW. The more rural LGAs of Blayney, Cabonne and Cowra have an older population than the LGAs of Bathurst and Orange with significant regional centres. The age distribution of persons in the Blayney UCL is similar to that of the Region.

The proportion of older residents within the Central West is likely to increase by approximately 10% over the next 20 years, which is consistent with the national trend of an ageing population (BSC 2014). The ageing population will likely increase demand for aged care, residential

facilities, nursing homes and extensive health and community services as well as have implications for local labour supply. At present, almost 20% of the Blayney LGA population is 65 years and older.

Comparatively, the Blayney LGA also has a large proportion of young persons. Approximately 20.6% of the population is aged 14 or younger. This suggests that there is likely to be sustained demand for child care and for education services in the LGA.

1.2.1 Family and Household Characteristics

Key characteristics of family and household composition in the SAA relative to the RAA and NSW are discussed in the following sections.

Household Composition

Table 5 shows the 2016 structure of households and families in the SAA relative to the RAA and NSW. Relevant trends in the data include:

- All areas of interest have a high proportion of family households and similar proportions to the Region;
- Blayney UCL has a high a higher proportion of lone person households and a lower proportion of group households than the Region and NSW, reflecting an aging population; and
- Bathurst LGA had a significantly higher proportion of group households, reflective of the young adult population (20-29 years) (i.e. influx from tertiary education from Charles Sturt University, NSW).

Table 5
Household Structure, 2016

Geographic Area	Households (%)			Total Households
	Family	Lone Person	Group	
Blayney UCL	67.0	31.7	1.4	1,111
Blayney LGA	71.6	26.7	1.7	2,660
Orange LGA	68.2	28.6	3.2	14,737
Bathurst LGA	68.9	27.0	4.1	14,410
Cabonne LGA	74.0	24.4	1.6	4,690
Cowra LGA	67.1	30.8	2.1	4,823
Central West SA4	68.5	28.8	2.7	74,743
NSW	72.0	23.8	4.2	2,604,306

Source: ABS 2018 and ABS 2019a.

Family Structure

Table 6 presents the percentage of families by family type for the SAA relative to the RAA and NSW. Table 6 shows that Blayney LGA and Cabonne LGA had significantly lower proportions of one parent families than other areas of interest, and correspondingly higher proportions of couple families with children. This is more reflective of the family structure noted more broadly for NSW.

Table 6
Families by Type, 2016

Geographic Area	Couple Family (%)		One Parent Family (%)	Other Family (%)	Total Families (No.)
	With Children	Without Children			
Blayney UCL	39.7	35.8	22.5	1.3	755
Blayney LGA	41.8	41.5	15.4	1.1	1,926
Orange LGA	41.9	38.2	18.8	1.2	10,227
Bathurst LGA	42.5	38.3	17.9	1.3	10,136
Cabonne LGA	45.1	41.8	11.9	1.0	3,531
Cowra LGA	35.3	46.1	16.4	2.0	3,291
Central West SA4	40.3	41.3	17.1	1.3	52,041
NSW	45.7	36.6	16.0	1.7	1,940,226

Source: ABS 2018.

During consultation with service providers and religious affiliations, single parent families were identified as one of the vulnerable groups of the community. One parent families constitute 15.4% of all families within Blayney LGA which is relative to NSW (16%) and Central West (17.1%) (ABS 2018). Blayney UCL, in comparison to all other areas of interest and NSW, has a significantly higher proportion of one parent families (22.5%).

1.1.2 Indigenous Community Profile

Population

In 2016, the SAA had an Indigenous population of 266 people, equivalent to 3.7% of the total population (Table 7). The proportion of the population identifying as Indigenous in the SAA is similar to the neighbouring Cabonne LGA, but smaller than the other LGAs of interest and the Central West Region.

Table 7
Indigenous Persons, 2016

Geographic Area	Persons	%
Blayney UCL	144	4.9
Blayney LGA	266	3.7
Orange LGA	2,556	6.3
Bathurst LGA	2,244	5.4
Cabonne LGA	496	3.7
Cowra LGA	984	7.9
Central West SA4	13,292	6.4
NSW	216,176	2.9

Source: ABS 2017 and 2019.

Table 8 presents some indicators of community structure and well-being for Indigenous people in the SAA. Table 8 shows improvement for almost all key indicators over the past 10 years.

Analysis of key indicators relevant to the Indigenous population of the Blayney LGA and compared with the non-Indigenous population, at the time of the 2016 ABS Census show (ABS 2017) include:

- A significantly younger population than the non-Indigenous community with a median age of 19 years compared to 43 years respectively;
- A smaller proportion of Indigenous population aged 65 years or more (5%) compared with the non-Indigenous population (19%);
- A greater proportion of population aged under 10 years (20%) compared with the non-Indigenous population (13%);
- A smaller proportion of working age population in the labour force (53%) compared with the non-Indigenous population (64%);
- A dependency ratio of 0.79 compared with 0.65 for the non-Indigenous community of Blayney LGA indicating each Indigenous person of working age has more dependents to support, on average than the non-Indigenous community;
- Larger household occupancy rates compared to the non-Indigenous community of the Blayney LGA: 3.1 residents compared with 2.4 residents.
- A larger proportion of family households than the non-Indigenous community of Blayney LGA. Of Indigenous households in Blayney LGA, 39% were couples with children and 29% were one-parent families, 10% and 19% higher respectively than the non-Indigenous community of Blayney LGA; and
- No Indigenous residents resided in improvised housing or were in institutional housing in the Blayney LGA.

Table 8
Characteristics of Indigenous Persons – Trend Data

Indicator	2016		
	Indigenous	Non Indigenous	Gap
% of households owning/buying their home	53%	73%	-21%
Median weekly income of adults (15+)	$504	$625	-19%
Median weekly income of households	$1,269	$1,226	4%
% of adults 15+ in labour force	53%	64%	-11%
% of unemployed in workforce	9%	6%	4%
Employed adults as % of population	28%	48%	-20%
% of infants under 5 in education	46%	28%	18%
% of adults (15+) who have left school	24%	40%	-16%
Average school Year completed	10.4 yrs	10.6 yrs	-0.3 yrs
% of adults 15+ with a post-school qualification	44%	56%	-12%
% of people with a severe, long-term disability	6%	5.1%	0.9%

Source: NSW Department of Education 2017.

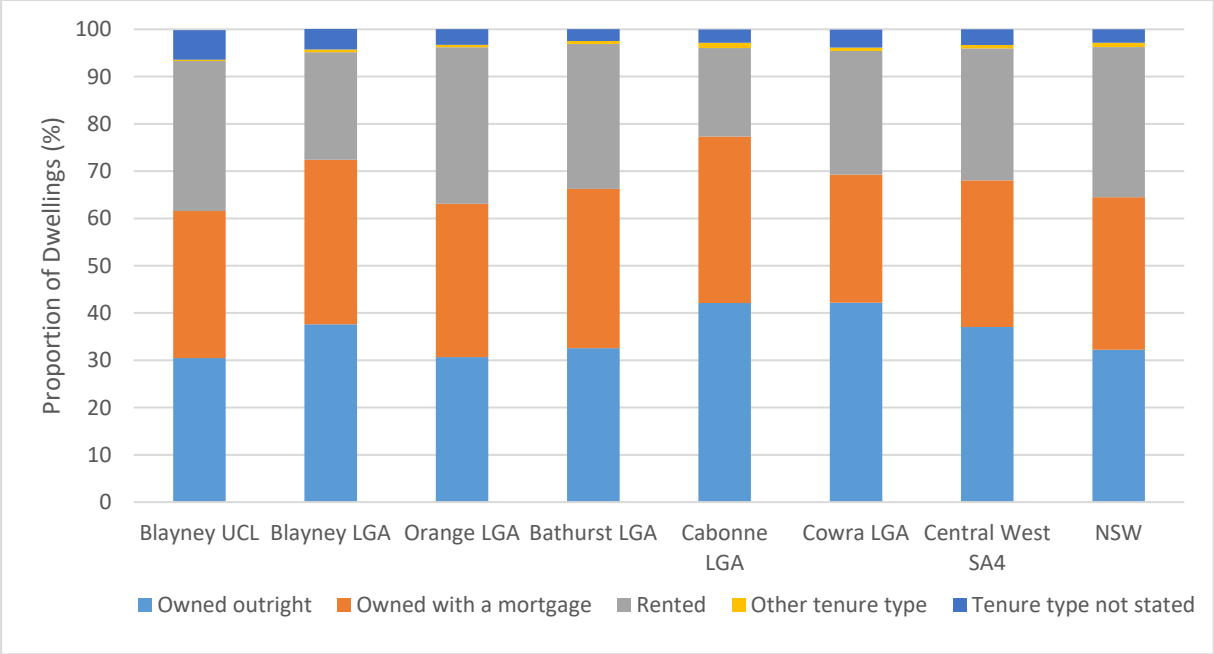
1.3 HOUSING

1.3.1 Housing Tenure

Graph 3 shows housing tenure types in the SAA relative to the RAA and NSW. The Cabonne and Blayney LGAs share a common housing tenure profile with the majority of housing either owned outright or owned with a mortgage. The Blayney UCL has a higher proportion of rental tenure than Blayney LGA, indicating that home ownership across the LGA is focused principally in the surrounding villages and rural areas of the LGA. The proportion of rental tenure in Blayney UCL suggests increased vulnerability to changing housing market conditions such as that potentially induced by the project.

The proportion of rental tenure in the Blayney UCL is similar to the Bathurst and Orange LGAs but the Blayney UCL is different as it has a significantly larger proportion of rental tenure than all other areas of interest except NSW, which has a similar proportion.

Graph 3
Housing Tenure, 2016



Source: ABS 2017.

1.3.2 Housing Stock Diversity

There is a lack of diversity in the structure and size of housing stock in the SAA, and in particular in the Blayney UCL. Blayney township has experienced little growth in housing stock for many years, a challenge acknowledged by BSC, and noted by Elton Consulting (2019) in the preliminary assessment of conditions to inform a review of the Blayney Settlement Strategy.

The lack of housing diversity is evidenced in housing stock data for Blayney UCL and Blayney LGA. The majority of housing stock in the Blayney UCL and the Blayney LGA are separate dwellings.

In 2016 in the Blayney UCL, of occupied private dwellings:

- 89.9% were separate houses, 2.2% semi-detached dwellings; and 4.7% were flat or apartments; and
- 2.2% had 1 bedroom, 11.9% had 2 bedrooms and 47.3% had 3 bedrooms.

In comparison, of occupied private dwellings in:

- Blayney LGA:
  - 94.8% were separate houses, 1.3% were semi-detached, row or terrace houses, townhouses etc, 2.0% were flat or apartments; and
  - 2.8% had 1 bedroom, 12.4% had 2 bedrooms and 43.2% had 3 bedrooms.
- In NSW:
  - 66.4% were separate houses, 12.2% semi-detached dwellings; and 19.9% were flat or apartments; and
  - 6.0% had 1 bedroom, 22.2% had 2 bedrooms and 37.2% had 3 bedrooms.

The housing in Blayney UCL is typical of two styles. One style of housing is from the Blayney Abattoir era and is typically a single storey brick house with two or three bedrooms. The second style is a timber cottage.

1.3.3 Housing Costs

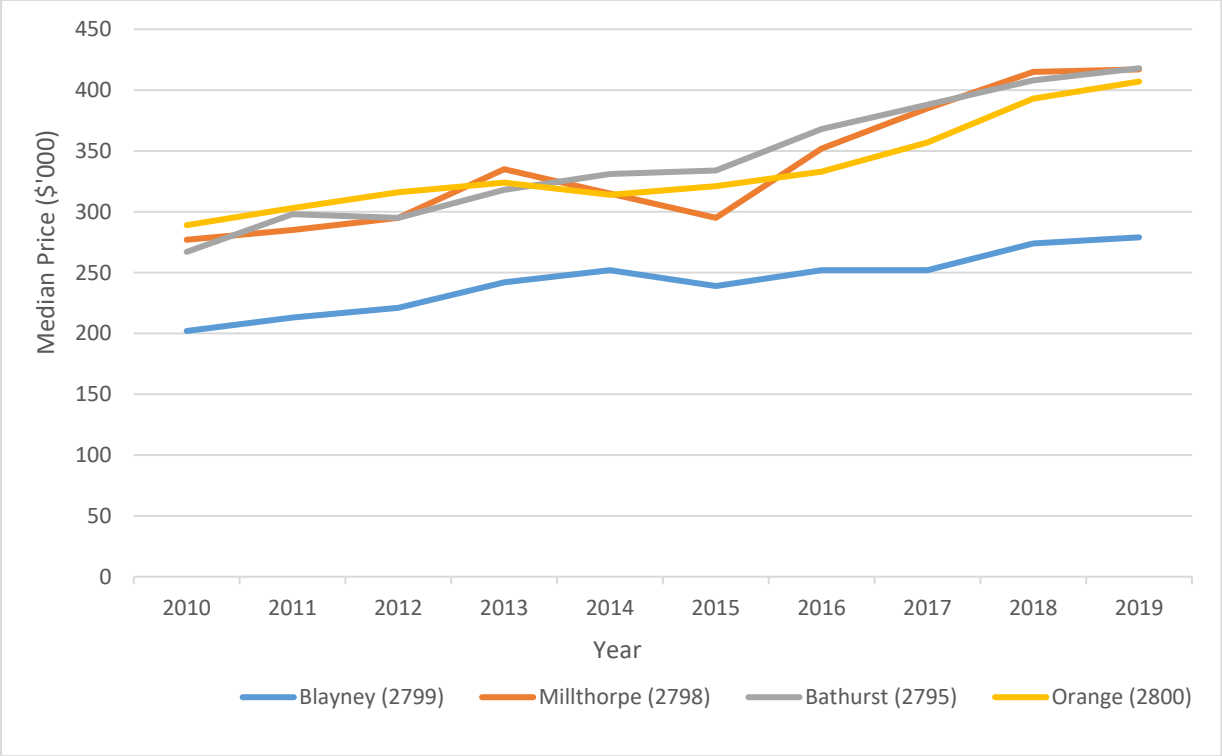
This section focuses on housing costs and affordability in the SAA (postcode and LGA areas), as this is the preferred residential location for the workforce during the project operations phase. Some information is also provided for Bathurst, Orange, Lithgow and Portland (postcode and LGA areas) as these locations also have the potential to provide accommodation for the project workforce.

Despite being the closest locality to the project, Kings Plains and the land to the west and north of the mine project area are not considered in detail in the following analysis of housing and accommodation due to its restricted growth potential, a consequence of the current land zoning.

Housing Market Prices

Graph 4 shows median dwelling prices for the Blayney, Millthorpe, Bathurst and Orange townships (based on non-ABS suburb areas). The information is drawn from RESIDEX (2019 and 2019a) for the suburbs of Blayney, Millthorpe, Bathurst and Orange. Housing prices are noted to be significantly higher in Millthorpe, Bathurst and Orange compared to Blayney.

Graph 4
Median House Prices, 2010-2019



Source: RESIDEX 2019 and 2019a.

Between 2010 and 2019, Blayney's median house price increased from $202,000 to $279,000, an increase of around 38%. Orange experienced a similar increase of 41% in median house prices between 2010 and 2019 ($289,000 to $407,000). In the same period, Millthorpe's median house price increased from $277,000 to $417,000, a substantial increase of around 51% comparable to Bathurst's median house price increase of around 57% ($267,000 to $418,000). Whilst, the increase in median house prices in Millthorpe and Bathurst are similar in proportion, Millthorpe, Bathurst and Orange all have relative median prices in 2019. A drop in house prices occurred in 2014-2015, particularly evident in Millthorpe, likely attributable to market stabilisation following a sustained period of growth associated with the Cadia East Extension Project.

Current Rental Prices

Median rent in the communities of interest for the 2011 and 2016 Census years is shown in Table 9. Between 2011 and 2016 all communities of interest, except Millthorpe UCL, in the area of influence experienced a significant increase in median weekly rent. Millthorpe UCL has experienced an increase of 11.2% in median weekly rent. This may be due to Millthorpe having a high rent in 2011. Similarly, Orange LGA experienced a smaller change in median rent (17.4%) between 2011 and 2016 compared to the Blayney and Bathurst LGAs (33.3% and 27.3% respectively).

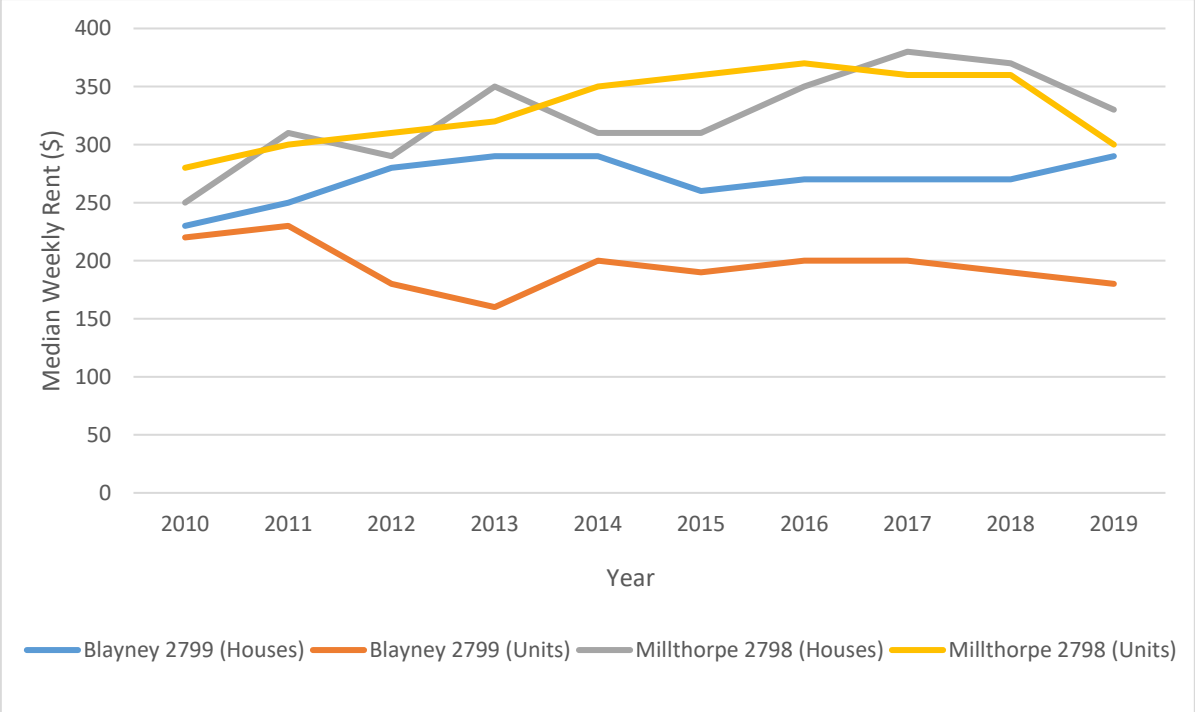
Table 9
Median Rent, 2011 and 2016 Census

Location	Median Weekly Rent		
	2011	2016	% Change 2011-2016
Blayney UCL	$175	$230	31.4
Millthorpe UCL	$250	$278	11.2
Blayney LGA	$165	$220	33.3
Bathurst LGA	$220	$280	27.3
Orange LGA	$230	$270	17.4
Central West SA4	$180	$235	30.6
NSW	$300	$380	26.7

Source: ABS 2018.

