

Angus Place West Project

Scoping Report

Prepared for Centennial Coal Company Pty Limited
February 2026



Angus Place West Project

Scoping Report

Centennial Angus Place Pty Ltd

E250405 RP#1

February 2026

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Executive Summary

Angus Place Colliery (Angus Place) is an underground thermal coal mining operation in the Western Coalfields of New South Wales (NSW). Angus Place is approximately 15 kilometres (km) north-west of Lithgow, in the Lithgow local government area (LGA). Angus Place is operated by Centennial Angus Place Pty Limited (Centennial Angus Place), a wholly-owned subsidiary of Centennial Coal Company Limited (Centennial), which is a subsidiary of Banpu Public Company Limited, a public company founded and headquartered in Bangkok, Thailand, and listed on the Stock Exchange of Thailand.

Angus Place comprises a pit top, underground mining area, ventilation infrastructure and water management infrastructure. The existing underground workings are primarily beneath the Gardens of Stone State Conservation Area (SCA), including a ventilation facility, dewatering boreholes, switchyard, pipelines, underground cables and a network of monitoring installations.

In response to a downturn in coal markets, Angus Place was placed into care and maintenance in 2015. No coal production has taken place since this time. Centennial Angus Place is proposing a new State significant development (SSD) project which will allow Angus Place to recommence coal supply to Mt Piper Power Station (MPPS). The project is known as Angus Place West. The project generally involves:

- bord and pillar mining method consisting of first-workings only within the proposed mining area
- extraction of approximately 8.5 million tonnes of run-of-mine (ROM) coal at a maximum rate of up to 1.2 million tonnes per annum (Mtpa) until 31 December 2042. Mining operations are proposed to be permitted to 31 December 2042 to allow operational and planning flexibility to accommodate the proposed closure of the MPPS
- the continued transfer of coal to the surface, coal handling at the pit top and coal loading into trucks for dispatch via the private coal haul road regulated under the Western Coal Services consent (SSD-5579)
- the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either Springvale Coal Services Site (SCSS) or MPPS using the existing coal handling, processing and conveyance infrastructure
- the continued operation of the pit top, approved water management infrastructure and existing ancillary infrastructure (including ventilation, electrical and water management infrastructure within the Gardens of Stone SCA)
- construction of a transfer pipeline between the pit top and Pumping Station Facility No.1 (approved for construction as part of the McPhillamys Gold Project on land adjacent to the Angus Place pit top)
- transfer of water to Springvale Water Treatment Project (SWTP), SCSS, MPPS and Pumping Station Facility No.1 (for transfer to the McPhillamys Gold Project)
- exploration, monitoring and rehabilitation activities.

While there is a transition to renewable energy generation currently underway, coal continues to support power generation in NSW, with MPPS an important contributor to baseload generation. Alternate coal supplies will be needed to maintain the ongoing operation of MPPS through to its planned closure. The project will maintain Centennial's ability to supply coal to MPPS but with a low impact mining method.

The project meets the definition of SSD, and therefore the NSW Minister for Planning and Public Spaces or the Independent Planning Commission (IPC) will be the consent authority for the project. The project is a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and requires approval from the Commonwealth Minister for the Environment and Water.

The scoping report supports a request to the NSW Department of Planning, Housing and Infrastructure (DPHI), for Secretary's environmental assessment requirements (SEARs) for the project. This scoping report provides a high-level description of the project, the project study area and its surroundings, summarises the environmental planning pathway, and identifies potential environmental issues associated with the project. This scoping report has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Scoping Report* (DPIE 2022a).

The aspects identified as requiring detailed assessment in the environmental impact statement are water resources, social, biodiversity and subsidence. Aspects requiring standard assessment are air quality, greenhouse gas, Aboriginal cultural heritage, historical heritage, traffic, noise and vibration, economics and rehabilitation and mine closure.

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1 Introduction

1.1 Background

1.1.1 Overview

Angus Place Colliery (Angus Place) is an underground thermal coal mining operation in the Western Coalfields of New South Wales (NSW). Angus Place is located approximately 15 kilometres (km) north-west of Lithgow, in the Lithgow local government area (LGA) (Figure 1.1). Angus Place is operated by Centennial Angus Pty Limited (Centennial Angus Place), a wholly owned subsidiary of Centennial Coal Company Limited (Centennial), which is a subsidiary of Banpu Public Company Limited, a public company founded and headquartered in Bangkok, Thailand, and listed on the Stock Exchange of Thailand.