Graph 5 shows median weekly rent for houses and units in Blayney and Millthorpe for the period 2010-2019 (based on non-ABS suburb areas). Rental prices in Blayney and Millthorpe have fluctuated in parallel with population growth and corresponding activity in the resource sector. Rental prices in Millthorpe experienced a steady increase up until 2018 where a dramatic decrease has occurred corresponding to the sale and devaluation of several large unit blocks in the area. Rental prices for units in Blayney have steadily decreased, whilst rental prices for houses have increased slightly over the past year. During 2010-2019 demand for rental and sale properties has increased with the number of available properties lessening over that time.

Graph 5
Median Weekly Rent ($) - Blayney and Millthorpe 2019



Source: RESIDEX 2019 and 2019a.

Table 10 shows the highest and lowest priced rental properties and the number of properties available for rent in the Blayney, Millthorpe and the nearby centres of Cowra, Bathurst and Orange in May 2019. The supply of available rental accommodation in Blayney and Millthorpe was very small.

Table 10
Rental Price – High and Low, May 2019

Property Type and Location	Lowest Rent ($p/w)	Highest Rent ($/pw)	Number of Properties
	Blayney (Postcode 2799)		
All Properties	$260	$360	3
3-bedroom + houses	$340	$360	2
2 bedroom houses	$260	$260	1
	Millthorpe (Postcode 2798)		
All Properties	$350	$350	1
3-bedroom + houses	0	0	0
2 bedroom houses	$350	$350	1
	Cowra (Postcode 2794)		

Property Type and Location	Lowest Rent ($p/w)	Highest Rent ($/pw)	Number of Properties
All Properties	$145	$395	26
3-bedroom + houses	$230	$395	14
2-bedroom houses	$175	$240	4
2-bedroom + units/ townhouses	$145	$215	6
	Orange (Postcode 2800)		
All Properties	$170	$1,100	144
3-bedroom + houses	$210	$1,100	84
2-bedroom houses	$240	$360	4
2-bedroom + units/ townhouses	$200	$550	18
	Bathurst (Postcode 2795)		
All Properties	$135	$350	93
3-bedroom + houses	$250	$500	46
2-bedroom houses	$210	$420	14
2-bedroom + units/ townhouses	$215	$350	13
	Lithgow (Postcode 2790)		
All Properties	$200	$370	27
3-bedroom + houses	$250	$370	14
2-bedroom houses	$220	$320	12
2-bedroom + units/ townhouses	$200	$200	1
	Portland (Postcode 2847)		
All Properties	$130	$325	4
3-bedroom + houses	$250	$250	1
2-bedroom houses	$240	$325	2
2-bedroom + units/ townhouses	0	0	0

Source: Realestate.com.au 2019.

A review of property sale data available on Realestate.com.au (accessed 29 May 2019) showed:

- 14 residential properties for sale in Blayney (Postcode 2799) which were all two or three bedroom homes. Properties ranged in price from $220,000 to $1,350,000. An additional 14 blocks of land were for sale in the Blayney LGA including the Blayney Villages ranging from $43,990 to $335,000;
- Five residential properties for sale in Millthorpe (Postcode 2798) of which were all three or four bedroom homes. Properties ranged in price from $439,000 to $579,000;
- 283 residential properties for sale in Orange (Postcode 2800) the majority of which were houses with three or more bedrooms. Properties ranged in price from $105,000 to $2,500,000; and
- 56 residential properties for sale in Bathurst (Postcode 2795) the majority of which were houses with three or more bedrooms. Properties ranged in price from $239,000 to $1,200,000.

Rental Vacancy Rates

Data from SQM Research (2019) shows the following rental vacancy rates for selected postcode areas for the period May 2019:

- 1.9% (10 properties) in Blayney (Postcode 2799);
- 1.4% (2 properties) in Millthorpe (Postcode 2798);
- 1.7% (114 properties) in Orange (Postcode 2800);
- 2.1% (127 properties) in Bathurst (Postcode 2795);
- 1.5% (32 properties) in Lithgow (Postcode 2790); and
- 2.3% (3 properties) in Portland (Postcode 2847).

SQM Research residential vacancy rate trend data to May 2019 shows:

- Fluctuating vacancy rates in Blayney between March 2012 and April 2015 with a significant peak of approximately 7% (~30 properties) between March and August 2014. Vacancy rates in Blayney remain instable. Trend data for Blayney shows vacancy rates of less than 1% during 2010-2011 when significant construction work was being undertaken at the Cadia Valley Operation (CVO).;
- A steady increase in vacancy rates in Orange from a low of less than 2% in 2012 to a peak of approximately 6% in December 2014, followed by a steady decline over five years to the current rate of 1.7%. Similar to Blayney, trend data for Orange shows vacancy rates of less than 1% during 2010-2011 when significant construction work was being undertaken at CVO.

- Fluctuating vacancy rates (between approximately 2% and 5%) in Bathurst between 2012 and 2018 with peak vacancy rates in December of each year, likely reflecting the out migration of tertiary students following the completion of the year;
- Continuous fluctuation in vacancy rates in the Lithgow LGA, with significant vacancies (approximately 3%) occurring during June 2013, June 2017 and December 2018. The estimated 3% vacancy rate experienced in December 2013 was a 6 year high to May 2019.

1.3.4 Short-Term Accommodation

Short-term accommodation relates to those types of accommodation that are typically provided to visitors or tenants for a short period of time; for example, motels, serviced apartments, bed and breakfast, self-contained homes, caravan and camping. The length of tenancy in these forms of accommodation can often extend to lengthy stays, depending on accommodation availability, price and personal circumstances.

Tourist Accommodation

Short-term accommodation providers in Blayney and nearby Millthorpe primarily provide temporary accommodation to tourism visitors to the LGA and broader Central West Region but are increasingly catering for mining staff, temporary contract workforces and personnel visiting the town for meetings.

There is a variety of short-term accommodation options available across the Blayney LGA, and significantly more in the neighbouring Bathurst and Orange LGAs. Short-term accommodation within the Blayney LGA includes a range of accommodation types including luxury B&Bs, hotels and motels, caravan parks and self-contained rental accommodation. Short-term accommodation is scattered across the LGA with hotels and motels located in Blayney, Millthorpe and several of the shire villages.

The ABS produce statistical information for accommodation establishments with 15 or more rooms. The majority of establishments in Blayney, Millthorpe and Lithgow are not included in the ABS data due to the size of the establishments. Table 11 lists the number of accommodation establishments with 15 or more rooms in the Blayney, Orange, Bathurst and Lithgow SA2 areas[2]. The data presented is for the June quarter 2016. There are a large number of smaller establishments advertised on booking.com, AirBNB and Stayz.com.

[2] Statistical Areas Level 2 (SA2) are medium-sized general-purpose areas. The SA2 is the smallest area for the release of Australian Bureau of Statistics (ABS) non-Census and Intercensal statistics, including the Estimated Resident Population and Health & Vitals data. ABS tourism accommodation data are only provided for small area NSW (i.e. SA2) and for Australian states.

Table 11
Tourism Accommodation Statistics, 2016

Location	No of Establishments	No of Rooms	Room Occupancy Rate (%)	Room Nights Occupied	Room Nights Available
Blayney SA2[3]	2	na	na	na	na
Orange SA2	13	562	76.3	39,041	51,142
Bathurst SA2	14	580	54.7	28,867	52,780
Lithgow SA2	6	na	na	na	na
NSW	245	27,895	76.4	1,917,900	2,508,800

Source: ABS 2016.

In October 2018 Hansen Bailey undertook a survey of accommodation providers in the SAA. The findings of the accommodation survey indicated that:

- The majority of accommodation providers in the Blayney LGA were not at full capacity in general throughout the year, with the exception of key regional events; and
- The majority of short-term accommodation providers have repeat business that is booked well in advance of events such as the Bathurst 1000, Bathurst to Blayney Bike Ride, Orange Wine Festival and Millthorpe Markets.

Around 166 rooms are available within the Blayney township and villages based on the survey results. Fifteen short-term accommodation providers in the Blayney LGA completed the survey and around 20 accommodation providers were contacted. There are a variety of accommodation options in the Blayney LGA including hotels, motels, Air BnB, camping grounds and bed and breakfast accommodation. Additional short-term accommodation options in Blayney LGA and neighbouring LGAs include Air BnB properties, and bookings available through Stayz, Orange 360 and Booking.com.

There is no purpose built worker accommodation facility approved in the Blayney LGA. During the construction phase of the Cadia East Project, the Blayney Caravan Park accommodated the majority of the workforce by sourcing additional removable on-site dwellings, as short-term accommodation within the Blayney LGA was at capacity. Some short-term accommodation providers within Blayney LGA currently allocate rooms for shift workers and/or mining workforces.

[3] The majority of ABS tourism accommodation data is not provided for the Blayney SA2 due to the small number of establishments.

1.3.5 Housing Affordability

Housing affordability is a function of both housing costs and household income. Housing stress is a specific measure of the extent to which lower income households face unaffordable housing costs (rent or mortgage payments). The usual benchmark for affordability is that households paying more than 30% of their gross income for housing costs are in 'stress' (Housing Alliance 2014).

Table 12 shows rates of mortgage and rental stress for the Blayney LGA, component UCLs compared to Central West SA4 and NSW.

Table 12
Median Mortgage Repayment and Rent, 2016

Census geographic area	Median mortgage repayment ($/monthly)	Households experiencing mortgage stress (%)	Median rent ($/weekly)	Households experiencing rental stress (%)
Blayney UCL	1,387	4.7	230	12.2
Millthorpe UCL	1,517	5.1	278	7.7
Blayney LGA	1,500	5.3	220	7.3
Central West SA4	1,500	5.1	235	9.4
NSW	1,986	7.4	380	12.9

Source: ABS 2018.

Table 12 shows that:

- All of the areas of interest experienced a lower rate of mortgage stress than NSW. The Blayney LGA experienced the highest rate of mortgage stress amongst all areas of interest (5.3%); and
- Of the areas of interest, Blayney UCL experienced the highest level of rental stress (12.2% of households) in 2016.

Factors Influencing Housing Affordability

The *BSC Housing Needs Analysis* (Housing Plus 2018) identified a number of issues impacting access to affordable housing in Blayney. These factors included:

- Lack of available housing and diversity of housing stock; and
- Lack of public housing and crisis housing in the LGA.

In addition, the presence of social disadvantage has implications for levels of housing affordability and in turn housing accessibility in the Blayney LGA.

Social Housing Provision

As noted by Housing Plus (2018) the proportion of social housing in Blayney is very low. Of Blayney LGA's 58 social housing units, two-thirds have three or more bedrooms. Twenty households in the Blayney LGA are on the waiting list for social housing. The typical waiting time for social housing in Blayney is up to five years (Housing Plus 2018).

Marist180, a non-for-profit organisation providing assistance for young people and their families, purchased a property in Millthorpe in early 2019 with plans to provide residential youth care for four to six vulnerable children aged 12-18 for 13 weeks at a time (Fitzsimons 2019). Planning consent for the home is not required as it has less than 10 bedrooms.

1.3.6 Development Approvals

Lot and Dwelling Approvals

BSC Community Plan indicates that a lack of residential zoned land is limiting new housing development opportunities in the areas of high demand such as Millthorpe and Blayney. BSC has identified that it has been almost a decade since the Blayney township has had new residential blocks available for home construction (BSC 2019).

The number of dwellings in Blayney LGA increased by 250 between 2006 and 2016. Recent housing market analysis undertaken by Housing Plus suggests that based on the NSW Government estimates of population growth for the Blayney LGA, and the same occupancy levels as 2016, the number of dwellings in Blayney LGA will need to increase by 20 per year to 2036 to meet future housing demands.

Growth in housing stock in the Blayney LGA has focussed principally on two large lot residential areas, including the Browns Creek Road area to the west of Blayney and the Forest Reefs Road area to the west of Millthorpe (Dicker 2019 pers comms). BSC approved, on average, 31 development applications (DAs) for single dwellings per year between 2008 and 2018. Most of this development activity (~65%) occurred in Blayney township. Approximately 14% of these DAs were for large lot residential 'lifestyle blocks' in Millthorpe (Elton Consulting 2019).

Building Approvals

Blayney building approvals from 2008-2018 indicate that the total annual approval values are around $10 million (M), with the exception of 2011-2012 period. In 2011-2012, building approvals for the LGA totalled around $19 M (REMPLAN 2019) which aligns with a period of sustained growth in Blayney LGA in anticipation of the commencement of work on the Cadia East Project. ABS building approvals data indicated that in the Blayney LGA approximately 12 residential dwellings were approved from 2015-2016, seven residential dwellings were approved during 2016-2017 and 12 approvals were granted between July 2018 – March 2019 (ABS 2019).

Future Land Development

In 2016, BSC facilitated the Blayney Shire Developer Forum to identify further residential growth opportunities and barriers to residential growth in Blayney township. The findings of this forum confirmed that the main reason private developers were not undertaking residential subdivision in Blayney township was because of the low return on land sales. At the time of the forum vacant residential lots in Blayney generally sold for between $80,000 and $90,000 (Dicker, 2019 pers. comms).

To help stimulate the housing market in Blayney township and secure the interest of local and regional property developers, BSC has undertaken their own subdivision of land for residential development. On 21 May, BSC launched 14 new residential blocks in Streatfield Close near the centre of Blayney town. The 14 blocks range from 838 m^2 to 1095 m^2 and the blocks are scheduled to be ready for building at the end of 2019. The blocks range in price for $132,000 to $155,000, substantially higher than the 2016 vacant land prices in Blayney. As of 2 June 2019, five of the 14 blocks had been sold.

In addition to the Streatfield Close development, a long standing vacant block (with significant subdivision potential) has recently been purchased in Blayney township and the new owner has already made preliminary enquiries to the BSC planning department regarding residential subdivision in the near future (Dicker, 2019 pers comms).

1.4 EDUCATIONAL ATTAINMENT

The highest level of schooling completed for all people aged 15 years and over in the areas of interest is shown in Table 13. The SAA has a proportionate number of people aged 15 years and over whom have completed years 8, 9, 10 and 11 in comparison with Orange, Bathurst, Cabonne and Cowra LGAs. The Blayney UCL and SAA have a higher proportion of people who have completed years 8-11 compared to NSW, with the exception of year 12. Only 28.1% of people aged 15 and over in the Blayney UCL and 35.5% in the SAA completed year 12 or equivalent, compared to NSW (52.1%). This may be due to a high proportion of students undertaking certificate level qualifications (i.e. apprenticeships and traineeships).

Table 13
Educational Attainment, 2016

Location	Year Completed or below (%)		Year Completed or equivalent (%)			Did not Go to School (%)	Not Stated (%)
	8	9	10	11	12		
Blayney UCL	7.75	10.78	34.98	6.99	28.12	0.30	11.55
Blayney LGA	6.02	8.61	32.78	6.87	35.57	0.17	10.02
Orange LGA	5.58	8.31	28.79	6.65	41.21	0.46	9.02
Bathurst LGA	4.42	7.45	27.29	6.63	42.25	0.29	11.66
Cabonne LGA	6.24	8.86	31.27	6.83	37.26	0.28	9.29
Cowra LGA	8.20	11.23	34.11	6.61	28.40	0.40	11.05
Central West SA4	6.00	8.89	30.63	6.82	35.52	0.33	11.81
NSW	4.62	6.28	21.60	5.81	52.13	1.01	8.54

Source: ABS 2019a.

1.5 LABOUR MARKET DYNAMICS

1.5.1 Current Employment and Unemployment

In December 2018, the SAA had a working age population of 3,966 people. The LGAs of the RAA (including Blayney LGA) had a combined working age population of 62,390 people. In December 2018 the Blayney labour force represented 6.3% of the total labour force of the RAA. Table 14 shows the annual labour force for Blayney LGA relative to the LGAs of the RAA and NSW. This information is drawn from the Department of Jobs and Small Business (DJSB).

Table 14
Labour Force Size for the December Quarter 2015-2018

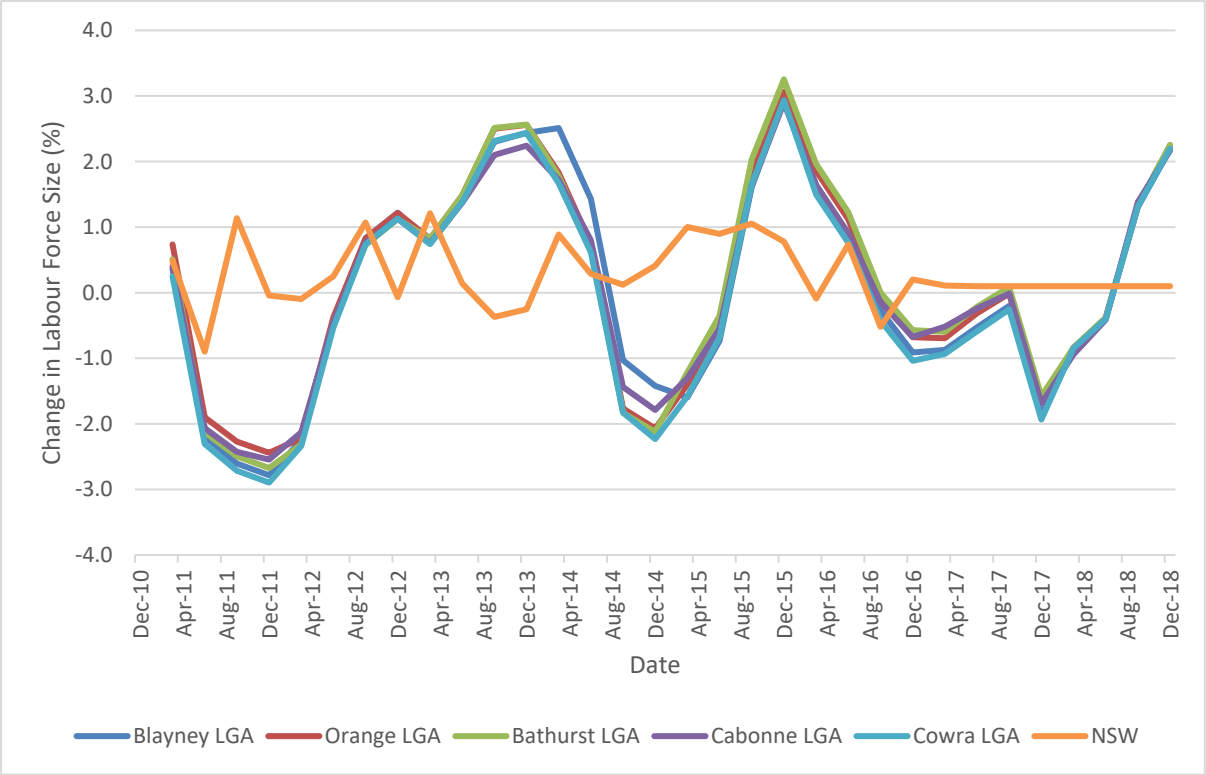
Location	Labour Force (Persons)			
	2015	2016	2017	2018
Blayney LGA	3,964	4,017	3,879	3,966
Bathurst LGA	22,338	22,924	22,398	22,925
Cabonne LGA	7,391	7,518	7,334	7,494
Cowra LGA	5,956	6,002	5,782	5,912
Orange LGA	21,703	22,180	21,587	22,093
NSW[4]	3,941,600	4,017,100	4,071,700	4,208,200

Source: ABS 2019a and DJSB 2019.

[4] ABS data provided for NSW State data was calculated using average annual values.

Graph 6 shows the change in labour force size across the Blayney LGA relative to the LGAs of the RAA and NSW between December 2010 and March 2017.

Graph 6
Change in Labour Force Size, 2010 – 2018



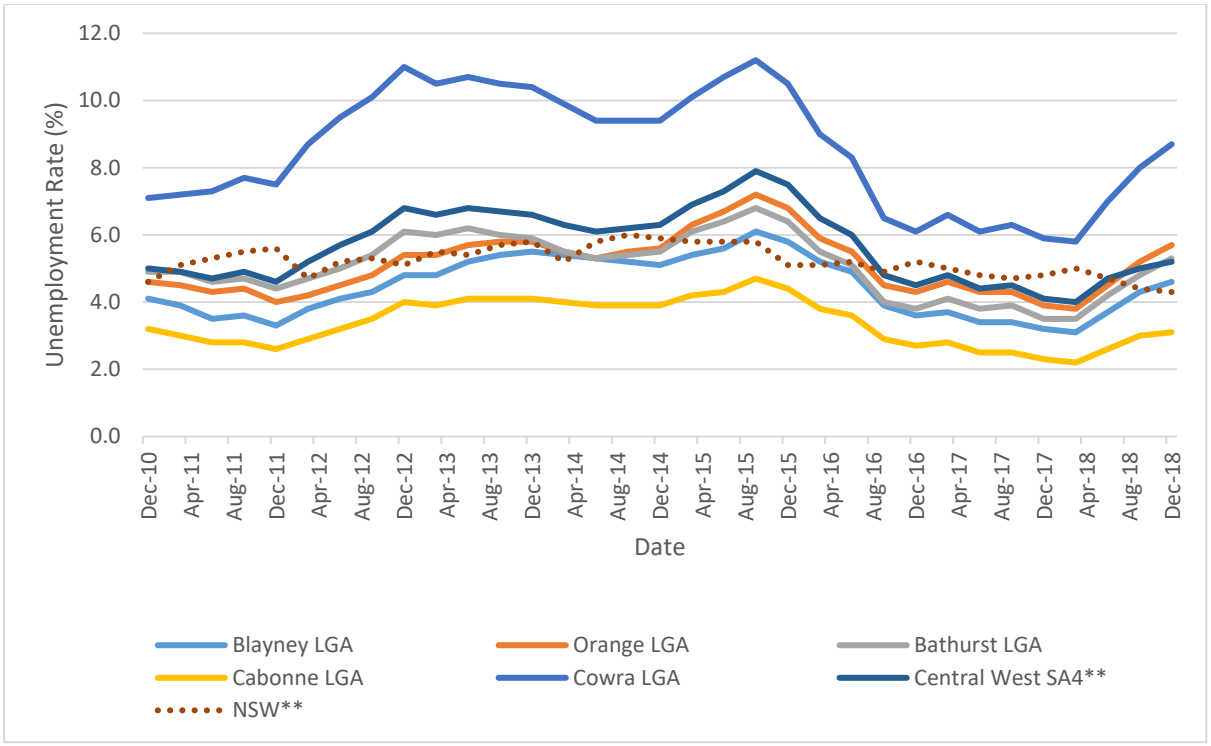
Source: ABS 2019a and Department of Jobs and Small Business (DJSM) 2019.

Analysis of labour force change across the SAA and RAA between 2010 and 2018 shows:

- Labour force changes in Blayney LGA between 2010 and 2018 have remained consistent with those in the neighbouring LGAs;
- There is a strong alignment of labour conditions across the RAA, indicating that this area operates as a labour region, within which labour likely reallocates in order to equalise.
- Localised labour force disruptions are not evident within the data; and
- The labour force size in both the Blayney LGA and component LGAs of the RAA fluctuate over longer periods of time compared to the NSW trend.

Graph 7 presents trends in unemployment for Blayney LGA relative to the LGAs of the RAA and NSW.

Graph 7
Unemployment Rate, 2010 - 2018



Source: DESSFB 2019.
*Notes: ** Unemployment rates for Central West SA4 and NSW are unsmoothed data*

Trends in unemployment rates across the SAA and the LGAs of the RAA are generally consistent, with Cowra LGA maintaining a significantly higher unemployment rate than surrounding areas but a similar trend in unemployment rates.

1.5.2 Industry of Employment

Mining, agriculture and manufacturing, have been the mainstay of the Blayney LGA economy for many years. In 2016 in the Blayney LGA, the:

- Mining industry sector employed 727 (24% of total employment across all industry sectors);
- Agricultural industry sector employed 392 people (13% of total employment across all industry sectors); and
- Manufacturing industry sector employed 368 people (12% of total employment across all industry sectors).

Between 2011 and 2016 the number of jobs in the mining industry sector in Blayney LGA increased from 530 to 727, and in the manufacturing industry from 328 to 368. Between 2011 and 2016 the number of jobs in Blayney LGA in the agricultural industry remained consistent at just under 400.

In comparison, the top three industry sectors of employment in 2016 for the *resident* population of Blayney LGA were the:

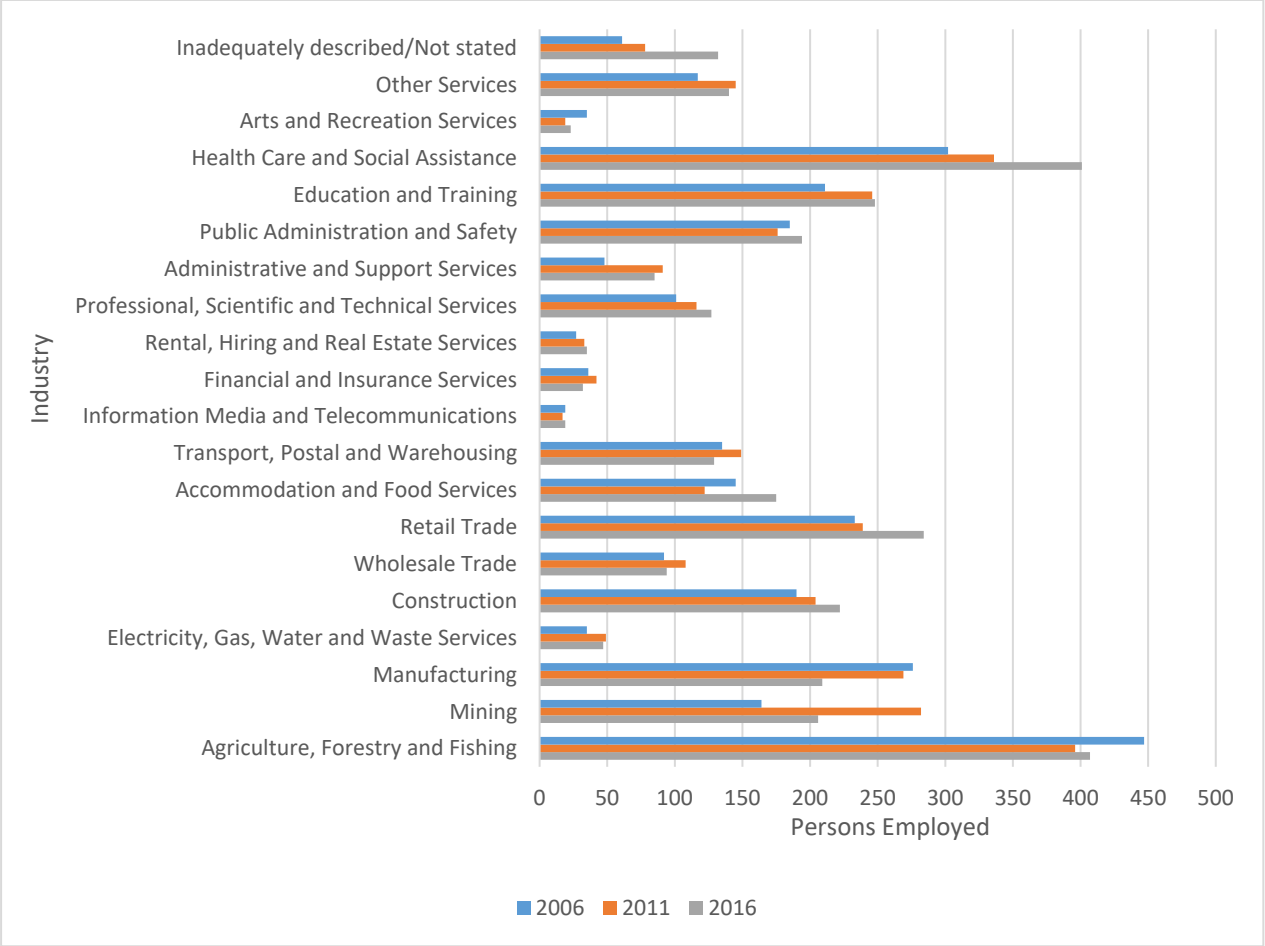
- Agricultural, forestry and fishing sector (407 or 12.6%);
- Health care and social assistance sector (401 people or 12.4%); and
- Retail Trade sector (284 or 8.8%).

Given the size of the health care sector in the Blayney LGA, it is likely that a significant proportion of Blayney LGA resident employment in the health care industry sector is met by roles in Bathurst LGA and Orange LGA both of which have strong health care sectors.

Graph 8 shows trend data (2006-2016) in industry of employment by *residents* of the Blayney LGA. Between 2006 and 2016, Blayney LGA experienced a:

- Large decline in employment in the agriculture, forestry and fishing, arts and recreation services and manufacturing industry sectors;
- Significant increases in the other services industry sector, and the heath care and social assistance sector; and
- Significant increase in mining employment in 2011, followed by a decrease by 2016. This can be attributed to the initial employment injection associated with the Cadia East Project and later workforce contraction at Cadia Valley Operation (CVO).

Graph 8
Industry of Employment, Blayney LGA



Source: ABS 2017.

Table 15 shows the number of residents of the Blayney LGA employed in each subdivision of the mining industry sector. The majority of residents employed in mining in 2006, 2011 and 2016 were employed in metal ore mining (gold mining). The total number of residents employed in mining in the Blayney LGA has fluctuated over time. Employment in mining increased by 72% from 2006 to 2011, but decreased by 25.5% from 2011 to 2016 reflecting changes at the CVO, where the majority of mining industry employment is located.

Table 15
Employment in Mining – Secondary Assessment Area

Mining Industry Subdivision	Number of Persons by Year			Change (%)		
	2006	2011	2016	2006-2011	2011-2016	2006-2016
Coal Mining	4	4	0	0.0	-100.00	-100.00
Oil and Gas Extraction	0	0	9	0.0	?	?
Metal Ore Mining	140	227	182	62.1	-19.8	30.0
Non-Metallic Mineral Mining and Quarrying	3	3	0	0.0	-100	-100
Exploration and Other Mining Support Services	3	28	3	833.3	-89.3	0
Mining, nfd[1]	13	24	7	84.6	-70.8	-46.2
Total	**164**	**282**	**210**	**72.0**	**-25.5**	**28**

Source: ABS 2019a.

Note:

1. *nfd is defined as 'not further defined'.*

There has been significant change in the employment in the agriculture, forestry and fishing industry and the mining industry sector in the LGAs of the RAA between 2006 and 2016. Table 16 shows that there has been minimal growth and, in some cases, a significant decline in employment in the agriculture, forestry and fishing employment in all areas between 2006 and 2016. Across the RAA, the reduction in employment in the agriculture, forestry and fishing industry sector has been offset by a significant increase in employment in the mining industry sector.

Table 16
Number of Persons Employed by Industry – Regional Assessment Area

		Year		Change	
Geog.	**Industry**	**2006**	**2016**	**No.**	**%**
Blayney LGA	Agriculture, Forestry and Fishing	447	407	-40	-8.9
	Mining	164	206	42	25.6
Orange LGA	Agriculture, Forestry and Fishing	389	392	3	0.8
	Mining	599	914	315	52.6
Bathurst LGA	Agriculture, Forestry and Fishing	733	491	-242	-33.0
	Mining	119	242	123	103.4
Cabonne LGA	Agriculture, Forestry and Fishing	1,310	1,086	-224	-17.1
	Mining	112	192	80	71.4

		Year		Change	
Geog.	**Industry**	**2006**	**2016**	**No.**	**%**
Cowra LGA	Agriculture, Forestry and Fishing	861	822	-39	-4.5
	Mining	25	26	1	4.0
Central West SA4	Agriculture, Forestry and Fishing	8,748	8,318	-430	-4.9
	Mining	24,80	4,617	2137	86.2
NSW	Agriculture, Forestry and Fishing	78,659	72,625	-6034	-7.7
	Mining	20,314	31,736	11422	56.2

Source: ABS 2019a.

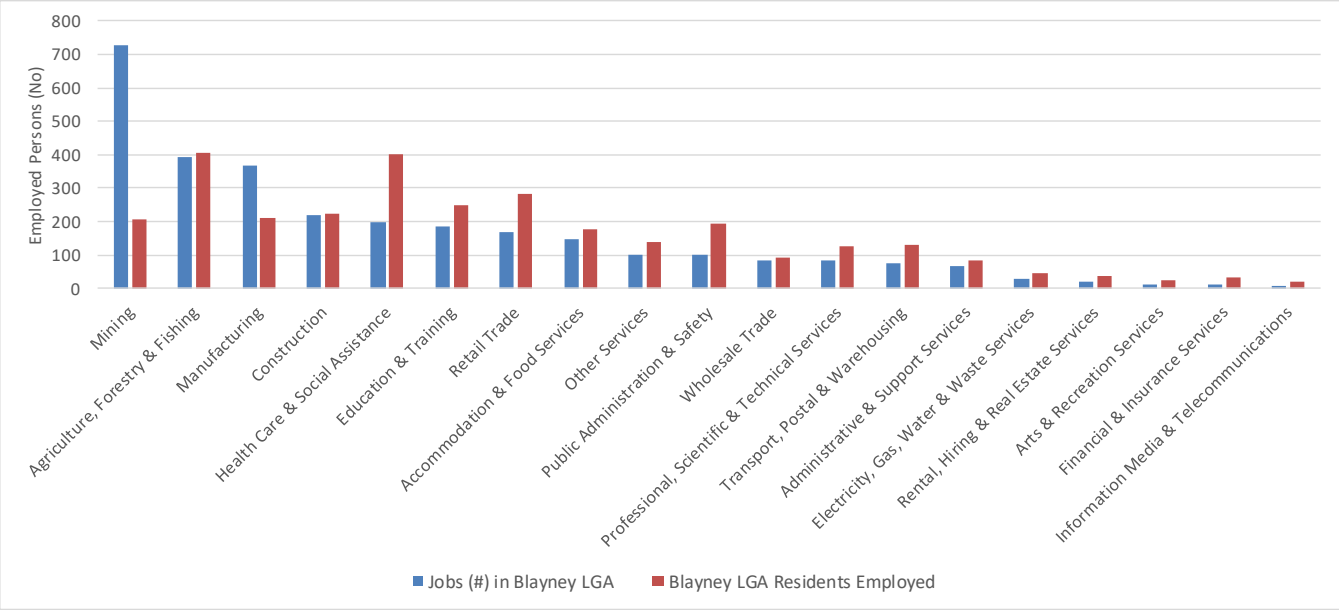
1.5.3 Employment Share

The economic strength of a region can also be noted by the extent to which an area "imports" or "exports" labour and by comparing jobs within industry sectors in a region to the number of people employed in the same industry sector. This is important in an area that is expecting a major project as it can show, to some degree, the extent to which a region is likely to be able to supply the required labour in given industry sectors.

In 2016 there were an estimated 2,991 jobs located in the Blayney LGA however only 1,527 Blayney LGA residents (50% of all employed persons) were employed within the LGA. This shows that Blayney LGA is both a considerable importer of labour (1,464 jobs) and an exporter of labour (1,503 persons). Approximately 30% of employed residents of the Blayney LGA worked in the Orange LGA and 10% in Bathurst LGA, highlighting the economic links between these areas.