Angus Place comprises a pit top, underground mining area, ventilation infrastructure and water management infrastructure. The existing underground workings are primarily beneath the Gardens of Stone State Conservation Area (SCA). Angus Place also includes supporting infrastructure in Gardens of Stone SCA, including a ventilation facility, dewatering boreholes, switchyard, pipelines, underground cables and a network of monitoring installations.

Operations at Angus Place commenced in 1979. It is regulated under a Ministerial project approval (MP 06_0021) which was granted in September 2006 by the then Minister for Planning under the now repealed Part 3A of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). MP 06_0021 has since been declared to be State significant development (SSD) under Clause 6 of Schedule 2 of the NSW Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017.

The local context of Angus Place is shown in Figure 1.2.

1.1.2 Approved activities and status

In response to a downturn in coal markets, Angus Place was placed into care and maintenance in 2015. No coal production has taken place at Angus Place since this time. Angus Place continues to meet safety and environmental regulations and is appropriately maintained to enable operations to recommence.

MP 06_0021 has been modified eight times and allows Centennial Angus Place (amongst other things) to:

- extract up to 4 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal by longwall mining methods until 18 August 2024¹
- handle and process ROM coal at the Angus Place pit top
- operate 24 hours a day, seven days a week
- store, extract and treat water from the underground mine workings
- employ up to 300 full-time equivalent (FTE) personnel
- transfer water to the Springvale Water Treatment Project (SWTP) for subsequent treatment and reuse within Mt Piper Power Station (MPPS).

¹ Mining operations lapsed after 18 August 2024.

Coal transport off-site is not regulated under MP 06_0021. Coal is transported off-site by truck in accordance with the development consent for Western Coal Services Project (SSD-5579). A private haul road connects the Angus Place pit top to MPPS.