Table 17 shows the industry employment characteristics in Blayney LGA for 2016. In 2016 there were 727 mining jobs in Blayney LGA, however less than 300 residents of Blayney LGA were employed in the mining industry. This shows that Blayney LGA is a considerable importer of mining workers (i.e. Blayney LGA relied upon areas outside of the LGA to supply mining labour for jobs within the Blayney LGA in 2016). The manufacturing sector is also a significant importer of labour. In 2016 there were 368 jobs in manufacturing in the Blayney LGA but a local labour force of less than 300 persons.

Table 17
Import and Export of Labour – Blayney LGA 2016



Source: ABS 2017

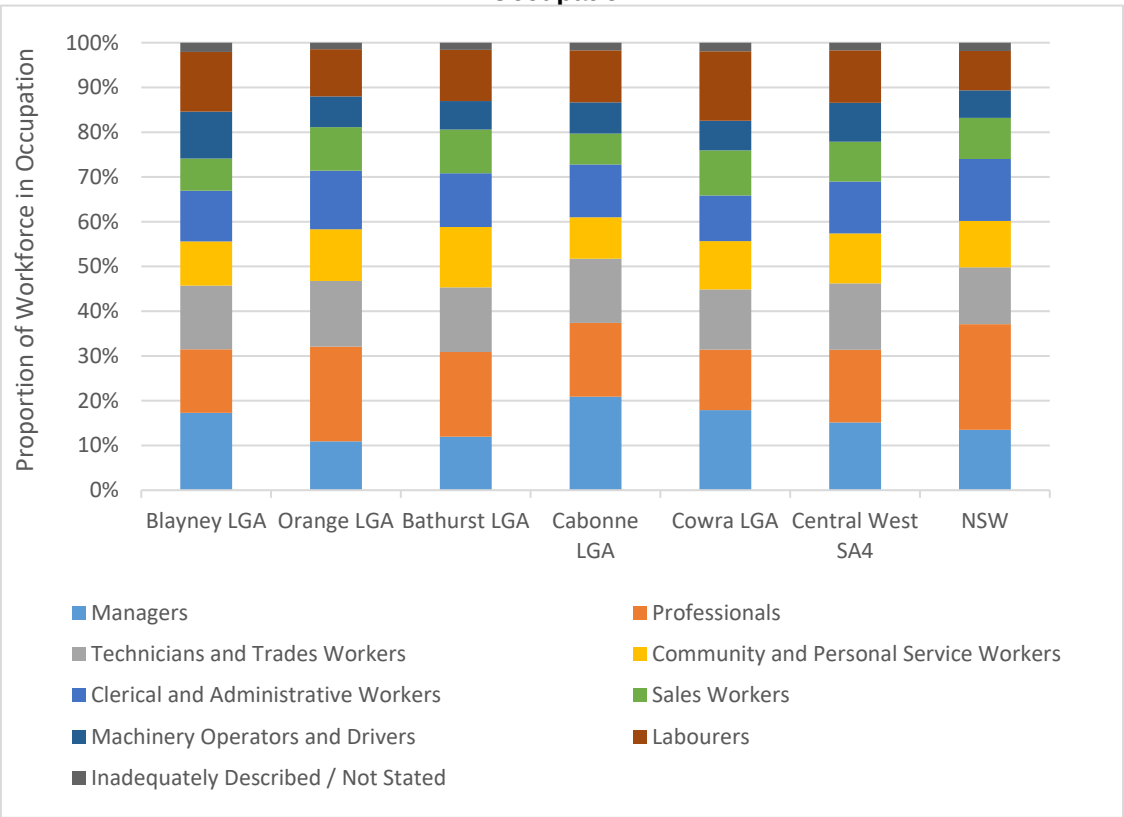
An analysis of journey to work patterns (DJSB 2018) shows that at the time of the 2016 population census:

- Only 50% (1,689) of Blayney LGA residents worked in Blayney i.e. 50% commuted to work outside of Blayney LGA. Eleven percent (360) commuted to Bathurst LGA, 4% (115) to Cabonne LGA, 25% (815) to Orange LGA and 1% (33) to Cowra LGA. Three percent (111) of residents had no fixed place of work;
- More than 80% of residents of Bathurst LGA worked in Bathurst LGA. Three percent worked in Orange LGA, 2% worked in Blayney LGA and in Lithgow LGA;
- More than 80% of residents of Orange LGA worked in Orange LGA. The majority of remaining residents worked in Blayney LGA (4%), Cabonne LGA (5%) and Bathurst LGA (3%);
- Approximately 45% of Cabonne LGA residents worked in Cabonne LGA, while a further 36% of residents worked in Orange LGA; and
- Approximately 85% of Cowra LGA residents worked in Cowra LGA. A further 4% of residents worked in Cabonne LGA.

1.5.4 Occupation

Graph 9 shows the occupation distribution across the labour force for 2016. In comparison to NSW, in 2016, Blayney LGA had more Managers (17.3% compared to 13.5%), Technicians and Trade Workers (14.3% compared to 12.7% for NSW), Machinery Operators and Drivers (10.5% compared to 6.1% for NSW) and Labourers (13.3% compared to 8.8% for NSW). This reflects both the strong employment in the agricultural, manufacturing and industry sectors. All areas of interest have a lower proportion of Professionals than NSW, but all areas of interest have relative proportions of occupations.

Graph 9
Occupation



Source: ABS 2017.

1.5.5 Qualifications

Post school qualification levels for the SAA and the RAA are shown in Table 18. The proportion of people who stated a completed qualification of a certificate level in all areas of interest (i.e. UCL, LGAs and SA4) is significantly higher than the NSW proportion of people who completed a certificate level qualification. This aligns with the dominant occupation areas described in Section 1.5.3.

Table 18
Post School Qualifications, 2016

Location	Certificate Level (%)	Graduate Diploma / Certificate (%)	Advanced Diploma and Diploma (%)	Bachelor Degree and Above (%)	Inadequately Described / Not Stated (%)
Blayney UCL	48.43	1.62	11.66	10.55	27.66
Blayney LGA	44.54	2.74	13.31	17.01	22.67
Orange LGA	40.62	3.22	14.85	22.04	19.32
Bathurst LGA	40.42	3.35	13.74	19.30	23.20
Cabonne LGA	42.67	2.38	15.33	19.01	20.46
Cowra LGA	45.11	1.93	12.90	14.02	26.11
Central West SA4	42.30	2.54	13.17	16.89	25.11
NSW	32.71	3.07	16.14	29.03	19.05

Source: ABS 2019a.

1.5.6 Skill Shortages

Increased competition for labour in the national and state mining sectors has led to some skill shortages in a number of relevant skills and occupations. A current list of skill and occupation shortages for the period 2017-2018 and relevant to the project is provided in Table 19.

Table 19 shows that there are a number of occupational categories that are experiencing skill shortages in both NSW and Australia, specifically in a range of professional and technical categories. This will provide an additional challenge to attracting a workforce for the project.

Table 19
Relevant Skill Shortages, NSW and Australia, 2017-2018

Occupation Cluster	Occupation	NSW	AUST
Professionals – Design, Engineering Science and Transport	Civil Engineering Professionals	S[1]	S
	Electrical Engineer	NS[2]	NS
	Mechanical Engineer	S	S
	Mining Engineers	-	NS
	Geologist/Geophysicist	-	D[3]
Technicians and Trades Workers – Automotive and Engineering Trades Workers	Automotive Electrician	-	S
	Motor Mechanics (General)	S	S
	Diesel Mechanic	S	S
	Structural Steel and Welding Trades	S	S
	Fitter	M	S

Occupation Cluster	Occupation	NSW	AUST
	Metal Machinist (First Class)	S	S
Technicians and Trades Workers – Construction Trade Workers	Carpenters and Joiners	S	S
	Plumbers	S	S
Technicians and Trades Workers – Electro technology and Telecommunications Trades Workers	Electrician (General)	S	NS
	Electronic Instrument Trades Worker (General) and Special Class)	-	NS

Source: DJSB 2018a, Mining Engineers ANZSCO 2336 Australia May 2018

Notes:

1. *S – Shortage - Skill shortages exist when employers are unable to fill or have considerable difficulty filling vacancies for an occupation, or significant specialised skill needs within that occupation, at current levels of remuneration and conditions of employment, and in reasonably accessible locations*
2. *NS – No Shortage*
3. *D – Recruitment difficulty - Recruitment difficulties occur when there may be an adequate supply of skilled workers, but some employers have difficulty filling vacancies for an occupation for reasons which include: the specific experience or specialist skill requirements of the vacancy; differences in hours of work required by the employer and those sought by applicants; or particular locational or transport issues. Please follow the relevant occupation link for more information on the nature of each recruitment difficulty.*

1.5.7 Employment Services Data

DJSB has recently (2018) released Jobactive case load data on youth, Indigenous and refugee job seekers by employment region. This data shows the job seeker case loads of specific providers within an employment region and provides more recent data on the characteristics of the unemployed. Jobactive is an Australian Government initiative to get more Australians into work. It connects job seekers with employers and is delivered by a network of Jobactive providers in over 1,700 locations across Australia. Data for the Central West Employment Region is presented in Table 20.

There are three main Jobactive providers in the Central West. Each Jobactive provider has regional offices in key locations across the Central West. Data presented in Table 20 relates only to the regional Jobactive offices located within the RAA.

Table 20
Jobactive Caseload Data for Central West Employment Region - December 2018[1]

Provider	Total Number of Cases	Characteristics of Caseload (% of cases)					
		Female	Youth (Under 25)	Mature Age (50+)	Indigenous	People with Disability	Refugee
Joblink Plus							
Bathurst	385	50.4	27.0	20.8	24.4	20.3	<4
Blayney	52	63.5	11.5	34.6	13.5	26.9	0
Cowra	193	48.2	22.8	30.1	23.8	21.8	0
Molong	30	40.0	16.7	36.7	23.3	40.0	0
Orange	468	51.3	22.0	21.2	28.0	24.1	5
Sureway Employment and Training Pty Ltd							
Bathurst	321	48.6	19.0	21.5	20.9	27.7	n.p
Cowra	222	53.2	21.2	26.1	23.0	26.6	n.p
Orange	407	49.6	19.9	24.1	26.5	23.1	n.p
VERTO Ltd							
Bathurst	461	51.4	24.9	17.4	18.4	17.6	0
Blayney	76	51.3	11.8	27.6	9.2	25.0	0
Cowra	192	55.7	16.7	37.5	15.6	27.1	<5
Orange	387	48.8	21.7	19.1	27.1	23.3	<5
Total	**3,194**	**50.7**	**21.6**	**23.1**	**23.3**	**23.3**	**na**

Source: DJSB (2018)

Notes:

1. *Jobactive services are generally available to people who receive an income support payment, such as Newstart Allowance, Youth Allowance (other), or Parenting Payment, and have mutual obligation requirements.*

At December 2018 the Jobactive providers in the RAA had a total caseload of 3,194 or 50% of the total case load of the Central West employment region. Consistent with unemployment trends, the majority of caseload was located in Bathurst and Orange. Job seeker characteristics evident through analysis of the Jobactive data for December 2018 for the RAA show:

- The majority of caseload related to female jobseekers (50.7%);
- A high proportion (44.7%) of the caseload related to people aged under 25 years or over 50 years; and
- More than 45% of the caseload consisted of Indigenous people and people with a disability.

Analysis of data for the Blayney Jobactive providers shows:

- A total caseload of 128;
- 56% (72) of the caseload related to female jobseekers; and
- 29% (33) related to people with a disability.

These figures suggest that the majority of the unemployed labour pool in the Blayney LGA are registered for Jobactive and seeking work.

1.6 ECONOMIC VITALITY

An economic profile of the RAA, including Blayney LGA is included in the Economic Impact Assessment (Gillespie Economics 2019) (EIS Appendix DD) prepared for the project.

1.6.1 Gross Regional Product

Table 21 shows the estimated Gross Regional Product (GRP) for Blayney LGA in 2017.

Table 21
Gross Regional Product – Blayney LGA 2017

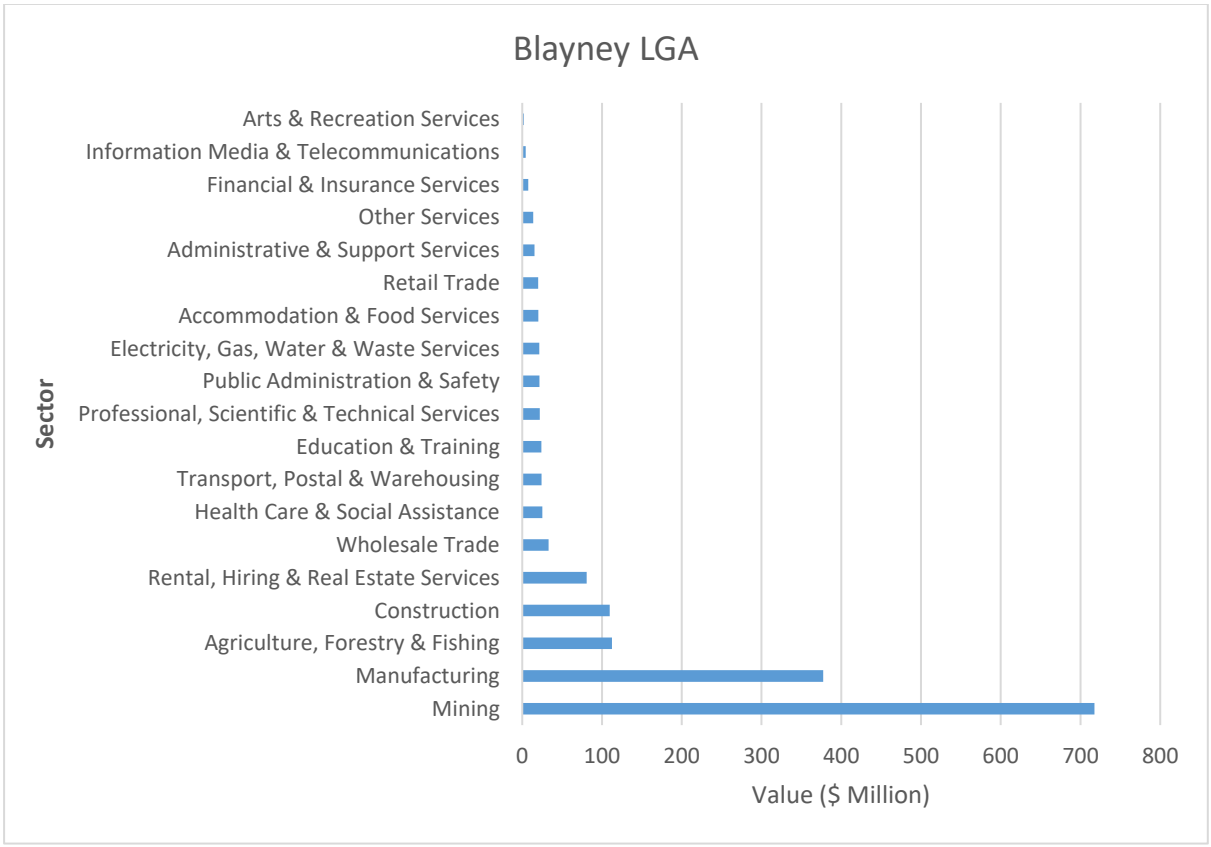
GRP Expenditure Method	Blayney LGA
Gross Regional Product ($ M)	660.9
Population (persons)	7,259
Per Capita GRP ($)	91,048
Per Worker GRP ($)	220,969

Source: REMPLAN 2019.

1.6.2 Industry Sector Contribution

Graph 10 presents the gross revenue generates by industry sectors in the Blayney LGA. Output generated by the Blayney LGA is estimated at approximately $1.65 Billion (B). The mining sector is the largest producer of output in the Blayney LGA accounting for 43.4% of all output (REMPLAN 2019).

Graph 10
Output by Industry, Blayney LGA 2017



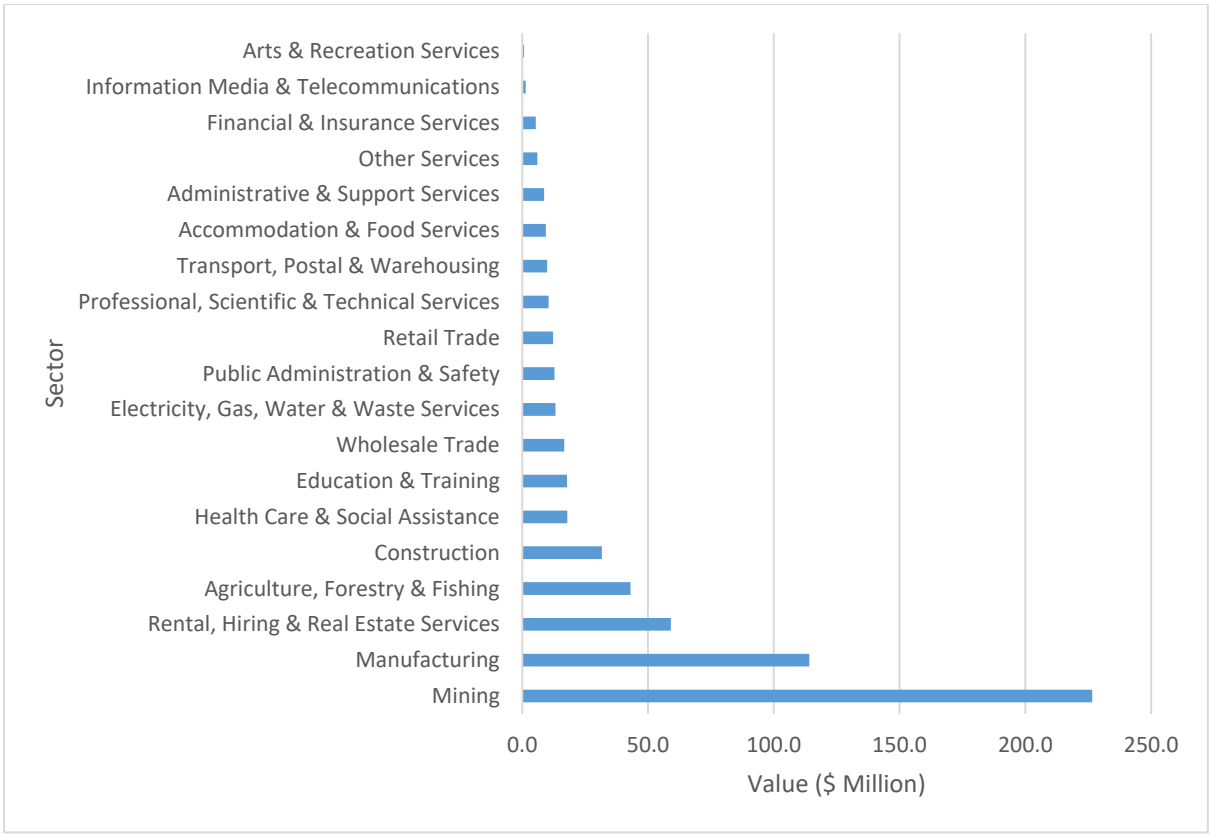
Source: REMPLAN 2019.

The total value added by the Blayney LGA economy is estimated at $617 M for the 2015/2016 period.

Graph 11 shows the value added to the Blayney LGA by each industry sector in 2015/2016 and illustrates the relative importance of each sector to the economy of the Blayney LGA.

Whilst there is a higher proportion of businesses servicing the construction and the agriculture, forestry and fishing sector across the Blayney LGA, the mining industry contributes a significantly higher proportion of value added to the LGA. In 2015/2016 mining accounted for $226.6 M in value added to the LGA, and is the highest sector contributor of value added to the LGA. This is almost twice the contribution of the manufacturing sector, the second highest contributor of value added to the LGA. Together, the mining and manufacturing sector accounted for over 50% of the value added in the Blayney LGA in 2015/2016.

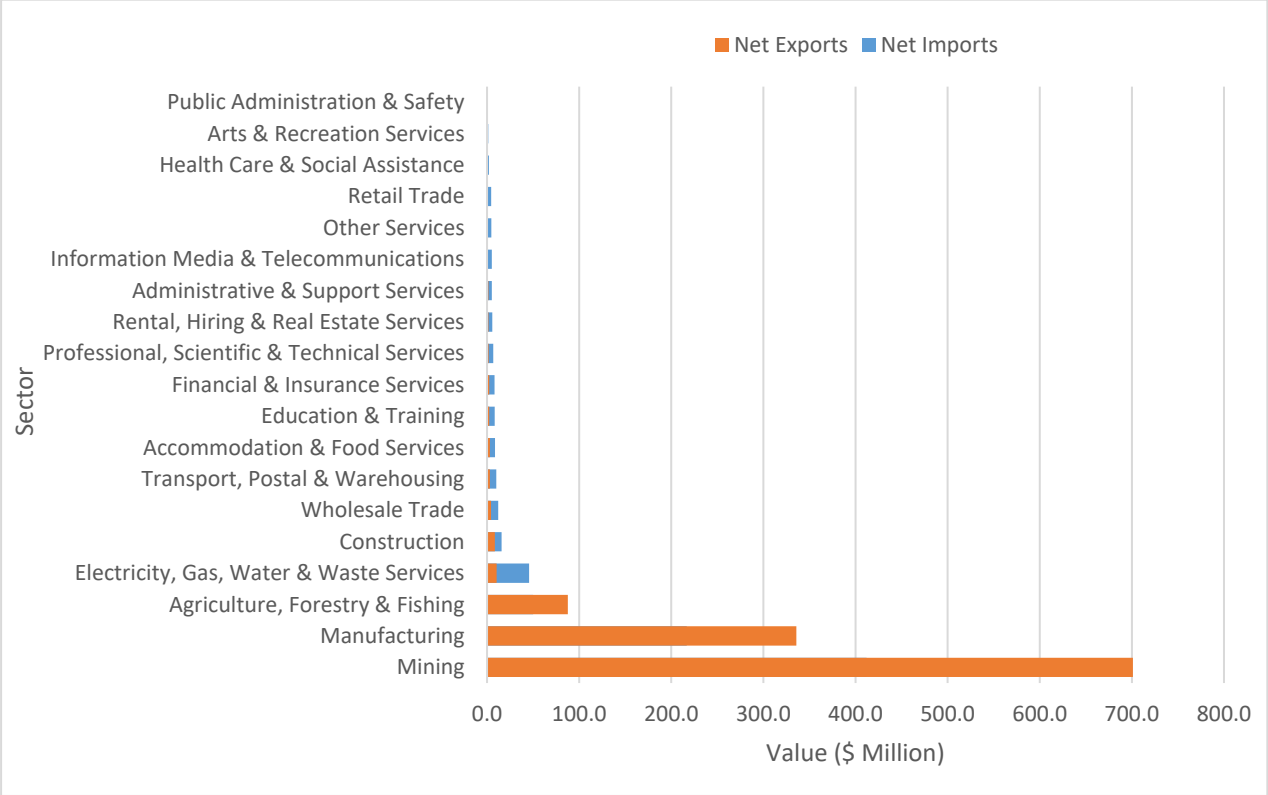
Graph 11
Value Added by Industry Sector Blayney LGA, 2015/2016



Source: REMPLAN 2019.

Graph 12 presents net imports and exports of each industry sector. Industry sectors with net exports are producing more output than demand within the Blayney LGA, while industries with net imports are producing less outputs than required by the LGA.

Graph 12
Net Imports and Exports Blayney LGA, 2015/2016



Source: REMPLAN 2019.

The Blayney LGA is a net exporter of mining, manufacturing, and agriculture, forestry and fishing services and is a net importer of all other services. Blayney LGA is a net exporter and importer of electricity, gas, water and waste services and construction services. The exports of the mining sector are significantly higher (value) that other sectors in the Blayney LGA.

1.6.3 Tourism Sector Contribution

The Blayney LGA and RAA has long been associated with tourism-related activities including outdoor rural recreational activities, weekends away and annual events such as the Bathurst 1000 super car race. The Blayney LGA is located in close proximity to major regional centres and provides the opportunity for visitors to experience a rural lifestyle.

The Central West Region has a strong tourism industry based on agriculture, heritage and the amenity associated with small towns. The Central NSW Region, including Blayney, Bathurst and Orange LGAs, received nearly 2.7 million domestic overnight visitors in 2017, increasing by 24.9% to the previous year. Visiting friends and relatives (35.2%) was the largest purpose of visit for visitors to the region, followed by 'holiday' (34.9%) and 'business' (20.2%). Domestic overnight visitors spent over $1.0 billion in the region and spent on average $139 per night. Domestic daytrip visitors spent $377 million in the region and spent on average $135 per trip.

Central NSW received 42,400 international overnight visitors, an increase of 16.2% as compared to the previous year (Destination NSW 2019).

According to REMPLAN (2019), tourism contributes $8.7 M to the total value added to the Blayney economy (approximately 1.42% value add), and supports approximately 101 jobs. The average spend per trip by a visitor for a domestic day is $175. The majority of which is spent mainly on accommodation and food services.

Orange360 is a new joint regional tourism initiative between Orange City Council (OCC), BSC and Cabonne Council (CC). BSC is seeking to promote signature events that already draw tourism to Blayney LGA, including Blayney to Bathurst (B2B) cycle race, Bathurst Motor races, Carcoar Running Festival, Millthorpe Garden Ramble and Millthorpe markets, Winter Wonderland, FOOD week and Orange Wine festival (BSC 2018). During consultation, BSC identified that the tourism market is an asset, and should be marketed by the natural and built heritage of the area.

The primary tourist attraction in the Blayney LGA is the rural villages, particularly Millthorpe and Carcoar. Other tourist attractions include the Blayney Wind Farm, Carcoar Dam and the Blayney villages (BSC 2019a). Carcoar Dam is a recreational location that promotes fishing, water skiing and camping facilities for locals and visitors. The findings of SIA consultation suggest Carcoar Dam is very popular and highly valued by Blayney residents as well as tourists.

Millthorpe Village and Carcoar Village are each experiencing increasing numbers of tourists due in part to a greater emphasis on advertising and the popularity of the village drive tours. Millthorpe and Carcoar also support a number of unique cafes and shops, as well as providing range of accommodation options. BSC is seeking to promote the historical village experience to the high-end market, promoting the villages as a recognised tourist destination.

1.6.4 Registered Businesses

According to the ABS (ABS 2019c) data in 2018 there were 790 registered businesses (including entries and exits) in the Blayney LGA the largest proportion of which were agricultural, forestry and fishing industry businesses (46%, 361 businesses) and the next largest proportion, construction industry businesses (12%, 96 businesses). Of the 361 agricultural, forestry and fishing industry businesses, 266 (74%) were “non-employing businesses”, which are typically self-managed agricultural businesses. Of the 790 registered business in the Blayney LGA in 2018, 520 (66%) were “non-employing businesses”.

Hansen Bailey undertook a survey of business owners and operators in the Blayney LGA to inform the SIA. The findings of this survey provided baseline information in relation to workforce recruitment and current business conditions. The findings of the survey are reported in Appendix E of the SIA.

1.7 CULTURAL DIVERSITY AND VULNERABILITY

1.7.1 Cultural and Ethnic Composition

Table 22 shows the proportion of persons born in Australia for the SAA relative to the RAA and NSW, as well as the proportion of persons who speak only English at home. These indicators are measures of community vulnerability. Both indicators are significantly higher in the Blayney LGA and the RAA than in NSW, indicating a lower level of cultural diversity compared to the State.

Table 22
Cultural and Ethnic Indicators, 2016

Location	Persons born in Australia (%)	English only at home
Blayney UCL	85.9	91.3
Blayney LGA	85.8	91.5
Orange LGA	83.5	87.8
Bathurst LGA	83.7	87
Cabonne LGA	86.3	91.3
Cowra LGA	84.7	89
Central West SA4	83.1	87.6
NSW	65.5	68.5

Source: ABS 2017 and 2018.

1.7.2 Income Support

Table 23 presents income support data from the Public Health Information Development Unit (PHIDU) (Torrens University Institute 2017) for the SAA compared to the LGAs of the RAA. Table 23 shows that the RAA (including Blayney LGA) has higher indicators of income support than NSW. In particular, Cowra LGA has a significantly higher proportion of population on disability support pension and low-income welfare compared to the rest of the RAA and NSW. This is likely a reflection of the proportion of Indigenous population in the LGA and the proportion of population aged over 64 years (Section 1.2).

Table 23
Income Support – June 2016

Census Geographic Area	% Disability support pensioners	% People receiving an unemployment benefit long-term	% People aged 16 to 24 receiving an unemployment benefit
Blayney LGA	68.6	5.4	4.9
Orange LGA	75.8	4.8	5.4
Bathurst LGA	71.7	4.2	3.4
Cabonne LGA	61.2	3.5	3.5
Cowra LGA	78.0	7.6	6.7
NSW	67.6	4.0	3.0

Source: Torrens University Institute 2017.

1.7.3 Disadvantage

Index of Relative Social Disadvantage

The ABS's Socio-Economic Indices for Areas (SEIFA) are composite indices of factors affecting socio-economic advantage and disadvantage, measured against an Australian benchmark index of 1,000. Factors within the Index of Relative Socio-Economic Disadvantage such as unemployment, low income, educational attainment, overcrowded living arrangements, rate of disability among people under the age of 70 and poor proficiency in English affect access to information and health care.

Table 24 details the SEIFA scores for Blayney LGA relative to the LGAs of the RAA. A review of SEIFA scores indicates that:

- All areas in the RAA experienced relative disadvantage, albeit very low; and
- Cowra LGA experienced the least advantage, as reflected in income and unemployment indicators.

Table 24
SEIFA Ratings, 2016 – IRSAD[1]

Census Geographic Area	SEIFA Rating
Blayney LGA	965
Orange LGA	968
Bathurst LGA	973
Cabonne LGA	997
Cowra LGA	910

Source: ABS 2018a.
Note:
ISRAD is defined by the ABS as the Index of Relative Socio-Economic Advantage and Disadvantage.

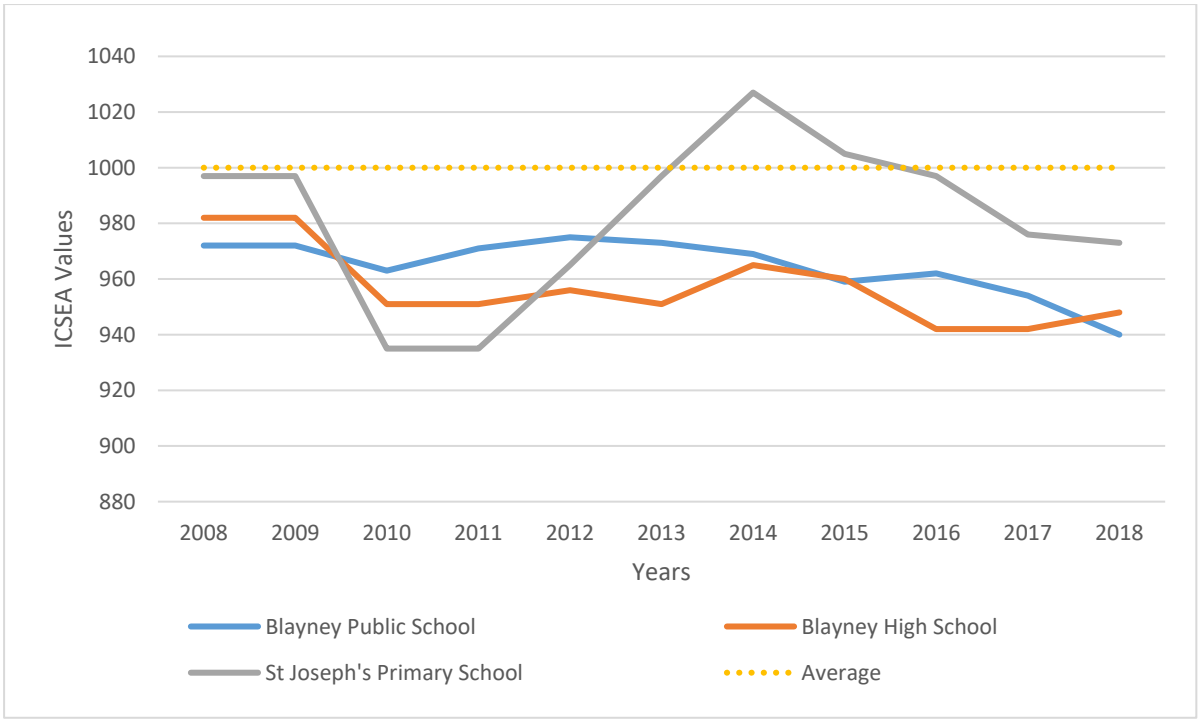
Index of Community Socio-Educational Advantage

Graph 13 presents the Index of Community Socio-Educational Advantage (ICSEA) for schools in the town of Blayney for the years 2008-2017. The ICSEA value provides an indication of the socio-educational backgrounds of students. The lower the ICSEA value, the lower the level of educational advantage of students who go to the school. ICSEA is set at an average of 1,000. This figure of 1,000 is used as an ICSEA benchmark.

Graph 13 shows that students at both Blayney Public School and Blayney High School have a lower level of educational advantage than the average. This is consistent with the 2016 SEIFA findings for Blayney LGA. ICSEA values at St Joseph's Primary School have fluctuated above and below the average line over the eight-year period. St Joseph's School included a secondary college until its closure in 2009. The change in ICSEA value between 2009 and 2011 is likely attributed to outmigration of students following closure.

The 2017-2018 trend of slightly increasing enrolments at Blayney High School likely reflects changes in the school structure following closure of the secondary college. It is interesting to note that the ICSEA values at Blayney High School changed little following the closure of St Joseph's Secondary College suggesting outmigration of students to other schools in the region e.g. private schools in Orange and Bathurst.

Graph 13
Blayney Schools ICSEA Values



Source: ACARA 2019.

Blayney High School has two classes dedicated to children with learning difficulties. Blayney High School also has a high rate of students leaving school after grade 10 to pursue an apprenticeship or a trade.

Weekly Family Income

In 2016 the median weekly family income in Blayney UCL was $1,383 and in Blayney LGA was $1,581. All LGAs within the RAA have a higher proportion of families earning under $1,500 a week and a lower proportion of families earning over $3,500 a week, compared to NSW. Cowra LGA has a significantly larger proportion of families earning under $1,500 a week, at 55% compared to 37% for NSW (ABS 2017).

1.7.4 Prevalence of Social Issues

The *BSC Housing Needs Analysis* (Housing Plus 2018) identified a number of prevalent social issues in the Blayney LGA including:

- Homelessness encouraged by eviction; and
- Domestic violence incidents in the LGA.

Homelessness

Information on homelessness in the Blayney LGA is derived from Housing Plus (2018 pp, 11). Data collected by the *Orange Homelessness and Housing Support Service for Adults and Families* shows that there were 21 people experiencing, or at risk of, homelessness in Blayney LGA in 2016-17. Fourteen of these clients presented to the service with children. The main reason given for presenting to the service was 'housing crisis' (eviction) (52.4%) followed by 'financial difficulties' (23.8%) and 'inadequate or inappropriate dwelling conditions' (9.5%). 'Housing affordability stress' was low at 4.8%.

Domestic Violence

Recorded incidents of domestic family violence are low in the Blayney LGA at a rate of 242.7 per 100,000 population (Housing Plus 2018). This rate is significantly lower than the NSW average of 365.7 per 1000,000 population.

1.8 COMMUNITY HEALTH, WELLBEING AND SAFETY

1.8.1 Health and Wellbeing

The following discussion provides a summary of key indicators of health and wellbeing in the Blayney LGA comparative to the LGAs of the RAA based on information available through ABS and the NSW PHIDU (Torrens University Institute 2017).

Volunteerism

Table 25 presents rates of volunteerism. Volunteerism is one measure of wellbeing and resilience in a community. Blayney LGA has a high rate of volunteerism, which is consistent with feedback received from the local community during SIA consultation. During engagement with the broader community of Blayney LGA, it was identified that numerous individuals volunteered for several different organisations. It was typical of the older generations to be involved in five or more volunteer positions.