1.2 Project overview

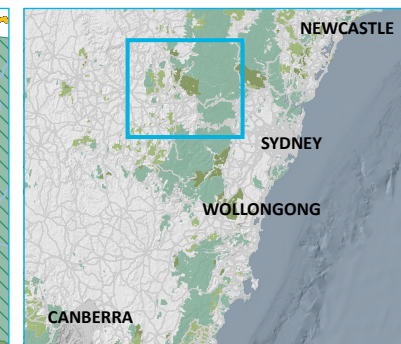
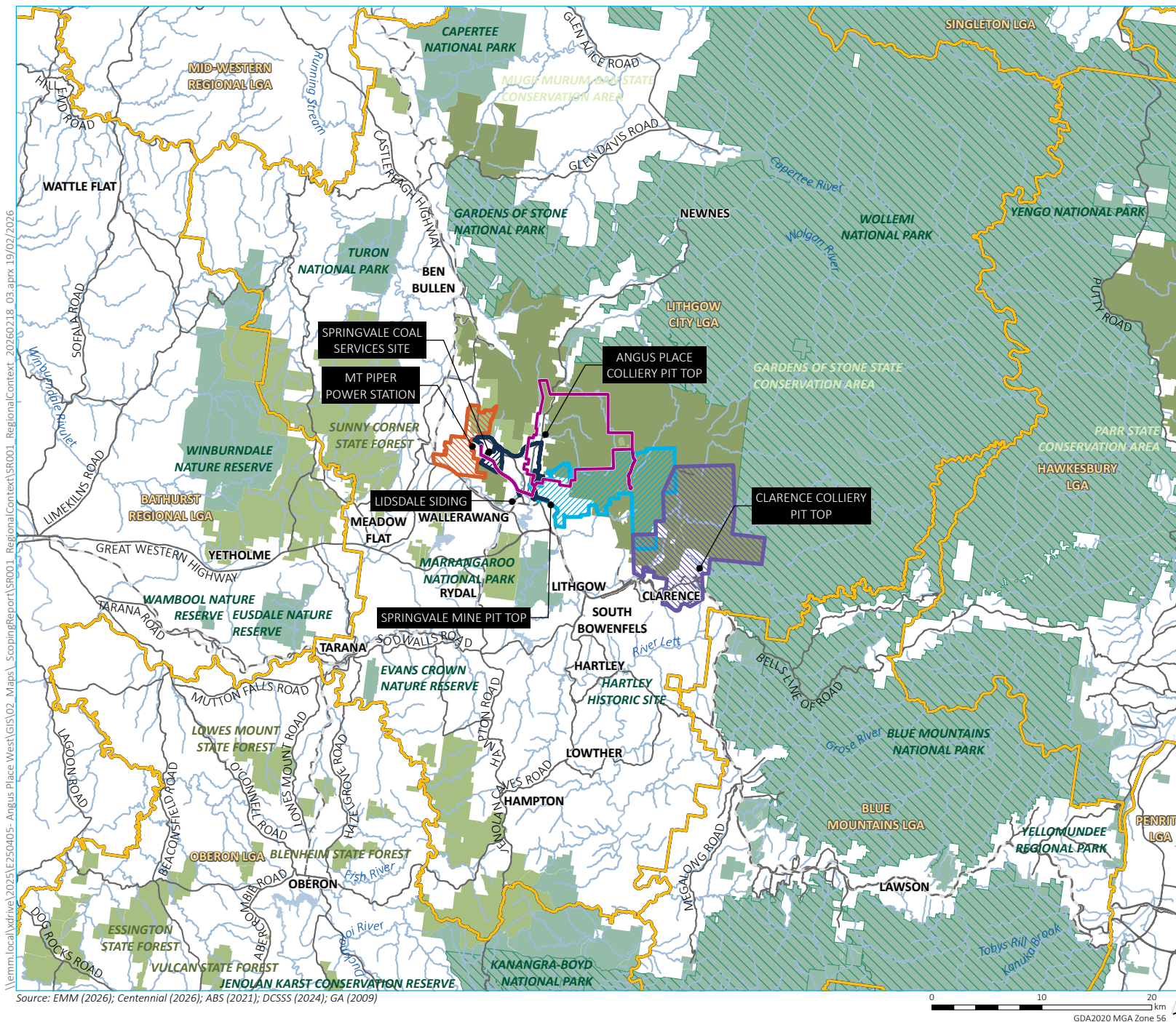
Mine planning studies have been undertaken into a long-term plan for Angus Place beyond the approved mine life, to meet the future coal supply demands of MPPS while balancing social, environmental and economic outcomes. Based on the outcomes of these investigations, Centennial Angus Place is seeking approval for Angus Place West (the project). Broadly, the project seeks to extend the life of an existing coal mining operation and support the ongoing operation of MPPS.

Centennial Angus Place seeks approval for the project to allow:

- bord and pillar mining methods consisting of first-workings only within the proposed mining area
- extraction of approximately 8.5 Mt of ROM coal at a maximum rate of up to 1.2 Mtpa until 31 December 2042. Mining operations are proposed to be permitted to 31 December 2042 to allow operational and planning flexibility to accommodate the proposed closure of the MPPS
- the continued transfer of coal to the surface, coal handling at the pit top and coal loading into trucks for dispatch via the private coal haul road regulated under the Western Coal Services consent (SSD-5579)
- the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either Springvale Coal Services Site (SCSS) or MPPS using the existing coal handling, processing and conveyance infrastructure
- the continued operation of the pit top, approved water management infrastructure and existing ancillary infrastructure (including ventilation, electrical and water management infrastructure within the Gardens of Stone SCA)
- construction of a transfer pipeline between the pit top and Pumping Station Facility No.1 (proposed for construction as part of the McPhillamys Gold Project on land adjacent to the Angus Place pit top)
- transfer of water to SWTP, SCSS, MPPS and Pumping Station Facility No.1 (for transfer to the McPhillamys Gold Project)
- exploration and monitoring activities
- rehabilitation of the pit top and disturbed areas associated with the operation of Angus Place.

Other than as set out above, all activities approved under MP 06_0021 are intended to continue.

As the proposed project activities do not meet the requirements for a modification to MP 06_0021, to enable the project to be developed, a new SSD application is required under Part 4 of the EP&A Act.