All LGAs of the RAA have higher rates of volunteerism than NSW. Cabonne LGA in particular has significantly higher rates of volunteerism.

Table 25
Community Strength, 2016

Census Geographic Area	People aged 15 years and over who participate in voluntary work	Population aged 15 years and over	% Volunteers
Blayney LGA	1,392	5,751	24.2
Orange LGA	6,447	31,801	20.3
Bathurst LGA	6,877	33,181	20.7
Cabonne LGA	2,943	10,499	28.0
NSW	1,103,790	6,093,895	18.1

Source: Torrens University Institute 2017.

Disability

Table 26 presents disability statistics for the SAA comparative to the LGAs of the RAA and NSW. Table 26 shows that the LGAs of Blayney, Cabonne and Cowra have a higher proportion of population providing unpaid assistance to persons with a disability than NSW. This likely reflects the combination of aging population and a lack of aged care services which means aged persons are remaining in their homes longer with the support of family or friends. With the exception of Cabonne LGA, all LGAs of the RAA have a higher proportion of persons aged less than 65 with a profound or severe disability than NSW. This has implications for service provision in the LGAs.

Table 26
Disability, 2016

Census Geographic Area	Unpaid Assistance to persons with a disability (%)	Persons with a profound or severe disability and living in the community (%)	Persons aged 0 to 64 with a profound or severe disability (%)
Blayney LGA	12.6	4.8	3.3
Orange LGA	11.4	4.9	3.6
Bathurst LGA	11.8	4.7	3.3

Census Geographic Area	Unpaid Assistance to persons with a disability (%)	Persons with a profound or severe disability and living in the community (%)	Persons aged 0 to 64 with a profound or severe disability (%)
Cabonne LGA	12.4	4.1	2.5
Cowra LGA	12.7	6.3	4.6
NSW	11.6	4.9	3.0

Source: Torrens University Institute 2017.

Physical Health

Table 27 provides an overview of selected physical health indicators for LGAs of the SAA and RAA, and NSW, based on 2014-2015 PHIDU data. The indicators show:

- Modelled estimates (2014/2015) of people aged 18 years and over having one of four key health risk factors[5] show a higher rate of incidence in Blayney LGA (Aged-standardised rate (ASR) per 100 of 89) compared to NSW (ASR of 78); and
- Modelled estimates (2014/2015) of people aged 15 years and over at risk of having fair or poor self-assessed health show a slightly higher rate of incidence in the Blayney LGA (ASR per 100 of 17.9) compared to NSW (ASR of 14.3).

Table 27
LGA Physical Health Indicators

Census Geographic Area	Estimated number of people aged 18 years and over with one of four risk factors (ASR)[1]	Estimated number of people aged 15 years and over with fair or poor self-assessed health (ASR)[1]
Blayney LGA	89.0	17.9
Orange LGA	83.6	16.3
Bathurst LGA	80.7	16.4
Cabonne LGA	84.4	15.2
Cowra LGA	85.2	15.4
NSW	78.2	14.3

Source: Torrens University Institute 2019.

Notes:

1. ASR per 100

Mental Health

Stakeholders consulted for the SIA (particularly near neighbours) described increasing rates of mental health issues in the LGA, and suggested this was partly attributable to the stress of coping with the drought. This stress was described as affecting the financial and emotional wellbeing of farming families. Some near neighbours to the mine project area and also some residents of broader Blayney expressed increasing feelings of stress and anxiety due to the

[5] Current smokers, high risk alcohol, obese, no or low exercise in the previous week.

project. There is no up-to date information relating to the prevalence of mental health conditions in the Blayney LGA. PHIDU estimates for 2014/15 indicate higher modelled rates of psychological distress in people aged 18 years and over, based on the Kessler 10 scale, in Blayney LGA than the NSW average (ASR per 100 of 12.3 compared with 11.0) (Table 28).

Table 28
Number of People with Psychological Distress[1]

Census Geographic Area	Number	ASR per 100
Blayney LGA	634	12.3
Orange LGA	3,684	12.6
Bathurst LGA	3,647	12.3
Cabonne LGA	1,032	10.5
Cowra LGA	1,178	13.0
NSW	630,720	11.0

Source: Torrens University Institute 2019.

Note:

1. *Estimated number of people aged 18 years and over with high or very high psychological distress (PHIDU 2019).*

As shown in Table 29 for the year 2014/15, hospital admissions for mental health conditions (all persons and all hospitals) were lowest in Bathurst LGA, with an ASR of 1,510.8 per 100,000 people. Blayney LGA experienced higher hospital admissions for mental health conditions than Bathurst LGA and Cowra LGA, with an ASR of 1,690.4 per 100,00 people, but still below the NSW average of 1,975.3 per 100,000.

Table 29
Admissions for Mental Health Conditions

Census Geographic Area	Number	ASR per 100,000
Blayney LGA	122	1,690.4
Orange LGA	769	1,918.6
Bathurst LGA	626	1,510.8
Cabonne LGA	231	1,759.8
Cowra LGA	193	1,521.7
NSW	153,131	1,975.3

Source: Torrens University Institute 2019.

Other factors that influence, or are associated with a community's level of health and wellbeing are discussed in relevant sections and include:

- Economic activity, employment and income; and
- Access to community facilities and health services.

1.8.2 Crime and Community Safety

NSW Bureau of Crime Statistics and Research (BOCSAR) data shows that in Blayney LGA both domestic and non-domestic violence-related assaults have increased, as have indecent assaults, acts of indecent and other sexual offences (BOCSAR 2018; Logan 2018). According to discussions with the Chifley District Police Superintendent (2019) this can be attributed to a change in reporting of this data. It may also be compounded by the targeted campaign in the region encouraging domestic abuse victims to report incidences. The Chifley District Police Superintendent outlined that overall crime in the Blayney LGA and the regional area had actually marginally decreased. However, the occurrence of drug and alcohol related offences had increased in these areas, particularly in Bathurst. This issue was also mentioned during SIA consultation with the broader community.

Table 30 presents the change in offences over 2017-2018 in the Blayney LGA.

Table 30
Blayney LGA Crime Statistics, 2017-2018

Crime Categories	2017	2018	% Change
Domestic violence-related assault	14	40	185
Non-domestic violence-related assault	20	24	20
Indecent assault and other sexual offences	8	13	62.5
Break and enter from dwellings	39	24	-38
Break and enter from non-dwellings	26	13	-50
Stealing from a motor vehicle	20	33	65
Stealing from a dwelling	20	9	-55
Fraud	19	14	-26
Malicious damage to property	59	45	-24

Source: BOCSAR 2018.

Note:

1. *Blayney recorded no cases of robbery without a weapon, robbery with a firearm, robbery with a weapon not a firearm or any murders.*

Malicious damage to property was the most reported crime amongst the categories reported in BOSCAR, but with 45 cases being reported up to June 2018, it is still lower than the 59 cases reported in the same period to June in 2017.

1.9 SOCIAL INFRASTRUCTURE PROVISION

This section describes social infrastructure provision and services relevant to the communities of the Blayney LGA. The availability of social infrastructure and services across the Blayney LGA varies.

1.9.1 Community Services and Organisations

There are a range of community services in Blayney, including general community support, respite services and community transport. Limited services are available in the smaller villages of the Blayney LGA. Table 31 provides an indication of the larger community services available in the Blayney LGA.

Table 31
Community Services in the Secondary Assessment Area

Community Services	
Blayney Mens Shed	Blayney Branch – Australian Red Cross
Blayney Multi Service Outlet	Presbyterian Women's Association
Blayney Community Youth Group	Blayney Meals on Wheels
St Vincent De Paul	Blayney Interagency Group
Blayney Community Transport	Blayney Shire Can Assist

Community services in Blayney LGA are delivered through a combination of employed staff and volunteers. More than 30% of people aged 15 years and over in the Blayney LGA volunteer for an organisation.

1.9.2 Children's Services

The following preschools and early childhood services are available in the communities of interest within the Blayney LGA:

- Blayney Out of Hours School Care (Oosh) (Blayney Public School);
- Blayney Early Learners Long Day Care;
- Blayney Preschool;
- Millthorpe Oosh; and
- Cabonne/Blayney Family Day Care.

Out of Hours School Care and Vacation Care

Oosh care is available in Millthorpe and Blayney. Whilst Millthorpe Oosh is nearing capacity, Blayney Oosh has capacity for several children. Blayney Oosh is targeted towards children with diagnosed issues. Before school care is not offered in the LGA, but the LGA does have vacation care options available. Access to Oosh was not raised as an issue during consultation with the broader Blayney community or relevant service providers.

Children's Services – Current and Future Needs

Consultation undertaken for the SIA indicated that child care and preschool services in Blayney UCL have capacity for one to two additional children and Millthorpe UCL is at capacity and has an established waiting list. Millthorpe's Children's Garden day care closed in early 2018 and may have facilitated other child care within Millthorpe to reach capacity. The existing child care services available in the LGA are limited by the hours of operation and the available spaces for children. Construction of a new child care service *Circle Early Learning* recently commenced in Blayney. This centre is due to open late 2019 and will offer 53 child care places catering for ages 0-6 (Circle Early Learning 2019). The addition of this child care service will significantly improve accessibility to child care services for the existing population.

1.9.3 Education Services

Primary and Secondary Schools

Table 32 shows the primary and secondary schools within the Blayney LGA. There are six public primary schools and one private primary school in Blayney LGA, of which two schools (one public and one private) are located in Blayney. Blayney High School (BHS) is the only secondary school in Blayney LGA and is located in Blayney.

SIA Consultation findings indicate that Millthorpe Public School is a popular school within the Blayney LGA and is at full capacity, with eight demountable classrooms. Millthorpe Public School will be upgraded and extended as part of the NSW Governments $6 billion school building program. Enrolments at Blayney Public School (BPS) are increasing following a period of reduced enrolments. SIA consultation with education providers indicates a growing trend of families returning to BPS. Public schools located in the Blayney villages, with the exception of Millthorpe, all have capacity to accommodate extra students and currently have low enrolment numbers (i.e. less than 20 students).

Consultation with education providers identified that BHS' retention rate of students following year 10 is low as trade and apprenticeship careers are popular amongst students. Findings of SIA consultation with education providers indicates that BHS does have capacity in some classes, particularly within senior classes. BHS has experienced a decrease in enrolments over the last several years, which may be due to Blayney's proximity to several private and public schools in Bathurst and Orange.

Table 32
Primary and Secondary Education Services in Blayney LGA

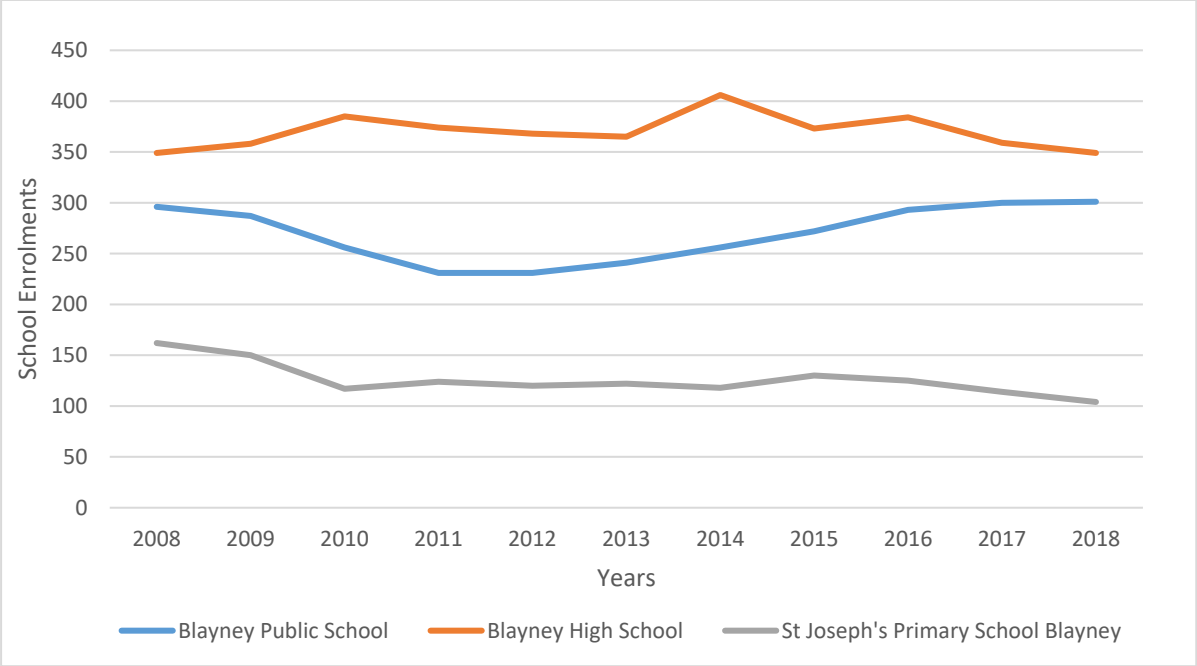
Education Services	Location
Blayney Public School (BPS)	Blayney
BHS	Blayney
St Joseph's Catholic Primary School	Blayney
Millthorpe Public School	Millthorpe
Neville Public School	Neville
Lyndhurst Public School	Lyndhurst
Mandurama Public School	Mandurama
Carcoar Public School	Carcoar

Source: ACARA 2019.

Graph 10 shows enrolment data for all schools in Blayney UCL between 2008-2018. The proximity of Blayney to the regional centres of Orange and Bathurst and the presence of a number of private secondary schools in these locations combined with the provision of school bus services on key routes means many families in the Blayney LGA send their children to public and private secondary schools in Bathurst and Orange.

According to education providers in the Blayney LGA, private schools in the regional centres are increasingly preferred by parents and students. The findings of SIA consultation suggest that schools in the nearby regional centres of Bathurst and Orange are favoured over BHS due to the increased range of sporting options on offer, a greater diversity in subjects and proximity to tertiary education providers. BHS has a low participation rate for years 11 and 12, and many students who want to pursue senior academic classes are required to access services in other regional schools.

Graph 14
Blayney School Enrolments 2008-2018



Source: ACARA 2019.

Table 33 summarises the primary and secondary education services in the nearby centres of Orange and Bathurst. A number of school bus services operate between Blayney and private schools in Orange and Bathurst.

Table 33
Primary and Secondary Education Services in Regional Centres

Education Services	Location	Enrolment (Number)
Kinross Wolaroi School	Orange	1,094
Orange Christian School	Orange	327
St Mary's Primary	Orange	385
Canobolas Public School	Orange	109
Orange Public School	Orange	662
Bowen Public School	Orange	228
Bletchington Public School	Orange	629
Calare Public School	Orange	651
Glenroi Heights Public School	Orange	212
All Saints College	Bathurst	447
Cathedral School	Bathurst	379
The Scots School Bathurst	Bathurst	288
Assumption Catholic School	Bathurst	383

Education Services	Location	Enrolment (Number)
Holy Family School.	Bathurst	387
MacKillop College	Bathurst	621
St Stanislaus College	Bathurst	580
St Philomena's Primary School	Bathurst	206
Bathurst Public School	Bathurst	577
Carenne Public School	Bathurst	108
Kelso Public School	Bathurst	257
Bathurst South Public School	Bathurst	243
Bathurst West Public School	Bathurst	412
Bathurst High Campus	Bathurst	973
Kelso High Campus	Bathurst	787

Source: ACARA 2019.

Further and Tertiary Education

There are no higher education providers within the Blayney LGA however, within the RAA there are a number of TAFE campus locations and two University providers. Table 34 describes the tertiary education services available in the RAA.

Table 34
Tertiary Education Services

Service	Location
Charles Sturt University	Bathurst
Training and Education Support Industries Skilled Unit	Orange
TAFE NSW – Western Institute	Bathurst
Orange College of TAFE	Orange
University of Newcastle	Orange

1.9.4 Health Services

Regional Health Service Provision

The Blayney LGA is located within the Western NSW Local Health District (LHD). This LHD services a population of approximately 277,353 people (Western NSW LHD 2016).

There are three major rural referral centres in the Western NSW LHD:

- Bathurst Hospital;
- Orange Hospital; and
- Dubbo Hospital.

There are three district hospitals (Cowra, Lachlan (Parkes and Forbes) and Mudgee) and over 30 rural hospitals in the Western NSW LHD.

There is one public health service in the Blayney LGA: the Blayney Multipurpose Health Service (MPHS).

Health Facilities in Blayney LGA

Blayney MPHS

The Blayney MPHS includes an emergency department, general hospital care, domiciliary care unit and a nursing home care unit. The MPHS provides a total of 29 beds, of which nine are allocated for acute general medical concerns and 20 beds are high care permanent beds. The emergency department is a nurse led service, that possess a camera service connection for triage 1 and 2.

The Blayney Ambulance service is co-located on site with the Blayney MPHS. The medical centre is only operational weekdays from 9am - 5pm, and Saturday 9am - 12pm. Despite the emergency service not being fully equipped at all times, patients only bypass Blayney if it is considered a major trauma, stroke or cardiac incident.

Blayney MPHS staff indicated that they are receiving higher volumes of emergency cases and typically treat slow-stream rehabilitation patients, diabetics, drug and alcohol patients and mental health cases.

Higher level services are accessed through Orange or Bathurst hospital or referred to Newcastle of Sydney.

Table 35 lists the key health services in the regional centres of Orange and Bathurst LGAs.

Table 35
Health Services in the Region

Blayney District Hospital	Bathurst Base Hospital and Health Service
Orange Health Service & Bloomfield Hospital	Macquarie Care Centre, Bathurst
Dudley Private Hospital, Orange	Bathurst Private Hospital
Marathon Health – Bathurst Office	St Vincents Private Hospital, Bathurst
Bathurst Community Health	Orange Community Health

Source: Western NSW Local Health District 2016.

General Practitioners

Within the Blayney LGA there are general practitioner services located in Blayney, Millthorpe and Carcoar, including:

- Blayney Family Medical Practice (BFMP);
- Millthorpe Medical Practice; and
- Carcoar Medical Centre.