KEY

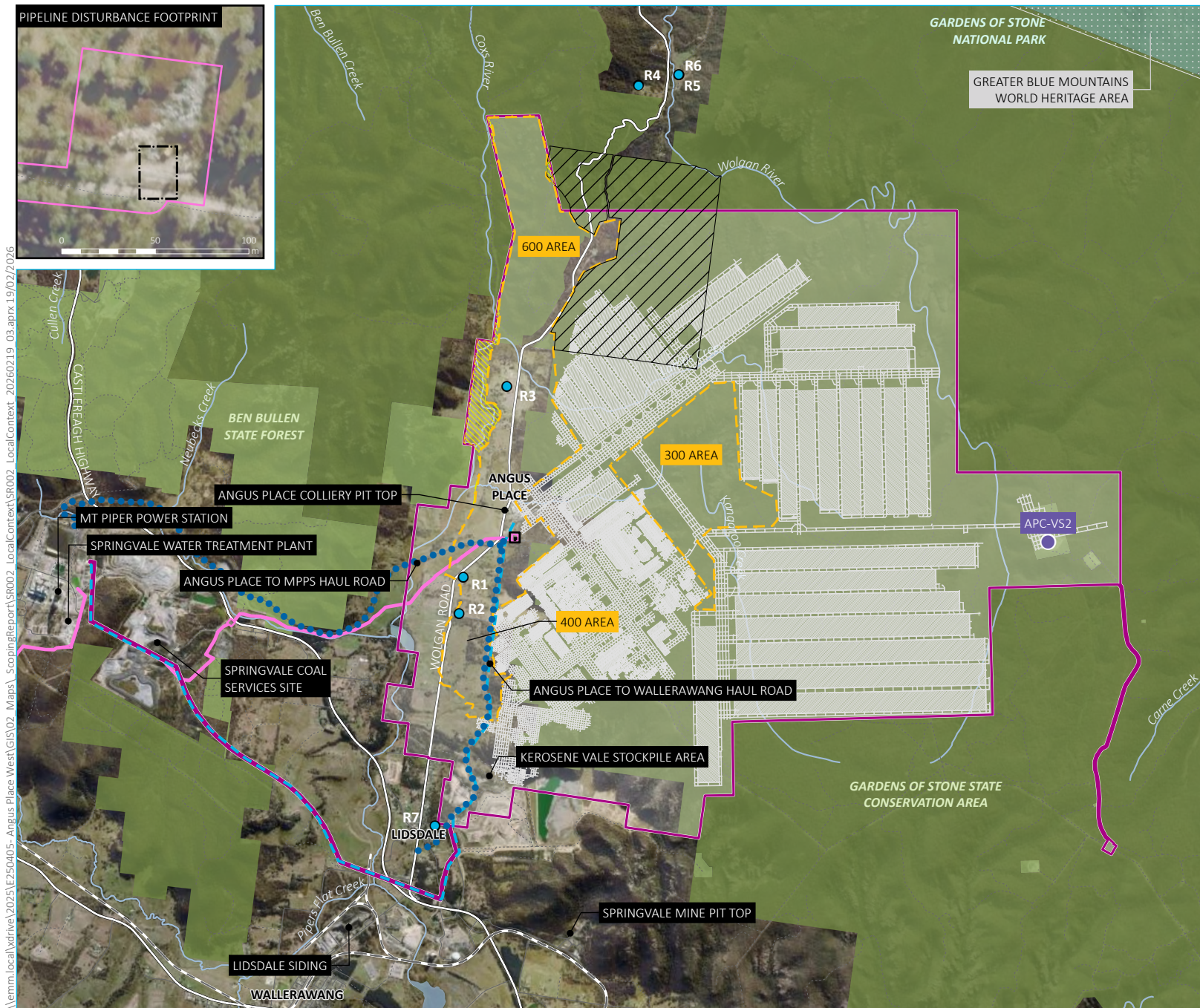
- Angus Place West project area
- Clarence Consolidation project area
- Springvale West project area
- Ivanhoe project area
- Western Coal Services project area

Existing environment

- Rail line
- Major road
- Named watercourse
- Named waterbody
- Greater Blue Mountains World Heritage Area
- NPWS reserve
- State conservation area
- State Forest
- Local government area

Regional context

Angus Place West
Scoping Report
Figure 1.1



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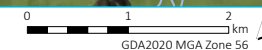
Source: EMM (2026); Centennial Coal (2026); ABS (2021); DCSSS (2024); GA (2009) ESRI (2026)



- KEY**
- Project area
 - Proposed mining area
 - Mining exclusion area
 - Vent shaft
 - Residential receptor
 - Private haul road (managed as part of SSD-5579)
 - Angus Place to MPPS Pipeline
 - Existing underground workings
 - McPhillamys Gold Project Pipeline (proposed as part of SSD-9505)
 - Pipeline disturbance footprint (to connect to McPhillamys Gold Project)
- Existing environment**
- Rail line
 - Major road
 - Minor road
 - Vehicular track
 - Named watercourse
 - Named waterbody
 - NPWS reserve
 - State conservation area
 - State Forest
 - Greater Blue Mountains World Heritage Area
 - Maiyingu Marragu (Blackfellows Hand Aboriginal Place)

Local context

Angus Place West
Scoping Report
Figure 1.2



1.3 Related development

1.3.1 Springvale Mine (SSD-5594)

Centennial operates Springvale Mine, which is currently the primary supplier of coal to MPPS, with smaller volumes of coal coming from other Centennial mines as well as other third party providers on a campaign basis. Springvale dispatches coal directly into MPPS via an existing overland conveyor operated as part of the Western Coal Services Project (SSD-5579). Springvale has approval to produce up to 5.5 Mtpa of coal from the Lithgow Seam, until 31 December 2028.

To be able to supply coal to MPPS beyond 2028 and out to 31 December 2042, approval will need to be sought for:

- MOD5 to SSD-5594, which will include an expansion of the underground mining area adjacent to the approved LW500s mining domain by bord and pillar mining methods and extension of mining operations to 31 December 2032
- Springvale West, a new SSD application which will include further expansion of the underground mining area using bord and pillar mining methods and extension of mining operations to 31 December 2042.

Approval will be sought for the underground transfer of coal to Springvale Mine where it will be handled at Springvale Mine's pit top before being transferred to either SCSS or MPPS.

1.3.2 Western Coal Services Project (SSD-5579)

Centennial operates the Western Coal Services Project, which incorporates the operation of infrastructure for the receipt, handling and processing of coal and reject materials from Springvale Mine, Angus Place and other Centennial operations, as well as the transportation of this coal to MPPS and Lidsdale Siding. The Western Coal Services Project also regulates the use of the Kerosene Vale stockpile.

SCSS is a coal processing and storage facility that forms part of the Western Coal Services Project. It is used for ROM coal handling and stockpiling, ROM coal beneficiation (washing), emplacement of coal reject material and emplacement of residual waste material from the SWTP.

Coal produced at Angus Place can be transported off-site by truck using existing private haul roads in accordance with SSD-5579. This is proposed to continue as part of the project. Water from Angus Place is also proposed to be transferred to SCSS.

1.3.3 Springvale Water Treatment Project (SSD-7592)

Centennial operates SWTP (SSD-7592), which can transfer up to 42 megalitres per day (ML/day) of water from mine dewatering facilities servicing Springvale Mine and Angus Place to a water treatment facility at MPPS. Treated water is used to meet the demand for make-up water requirements within the MPPS cooling water system. The SWTP was developed to improve environmental outcomes for the Coxs River catchment. Water from Angus Place is transferred to SWTP via an existing pipeline.

The utilisation of Pond D at MPPS and brine concentrators for the treatment of water for beneficial reuse was incorporated into SWTP. Water transferred from Angus Place to SWTP can also be temporarily stored within Pond D at MPPS prior to treatment and use within the MPPS water management system.

1.3.4 Mt Piper Power Station (DA80/10060)

EnergyAustralia NSW Pty Ltd (EnergyAustralia) operates MPPS, a coal-fired power station with the capacity to meet the energy needs of approximately 1.18 million homes annually, which is up to 12% of NSW's electricity demand. MPPS is fuelled by coal sourced from mines in the local area, which can be transported to the site via private haul road or overland conveyor.

Coal from Angus Place has historically been transported to MPPS via private haul roads in accordance with SSD-5579. A water transfer pipeline also operates between Angus Place and MPPS and facilitates the transfer of untreated mine water from Angus Place to MPPS via the Angus Place to MPPS Pipeline.