The capacity of health services is identified as an area of concern in the Blayney LGA Community Plan. *"Although people in the Shire have good access to medical facilities at neighbouring centres there is a need for a doctor to operate the existing emergency centre. If these facilities are not used there is a risk they will be lost." (BSC 2018 pp 6).* According to BFMP staff, the additional services such as psychologist, x-ray, dentist etc. do not operate in the practice every day, and this is seen as a deterrent to Blayney residents as they are unsure what service is available and when. Thus, many Blayney residents defer to using health services in the broader region (i.e. the LGAs of Orange and Bathurst).

Aged Care Services

Blayney has two aged care services in the LGA and both are at capacity. Aged care is a high demand service area within the LGA due to the aging population. Uralba Retirement Village has 22 rooms and one respite room. Lee Hostel is a nursing home with 28 beds.

Anecdotally, within Blayney township there is a significant elderly population accessing in home care due to an absence of suitable retirement village accommodation or residential care facilities. Within Blayney LGA, the demand for aged care and respite centres will increase into the future, with additional beds likely to be required into the future. Blayney Meals on Wheels service also assists elderly people where possible, but technically they are only meant to service disability. Other organisations do not typically provide services to the elderly population of Blayney.

1.9.5 Emergency Services

Table 36 presents a summary of emergency services operating in the SAA.

Table 36
Emergency Services in the Blayney LGA

Emergency Services	
Blayney Township Services	Blayney Fire and Rescue (Fire Station) NSW State Emergency Services (SES) Blayney Unit Blayney Ambulance Service Blayney Police Station Blayney Rural Fire Service
Village Services	Carcoar Police Station Millthorpe Police Station Mandurama Police Station
	Millthorpe Rural Fire Brigade (RFB) Kings Plains (RFB) Lyndhurst (RFB) Mandurama (RFB) Neville (RFB) Panura – Burnt Yards Rural Fire Service (RFS) Barry/Hobbys (RFB) Newbridge (RFB) Tallwood (RFB)

Source: BSC 2018 and Western NSW Local Health District 2016.

Police Services

There are three police stations in the SAA all of which form part of the Chifley Local Area Command (LAC) within the Western Region. The Chifley LAC office is located in Bathurst and in addition to the police stations within the Blayney LGA, the Chiefly LAC also includes Bathurst, Capertree, Hill End, Lithgow. Oberon, Portland, Rockley, Trunkey Creek and Wallerawang police stations.

Law enforcement is raised as an issue in the Blayney LGA Community Plan. "*Law enforcement is also not as readily available as it could be in emergencies. These issues bring about unease in the community" (BSC 2018 pp. 6).* Chifley District Superintendent indicated a desire to employ more staff to support improvements in safety across Chifley Police District. Blayney LGA is meant to be serviced by one sergeant and three detectives, however at the time of consultation it was serviced by one sergeant and one detective on a return-to-work program. The Blayney villages operate on a call-out basis. Police service delivery in Blayney LGA is supported by police services in other areas of the Chifley LAC.

In terms of crime, Chifley Police describe Blayney as a typical rural town in terms of crime. The majority of crime in the Blayney LGA is categorised as firearm disturbance or general break and enter crimes. The findings of SIA consultation with the Chifley Police indicate an increasing prevalence of drugs across the Chifley Police District.

Ambulance Services

The mine development project area (herein mine project area) is located within the NSW Ambulance Service's Regional Division in the Central West Area 1, Zone 1. There are three major response stations (Orange, Bathurst and Blayney) for the mine project area with Blayney operating as the primary response station.

The Blayney Ambulance service rosters one crew on during the day (8am to 6pm) and one crew on call at night-time. The Blayney Ambulance service is staffed by five permanent paramedics and one part-time paramedic. The crew is typically out of town servicing other areas. The Ambulance services in the region operate on a proximity basis i.e. whoever is closest and available at the time of the incident will respond to the incident. A Blayney Ambulance Station Officer said that the demand for the Ambulance service is generated outside of Blayney and in the other major regional centres. Whilst the NSW Ambulance service does have borders for their service provision, the regions' service area borders are blurred due to the proximity of Blayney to Bathurst, Orange and Cowra.

Rural Fire Service

The mine project area is located within the Canobolas Rural Fire Service Zone within the Central West Region of NSW. The Canobolas Zone is centred on the City of Orange and the major towns of Blayney, Cowra and Molong form the local government centres within the area. The Canobolas RFS Manager confirmed that there are 80 brigades across four LGAs. The Canobolas zone also includes the Kings Plains RFB.

1.9.6 Recreation, Leisure and Sporting Facilities

The Blayney LGA supports a number of sporting facilities including CentrePoint Sport & Leisure Centre (CentrePoint) in Blayney, and a number of grounds for AFL, athletics, cricket, netball, rugby league, rugby union, tennis and touch football across the LGA. CentrePoint caters for a variety of sports, including a popular swim club. The sports and leisure centre has an indoor heated pool, a gym and offers vacation care.

Most villages in the LGA have a sportsground and park.

The Blayney showground and pavilion are widely used for events and for regular sporting activities; the showgrounds also act as a space for other sporting practices during the week if fields are not available or are rained out. A major equestrian facility is currently under construction at the Blayney Showgrounds. A new walking track is also currently under construction along the Belubula River in Blayney.

In 2012 the BSC completed a Sport and Recreation Plan (BSC 2017). The preparation of the Sport and Recreation Plan was informed through an online survey of local trends in recreation and participation in sport and was supplemented with public displays and one-on-one

interviews. Consultation conducted to inform the Sport and Recreation Plan identified that existing facilities need to be upgraded.

Recent investments in sport and recreation in the Blayney LGA include:

- The provision of financial support for the upgrade the Blayney showgrounds; and
- Upgrades of the pool facilities in CentrePoint in Blayney LGA.

1.9.7 Community and Religious Facilities

Blayney Shire has 14 multipurpose community halls and centres, varying from historical weatherboard community halls established many years ago, to the relatively new Blayney Community Centre. Community halls and centres owned by BSC are available for hire.

There are a number of religious facilities in the Blayney LGA. Religious facilities are provided in the majority of the Blayney villages, with services provided at varying frequency. Table 37 identifies the religious facilities within the main centre of Blayney.

Table 37
Blayney Religious Facilities

Religious Facilities
Blayney Community Baptist Church
Abundant Life Church
Seventh Day Adventist Church
Blayney Catholic Parish Churches
Blayney Uniting Church
Blayney Presbyterian Church
Blayney Anglican Parish of Blayney

Source: Blayney NSW 2018.

The vision for culture in the Blayney LGA is to preserve and build on the strong cultural foundations in the region and foster diversity and creativity. There are various festivals and events held in the Blayney LGA throughout the year including the Millthorpe Markets and Carcoar Cup Running Festival. Cultural development through tourism opportunities in the Blayney LGA was identified as an area of need and priority during SIA consultation.

1.9.8 Social Support Services and Community Groups

There are a range of social support services and community groups located in the Blayney LGA that are typical of the sizes of the urban settlements that each of them service.

The following services operate within Blayney (BSC 2018a):

- Community Transport (provided by CareWest) – offers door-to-door transport for the aged 'over 65' population, persons with disabilities and carers;
- CanAssist – offers support to cancer patients and their families;
- Wangarang Industries – offers training and support for people with disabilities;
- Meals on Wheels – delivers at-cost meals to frail aged and disabled persons; and
- Several Blayney religious affiliations provide support and donation funds to vulnerable sectors of the community.

1.9.9 Commercial and Retail Facilities

Blayney and Millthorpe are the main centres for retail and commerce in the Blayney LGA.

Blayney is serviced mainly by retail businesses, agricultural businesses and food and accommodation businesses, namely restaurants, bakeries and cafes, hotels and motels, a single super market (i.e. Bernardi's), real estate agents, several boutique stores, electrical equipment, and machinery stores, as well as several fuel stations.

Blayney is also home to several large business operations including:

- Western White Linen laundry service;
- Nestle Purina PetCare; and
- CVO.

Millthorpe has smaller retail businesses including cafes and restaurants, clothes stores, gifts and homewares, and boutique stores, as well as motels, a post office, a pharmacy and a medical practice. Millthorpe has a strong food and accommodation sector and is experiencing growing weekend demand from tourism.

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APPENDIX G

Impact Significance Assessment

APPENDIX G

Table 1
PAA Mine Development Significance Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.5	Resident health and wellbeing is affected by sleep disturbance resulting from the noise and vibration impacts of the mine development	Residents of the Kings Plains Locality	Short-term. Initial 6 months of the project	Initial site establishment phase	H	E1	E1	L
6.3.5	Resident health is affected due to dust emissions from the mine project area	Residents of Kings Plains Locality and some near neighbours to the north and west of the mine project area	Long-term	Life of Mine	H	C3	D2	L
6.3.7	Impacts to service delivery for the Kings Plains Rural Fire Brigade (RFB) due to project induced potential population decline in Kings Plains community and associated reduction in volunteer pool	Kings Plains Service RFB and Canobolas District Rural Fire Zone	Long-term	Life of Mine	M	D3	D1	L
6.3.2	Blasting results in damage to private property damage	All residents of the PAA	Long-term	Life of Mine	H	C3	D2	L

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.1	Closure of Dungeon Road results in changes in property accessibility and increased travel times	All near neighbours	Long-term	Life of Mine	M	C3	D2	L
6.3.5	Resident health and wellbeing is affected by sleep disturbance resulting from the noise and vibration impacts of the mine development	Residents of the Kings Plains Locality	Long-term – beyond Year 3	Operations Phase	H	C3	C2	M
6.3.3	Mine development has an economic impact on existing commercial apiarian businesses	Existing apiarian businesses	Medium-term	Construction Phase and Operations Phase	H	A4	D3	M
6.3.3	Changes in groundwater accessibility impact agricultural livelihoods	Residents of the PAA	Medium-term	Construction Phase and Operations Phase	H	C4	D2	M
6.3.3	Mine development reduces access to surface water or ground water resources at private properties	All residents of the PAA	Long-term	Life of Mine	H	D4	D3	M
6.3.2	Impact to sense of place due to adverse changes in valued attributes of the local area (i.e. the landscape and the natural environment, and community)	Residents of Kings Plains Locality. People with historical connection to the land and locality	Long-term. Impact most significant in the initial construction phase when landscape changes are most significant	Life of Mine	H	A4	B3	H

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.3.4	Fragmentation of Kings Plains community and potential changes to social cohesion	Residents of Kings Plains	Medium-term. Impact likely to be most significant during Year 1-Year 3 when cumulative amenity impacts are predicted to be greatest	Construction Phase and initial years of Operation Phase	H	A4	B3	H
6.3.4	The mine development impacts the existing rural way of life	Residents of the Kings Plains Locality. Some residents of located to the north and west of the mine project area	Long-term	Life of Mine	H	A4	B3	H
6.3.5	Resident health and wellbeing is affected by the stress and anxiety associated with project uncertainty	Residents of Kings Plains Locality and some residents in the broader Primary Assessment Area (PAA)	Medium-term	Construction Phase and initial years of Operation Phase	H	A4	C3	H
6.3.6	Perceived reduction in the value of private property due to proximity of the mine development and anticipated amenity impacts	All residents of the PAA	Long-term	Life of Mine	H	B4	C4	H
6.3.2	Rural amenity of near neighbours is reduced due to the impact of cumulative	Residents of Kings Plains locality and	Long-term. Impact greatest in the first 1-3 years when the	Life of Mine	H	A4	B3	H

SIA Ref	Social Impact	Stakeholder	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
	biophysical changes i.e. noise levels and a reduction in visual quality	some near neighbours to the west and north	southern amenity bund is under construction					
6.3.3	Mine development impacts the cultural ecosystem services accessed by residents	Residents of the Kings Plains Locality and some neighbours to north and west of the mine project area	Long-term	Life of Mine	H	A4	C3	H
6.3.3	Mine development impacts the provisioning ecosystem services accessed by residents	Residents of the Kings Plains Locality , some neighbours to north and west of the mine project area and commercial apiarists	Long-term	Life of Mine	H	A4	B4	H
6.3.2	Residents experience reduced enjoyment of outdoor spaces at night due to intrusive lighting and resulting impacts on dark skies.	Residents of Kings Plains locality and some near neighbours to the west and north	Long-term	Life of Mine	H	A4	C3	H
6.3.5	Resident health and wellbeing is affected by sleep disturbance resulting from the noise and vibration impacts of the mine development	Residents of the Kings Plains Locality	Medium-term – Year 1 – Year 3 when the southern amenity bund is under construction	Operations Phase	H	B4	C3	H

Note: H – High, M – Moderate, L – Low

Table 2
PAA Mine Development Significance Assessment – Social Opportunities

SIA Ref	Social Opportunity	Stakeholder	Temporal	Project Phase	Unmitigated Opportunity	Enhanced Opportunity	Significance
6.2.9	Employment opportunities for local residents	Some near neighbours, particularly residents with children	Long-term	Life of Mine	C2	B2	L

Note: H – High, M – Moderate, L – Low

Table 3
SAA Mine Development Significant Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.8	Increased demand for health and emergency services by the operations workforce reduces access to these services for existing residents	Existing residents of Blayney LGA, and health and emergency service providers	Long-term	Operations Phase	M	D2	D2	L
6.2.8	Increased demand for children's services and facilities e.g. child care in Blayney LGA reduces service accessibility for existing residents and/or increases cost of services	Low-socio economic households, families with young children and single parent families	Long-term	Operations Phase	M	C2	D2	L
6.2.8	Increased demand for community services reduces access to these services for existing residents	Residents of Blayney LGA	Long-term	Life of Mine	L	C2	C1	L
6.2.1	Closure of Dungeon Road impacts access and connectivity	Residents of the PAA and Blayney residents	Long-term	Life of Mine	L	C3	D2	L
6.2.8	Project workforce increases demand for delivery of services e.g. waste management by Blayney Shire Council (BSC)	BSC and residents of Blayney LGA	Long-term. With majority of the impact experienced during Construction Phase	Life of Mine	L	C3	C2	L

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.7	Influx of operations workforce leads to changes in structure and cohesion of the Blayney township community and Millthorpe Village community	Residents of Blayney and Millthorpe	Long-term	Operations Phase	L	D2	E1	L
6.2.7	Proximity of the mine development to Blayney the increased presence of a mine workforce in Blayney township results in permanent changes to the character of Blayney township	Residents of Blayney township	Long-term	Life of Mine	M	C3	D2	L
6.2.4	The Mine Development results in a loss of valued rural heritage	Residents of Blayney LGA	Construction Phase	Life of Mine	L	D2	D2	L
6.2.10	The project leads to reduced productivity in the agricultural sector	Existing agricultural businesses in Blayney LGA, including supporting businesses	Long-term	Life of Mine	H	C3	D2	L
6.2.1	Disruption to the local road network impacts resident accessibility and connectivity	Residents of Blayney LGA	Short-term	Construction Phase	L	C2	C1	L
6.2.7	Reduction in the "journey experience" for tourists arriving in Blayney via the Mid Western Highway	Visitors to Blayney	Medium-term. Impact greatest in Years 1-3 as the waste rock emplacement (WPE) is constructed	Construction and Operations Phase	H	C3	D2	L

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.2	Increased mine traffic on local roads leads to an increased need for road maintenance and places a financial burden on the BSC or Cabonne Council (CC)	BSC, CSC and LGA residents	Long-term	Life of Mine	M	A3	D2	L
6.2.3	The project's dependency on ecosystem services reduces accessibility for other users	Water users	Long-term	Life of Mine	M	B4	D2	L
6.2.11	Removal of mine project area from the supply of agricultural land in the Blayney LGA impacts agricultural production in the LGA	Local agricultural industry, NSW Farmers Federation and neighbours in proximity to the mine project area	Long-term	Life of Mine	H	C2	D2	L
6.2.5	Increased demand for short-term accommodation by the operations workforce presents challenges for competing local industry and businesses	Residents of Blayney LGA	Short-term. Impact felt with initial influx of workforce	Operations Phase	L	C3	D2	L
6.2.5	Economic and environmental costs arising from the introduction of possible "poor" quality water from the Centennial pipeline	Property owners and surface water users	Long term	Life of Mine	M	C2	E2	L

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.2	Increased traffic on the local road network disrupts school bus routes and poses a risk to passenger safety	School bus service operators and user groups	Long-term	Life of Mine	H	C4	D2	L
6.2.5	The use and enjoyment of Carcoar Dam by the public is impacted by the project	Existing and potential users of Carcoar Dam recreation area	Long-term	Life of Mine	H	D3	D2	L
6.2.5	Operations Phase workforce accommodation demands reduce accessibility to private housing for existing and future residents	Existing and future residents of Blayney	Short-term as impact will be experienced with initial influx of Operations Phase workforce	Operations Phase	L	C2	D2	L
6.2.5	The use and enjoyment of the Belubula River by the public is impacted by the project	Residents of Blayney LGA and Landowners along the Belubula River	Long-term	Life of Mine	H	D4	D2	L
6.2.7	The mine development leads to adverse changes in the public perception of the character of Blayney LGA and township reducing the attractiveness of the destination to tourists and potential future residents	Residents of Blayney LGA, business operators, service and facility providers and BSC	Long-term	Life of Mine	H	C3	D2	L
6.2.5	Increased demand for local and regional housing support services due to displacement of low-income households	Housing Plus and other housing support services as well as low-income households	Medium-term (18 months)	Construction Phase	M	B2	C2	M

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.3/ 6.2.11	Downstream landholders experience livelihood impacts due to project impacts on the quantity and quality of water in the Belubula River	Downstream landowners along the Belubula River	Long-term	Life of Mine	H	D4	D3	M
6.2.3	The mine development reduces existing accessibility to ecosystem services for residents of the Blayney LGA	Residents of Blayney LGA	Long-term	Life of Mine	H	A3	C2	M
6.2.10	Reduced employment and economic output in other sectors of the economy (e.g. trades and services) as a result of the project	Businesses and residents employed in non-mining sectors of the economy	Medium-term	Construction Phase	H	B3	C3	M
6.2.4	The Mine Development results in further loss of cultural heritage and connection to country for Aboriginal people, and further impacts to the beliefs and values of the Wiradjuri People	Wiradjuri People and Orange Local Aboriginal Land Council	Intergenerational	Life of Mine	H	C3	C2	M
6.2.12	Difference sectors of the Blayney LGA experience a greater social and economic burden of the project	Vulnerable groups, Low income households	Medium-term	Life of Mine	M	A3	B3	M
6.2.2	Increased mine traffic on the local and regional road network reduces safety for road users	Local road users	Long-term	Life of Mine	H	C3	C2	M

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.10	The project generates inflationary pressures contributing to changing lifestyle affordability	Non-mining sector of Blayney LGA, low-to medium income households of Blayney LGA, and vulnerable households (e.g. elderly)	Long-term. Impact likely to be most significant during Construction Phase	Life of Mine	M	C3	C2	M
6.2.2	The potential for significant economic and social costs to society due to a cyanide contamination event	Residents of Blayney LGA and neighbouring Cabonne LGA	Intergenerational	Life of Mine	H	C4	D3	M
6.2.10	The economic and social benefits of the project do not accrue to Blayney LGA	Residents of Blayney LGA	Long-term	Life of Mine	H	D3	E3	H
6.2.10	Local business expectations in relation to project opportunities are not met resulting in a financial burden for some local businesses and potential loss of services for Blayney community	Local business owners and operators, and their families	Ongoing risk throughout Construction and initial phases of Operation	Construction and Operations	H	C4	C3	H
6.2.7	Influx of construction workforce leads to changes in structure and cohesion of the communities of Blayney and Millthorpe townships	Residents of Blayney and Millthorpe	Medium-term. Impact likely 18 months, and temporary	Construction Phase and initial Operations Phase	H	B3	C3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.5	Increased demand for short-term accommodation by the construction workforce presents challenges for competing local industry and businesses	Residents of Blayney LGA, business operators, service and facility providers and BSC	Medium-term (18 months)	Construction Phase	H	A3	C3	H
6.2.5	Construction Phase workforce accommodation demands reduce accessibility to private housing for existing and future residents	Existing and future residents of Blayney	Medium-term	Construction Phase	M	A3	B3	H
6.2.5	Low-income households are displaced from private rental accommodation in Blayney due to workforce accommodation demands	Low-income households, vulnerable groups (e.g. elderly and Indigenous households)	Medium-term (18 months)	Construction Phase	M	A3	C3	H
6.2.9	Construction phase labour demands results in labour draw from the non-mining sector impacting economic output and business viability	Non-mining sector in Blayney LGA	Medium-term	Construction Phase	H	A4	A3	H
6.2.9	Construction phase labour demands significantly constrain the local labour market of Blayney LGA	Blayney LGA	Medium-term	Construction Phase	H	A3	B3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.2.10	The project reinforces the Blayney LGA's specialisation in mining potentially increasing economic vulnerabilities	Blayney LGA	Long-term	Life of Mine	L	B3	C3	H
6.2.8	Increased demand for health and emergency services by the construction workforce reduces access to these services for existing residents	Existing residents of Blayney LGA and health and emergency service providers	Medium-term	Construction Phase	M	B3	C3	H

Note: H – High, M – Moderate, L – Low

Table 4
SAA Mine Development Significance Assessment – Social Opportunities

SIA Ref	Social Opportunity	Stakeholders	Temporal	Project Phase	Opportunity	Enhanced Opportunity	Significance
6.2.7	Resident population growth in Blayney township enhances volunteer labour pool	Residents, service providers and organisations in Blayney LGA	Long-term	Life of Mine	C2	C3	L
6.2.7	Project induced resident population growth in Blayney township and Blayney LGA supports stronger community cohesion and enhanced liveability	Existing residents of Blayney LGA, BSC, Service and facility providers and local businesses.	Long-term	Operations Phase	C1	B3	M
6.2.9	Opportunity to increase labour and skills capacity in the Local Area	LGAs of the Local Area	Long-term	Life of Mine	C2	C3	M
6.2.9	Indigenous people in the Local Area are employed on the project	Indigenous population	Long-term	Life of Mine	C2	B3	M
6.2.9	Enhanced education and training opportunities available at Blayney High School	High school students at Blayney High School and local business operators	Long-term	Life of Mine	C2	B3	M
6.2.10	Economic benefit to the Central West Region (CW Region)	Residents, business operators, service providers and Councils in the CW Region	Long-term	Life of Mine	A3	A4	M
6.2.8	Stronger local investment supports improvements and/or expansion in services and facilities in Blayney LGA	Residents of Blayney LGA and visitors to the region	Long-term	Life of Mine	C3	A3	H
6.2.10	Increased local spend supports long-term sustainability of existing local businesses and creates opportunities for expansion or establishment of new businesses	Local business owners and residents of Blayney LGA	Long-term	Life of Mine	C3	B3	H

SIA Ref	Social Opportunity	Stakeholders	Temporal	Project Phase	Opportunity	Enhanced Opportunity	Significance
6.2.10	The significant economic benefits of the project accrue to the Blayney LGA	BSC, Blayney residents, and businesses and service providers in Blayney LGA	Long-term	Life of Mine	B3	A3	H
6.2.5	Growth in the land and housing development market in Blayney	Existing and new residents of Blayney township, BSC, business operators and service providers	Long-term	Operations Phase	B3	A3	H
6.2.9	The creation of direct and indirect jobs in Blayney LGA	Residents of Blayney LGA and business operators	Long-term	Life of Mine	A3	A4	H

Note: H – High, M – Moderate, L – Low

Table 5
Cumulative Mine Development Significant Assessment – Social Impacts

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.4.2	Reduced productivity in the local agricultural industry	Agricultural businesses and residents of the Blayney LGA	Long-term	Life of Mine	H	D2	D2	L
6.4.2	Reduced accessibility to short-term accommodation due to cumulative impacts of other projects in the Blayney LGA	Low-income households, vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	C4	C3	H
6.4.2	Sustained reliance on a single industry for economic growth and infrastructure provision	BSC and broader Blayney community	Long-term	Life of Mine	M	A4	A3	H
6.4.2	Temporary shortage of short-term accommodation impacts accessibility to accommodation for the non-mining sector	Visitors to the Blayney LGA, non-mining sector business, low-income households and vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	A4	A3	H
6.4.2	Short-term cumulative shortage of private rental accommodation for the non-mining sector	New and existing residents of Blayney LGA, low-income households, vulnerable groups (e.g. elderly, single parent households and Indigenous households)	Medium-term	Construction Phase	H	A4	A3	H

SIA Ref	Social Impact	Stakeholders	Temporal	Project Phase	Stakeholder Concern	Unmitigated Risk	Mitigated Risk	Significance
6.4.2	Temporary increase in demand for health and emergency services increases demands for service providers and reduces access to services for existing residents	Blayney LGA health and emergency service providers and Blayney LGA	Medium-term	Construction Phase	M	B4	B3	H
6.4.2	Cumulative increase in temporary workforce in Blayney leads to temporary changes in community cohesion	Residents of Blayney LGA	Medium-term	Construction Phase	L	B3	C3	H
6.4.2	Short-term labour draw from the non-mining sector impacts the operation of non-mining sector businesses	Blayney LGA businesses	Medium-term	Construction Phase	H	B3	C3	H

Note: H – High, M – Moderate, L – Low

APPENDIX H

NSW SIA Guideline Requirements

APPENDIX H

1.0 SIA GUIDELINE REQUIREMENTS

1.1 CORE PRINCIPLES OF THE SIA GUIDELINE

Table 1
Application of SIA Guideline Core Principles

SIA Core Principle	Application in the SIA
Action-oriented	Sections 6-7 and Section 10 demonstrates outcomes that are practical, achievable and effective.
Adaptive	This report illustrates adaptive management and monitoring measures to support the projects continued improvement. Community feedback has informed the development of the preferred mine layout (Section 3 and Appendix B and Appendix D) and contributed towards the development of mitigation measures.
Distributive Equity	The SIA describes how the impacts and benefits of the project are likely to be distributed across time, space (geography) and socially (amongst different groups within society). The Economic Impact Assessment (EcIA) (Gillespie Economics 2019) describes the distribution of economic benefits of the project. Key management strategies i.e. construction of the pit and southern amenity bunds, local content plan, construction workforce accommodation strategy (CWAS) were discussed and evaluated in consultation with nearby residents and/or broader community. The final mine layout plan was determined based on the findings of initial scoping engagement and ongoing engagement with near neighbours to understand potential issues and concerns. Existing social equity in the project's social area of influence is described in Section 6.
Impartial	This report is written in an impartial manner. The information provided in this report is objective and independent; it is supported through technical reports, as well as through consultation outcomes. It is not prejudice. The SIA reports community views and 'voices' faithfully, and these views have informed the consideration of impact significance. This report has been developed by Bronwyn Pressland and Lauren Jessup. A declaration of authorship and independence is included at the front of this report.
Inclusive	Consultation with affected and interested stakeholders, and near neighbours has informed this report. A variety of engagement mechanisms were employed for the SIA including a series of group workshop discussions, telephone surveys of discreet stakeholder groups e.g. business owners, structured face-to-face interviews with near neighbours, telephone interviews and small group discussions. SIA engagement is described in Section 3 and Section 4, and Appendix B and D.
Integrated	Where relevant and possible, this report references analysis from other assessments to avoid duplication and double counting of impacts in the EIS. The SIA references academic studies, as well as community minutes and data from other resource projects in the Region to identify any further potential community concerns and inform the assessment of likely impact significance.
Life Cycle Focus	The SIA examines the potential impacts of the project across the project life. The SIA examines the cumulative impacts of other industrial projects

SIA Core Principle	Application in the SIA
	(i.e. mining, transport, quarry etc) throughout the project life cycle as well as the impact of ongoing rural drought conditions.
Material	The SIA provides a clear and detailed breakdown of social impacts that matter the most to the impacted community. The significance of the identified project impacts is presented in Section 8 and Section 10. Mitigation and management measures are applied to the predicted impacts and the significance of each impact is rated as high, medium or low.
Precautionary	The SIA considers the precautionary principle and addresses uncertainty by identifying and taking into consideration a breadth of potential social impacts. The identification of social impacts has been informed by the experiences of communities located in proximity to existing mining areas such as the Cadia Valley Operations.
Proportionate	The SIA includes a detailed social baseline based on relevant social indicators, and documents conditions and trends without the project (Section 5 and Appendix F).
Rigorous	Appropriate and robust evidence gathered from authoritative sources including consultation has been used to support information presented in the SIA. The SIA considers how social impacts are valued, experienced, and distributed between groups and or individuals in the community. The SIA also considers alternative scenarios.
Transparent	All information and assumptions in this report are explained and justified. People engaged can clearly identify how their input has been considered throughout the report, including concerns raised and resulting management measures.

1.1 SIA REPORT CHECKLIST

Table 2
NSW SIA Guideline Review Questions, 2017[1]

No	Question	Requirement Responses
General		
1	Has the applicant applied the principles in Section 1.3? How?	Yes. The SIA principles have been applied in the SIA and are described in Table 1 of Appendix H.
2	Does the lead author of the Scoping Report meet the qualification and skill requirements in Box 2?	Declaration (page i) in SIA. SIA Appendix A (SIA author curriculum vitae).
3	Does the lead author of the SIA component of the EIS meet the qualification and skill requirements in Box 4?	Declaration (page i) in SIA. SIA Appendix A (SIA author curriculum vitae). The author does not have membership with any professional organisations.

[1] These review questions are generally adapted from Vanclay. F. et. al. (2015).

No	Question	Requirement Responses
4	Has the lead author of the SIA component of the EIS provided a signed declaration certifying that the assessment does not contain false or misleading information?	Declaration (page i) in SIA.
Community engagement for social impact assessment (Section 2)		
5	Does the SIA include adequate explanations of how the engagement objectives have been applied? How?	Details of engagement methods and outcomes, including how engagement objectives have been applied are detailed in Section 3 of the SIA.
6	Does the SIA demonstrate that there has been a genuine attempt to identify and engage with a wide range of people, to inform them about the project, its implications and to invite their input? How?	Engagement for this SIA was undertaken and documented in accordance with the guideline and its principles. An attempt to identify and engage with a wide range of people was undertaken during SIA consultation. SIA methodology and SIA consultation is further described in Section 3. SIA Appendix B provides a detailed description of the methods of engagement. SIA Appendix D summarises the outcomes of this engagement.
7	Does the SIA demonstrate that an appropriate range of engagement techniques have been used to ensure inclusivity and to ensure the participation of vulnerable or marginalised groups? How?	A wide range of engagement techniques were employed to gather input and information into the SIA. The method of engagement is described in Section 3 and Appendix B of the SIA. Inclusive participation in engagement was encouraged and vulnerable and marginalised groupings were contacted through non-government organisations, Wiradjuri representatives and through religious affiliations. The Aboriginal Cultural Heritage Impact Assessments prepared for the mine development and the pipeline development capture consultation with Aboriginal stakeholders.
Scoping – area of social influence (Section 3.1)		
8	Does the Scoping Report identify and describe all the different social groups that may be affected by the project?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 of the SIA. SIA Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
9	Does the Scoping Report identify and describe all the built or natural features located on or near the project site or in the surrounding region that have been identified as having social value or importance?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
10	Does the Scoping Report identify and describe current and expected social trends or social change processes being experienced by	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. Appendix B also reflects the SIA

No	Question	Requirement Responses
	communities near the project site and within the surrounding region?	methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
11	Does the Scoping Report impartially describe the history of the proposed project, and how communities near the project site and within the surrounding region have experienced the project to date and others like it?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. SIA Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
Scoping – identifying social impacts (Section 3.2, Appendix A and Appendix B)		
12	Does the Scoping Report adequately describe and categorise the social impacts (negative and positive), and explain the supporting rationale, assumptions and evidence for those categories?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
13	How has feedback from potentially affected people and other interested parties been considered in determining those categories? Does the Scoping Report outline how they will be engaged to inform the preparation of the SIA component of the EIS?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
14	Does the Scoping Report identify potential cumulative social impacts?	Yes. The Scoping Report is adequately reflected in Section 3, and Section 5 in the SIA. SIA Appendix B also reflects the SIA methodology in further detail. Scoping Phase outcomes are detailed in Appendix C of the SIA.
Social baselines study (Appendix C – Section C1)		
15	Does the SIA component of the EIS discuss the local and regional context in sufficient detail to demonstrate a reasonable understanding of current social trends, concerns and aspirations?	Yes. Section 5 and Section 9 of the SIA demonstrates trends, concerns and aspirations both within the local and regional context.
16	Does the SIA component of the EIS include appropriate justification for each element in the social baseline study, and provide evidence that the elements reflect the full diversity of views and potential experiences in the affected community?	Yes. The discussion in Section 5 and Section 9 of the SIA is based on the full diversity of views expressed and potential experiences in the affected community, across a range of stakeholders.
17	Does the social baseline study include an appropriate mix of quantitative and qualitative analysis, and explain data gaps and limitations?	Yes, the SIA Social Baseline (Section 5 and Section 9 of the SIA) present both quantitative and qualitative analysis and explains limitations in accordance with accepted social science research methods.
Prediction and analysis of impacts (Appendix C – Section C2)		
18	Does the SIA component of the EIS include an appropriate description of the potential impacts in terms of the nature and severity of the	Yes. Project impacts and opportunities have been captured and discussed in Section 6 and Section 10 in the SIA.

No	Question	Requirement Responses
	change and the location, number, sensitivity and vulnerability of the affected stakeholders?	Appendix G of the SIA presents Impact Significance Assessment Tables.
19	Does the SIA component of the EIS identify potential impacts at all stages of the project life cycle?	Yes. Project impacts and opportunities have been captured and discussed in Section 6 and Section 10 in the SIA. Section 6 in the SIA presents impacts and opportunities at both the local and regional area level, cumulative impacts and opportunities and potential mine closure impacts and opportunities. Appendix G of the SIA presents Impact Significance Assessment Tables.
20	Does the SIA component of the EIS appropriately identify and justify any assumptions that have been made in relation to its predictions?	Yes. The local hire assumptions are supported by labour market analysis and analysis of the existing workforce and residential characteristics of the Cadia Valley Operations workforce (see Sections 2 and Section 3).
21	Does the SIA component of the EIS include appropriate sensitivity analysis and multiple scenarios to allow for uncertainty and unforeseen consequences? If relevant, does it include comparisons with studies of similar projects elsewhere?	Yes. Scenario testing is described in the Section 3 of the SIA and SIA Appendix B.
Evaluation of significance (Appendix C – Section C3)		
22	Does the SIA component of the EIS explain how impacts were evaluated and prioritised in terms of significance?	Section 3 in the SIA and SIA Appendix B describe the methodology of the significance assessment. Project impacts and opportunities have been captured and discussed in Section 6 and Section 10 of the SIA. Section 8 and Section 10 of the SIA discusses the Impact Significance Assessment and Appendix G of the SIA presents detailed Impact Significance Assessment Tables.
23	Does the evaluation of significance consider cumulative aspects where relevant?	Yes, where relevant the SIA considers cumulative impacts and opportunities. Project impacts and opportunities have been captured and discussed in Sections 6-8 and Section 10 in the SIA. Appendix G of the SIA presents Impact Significance Assessment Tables.
24	Does the evaluation of significance consider the potentially uneven experience of impacts by different people and groups, especially vulnerable groups?	Project impacts and opportunities have been captured and discussed in Section 6 and Section 10 of the SIA. Appendix G of the SIA presents Impact Significance Assessment Tables.

No	Question	Requirement Responses
Responses and monitoring and management framework (Appendix C – Sections C4 and C5)		
25	Does the SIA identify appropriate measures to avoid, reduce, or otherwise mitigate any significant negative impacts of the project, and justify these measures?	Yes. Section 7 and Section 10 of the SIA details management measures, monitoring and reporting approaches.
26	Does the SIA explain and justify measures to secure and/or enhance positive social impacts?	Yes. Section 7 and Section 10 of the SIA details management measures, monitoring and reporting approaches.
27	Does the SIA component of the EIS impartially assess the acceptability, likelihood and significance of residual social impacts?	Yes. Section 7 and Section 10 in the SIA details management measures, monitoring and reporting approaches.
28	Does the SIA component of the EIS propose an effective monitoring and management framework?	Yes. Section 7 in the SIA details management measures, monitoring and reporting approaches.
Modifications (Introduction – application)		
29	Are the social impacts associated with the modification expected to be new or different (in terms of scale and/or intensity) to those that were approved under the original consent? If yes, apply the review questions above to the SIA component of the environmental assessment.	Not applicable.