1.3.5 McPhillamys Gold Project (SSD-9505)

LFB Resources NL, a 100% owned subsidiary of Regis Resources Limited (hereafter referred to as Regis), has approval for the construction and operation of the McPhillamys Gold Project (SSD-9505). The McPhillamys Gold Project will be a greenfield open cut gold mine approximately 27 km south-east of Orange and an associated water supply pipeline between the mine and Angus Place. Water will be supplied via the pipeline from the following sources:

- untreated mine water from SCSS
- process and blowdown water from MPPS
- untreated mine water from Angus Place.

As part of the application for the McPhillamys Gold Project, Regis received approval to construct and operate a pumping station south of the Angus Place pit top that will be used to transfer water between Angus Place and the water pipeline.

Angus Place West includes the construction and operation of a pipeline and associated infrastructure to connect the Angus Place pit top to the pumping station.

1.4 Applicant details

The applicant details are provided in Table 1.1.

Table 1.1 **Applicant details**

Item	Detail
Proponent	Centennial Angus Place Pty Limited
Postal address	1 Market Street, Sydney NSW 2000 Australia
ABN	87 101 508 945
Nominated contact	Ron Bush

1.5 Project terminology

The following terms are used throughout the Scoping Report:

- The project: used to describe Angus Place West in its entirety, encompassing the continuation of Angus Place (including ongoing operation, use, repair and maintenance of existing surface infrastructure to support mining, coal handling and dispatch), underground coal mining activities within the proposed mining area and construction and operation of infrastructure associated with coal handling, storage and dispatch, as well as laydown and materials storage areas, mine ventilation and water management.
- Project area: the proposed development consent boundary for the project in its entirety, encompassing the proposed mining area, the pit top, historic underground mine workings and mine ventilation, electrical and water management infrastructure. The project area occupies the western portion of the Angus Place Colliery Holding and extends into Consolidated Coal Lease (CCL) 702 held by Shoalhaven Coal. Centennial and its entities hold Mining Lease (ML) 1424, ML1699, ML1720, ML1853 and CCL704 all of which are within the project area.
- Proposed mining area: the area within which first workings bord and pillar mining is proposed to be undertaken (also referred to as 300 Area, 400 Area and 600 Area).
- Pit top: the Angus Place pit top site and its infrastructure, accessible from Wolgan Road.
- First workings: the development of underground roadways, which involves the formation of main headings, gateroads and cut-throughs and the like.
- Sensitive receiver: locations where people live, work or engage in activities that could be impacted by the project and includes dwellings and recreational areas.
- Mining operations: the carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and associated removal, storage and/or emplacement of vegetation, topsoil, overburden, tailings and reject material; including underground development necessary for mining operations to be carried out. Mining operations exclude decommissioning and rehabilitation.

1.6 Document purpose

The purpose of this Scoping Report is to accompany the request for the Secretary's environmental assessment requirements (SEARs) for the project. The Scoping Report informs the content of the SEARs. The SEARs specify the requirements and level of environmental assessment needed to accompany the development application.

Centennial Angus Place will prepare a new SSD application for the project which will be supported by an Environmental Impact Statement (EIS) and associated technical assessments.

This Scoping Report has been prepared in accordance with the *State significant development guidelines – preparing a scoping report* (DPIE 2022a), and it:

- provides an overview of the project
- describes the alternatives to the project that have been considered, or are being further explored
- explains the strategic context of the project
- summarises the statutory context relevant to the project

- details and describes the proposed engagement activities undertaken with relevant stakeholders, including Government agencies, special interest groups and the community during the scoping phase and the activities that will be undertaken during EIS preparation
- outlines the key environmental issues relevant to the project, identifying which matters will need to be further investigated in the EIS.

2 Strategic context

2.1 Project justification

2.1.1 Energy security

MPPS generates up to 12% of NSW's total energy supply (EnergyAustralia 2021), providing power to up to approximately 1.18 million homes annually (Xenith 2025). MPPS requires around 2 to 3 Mtpa of coal to operate efficiently. Centennial's Western Coalfield mines are the main suppliers of coal to MPPS, with Springvale Mine currently being the primary and continuous supplier of coal to MPPS.

While there is a transition to renewable energy generation currently underway, coal continues to support power generation in NSW, with MPPS an important contributor to baseload generation. Springvale Mine is currently scheduled to cease operations in around December 2028, and therefore alternate coal supplies will be needed to maintain the ongoing operation of MPPS through to its planned closure. EnergyAustralia, as owner and operator of MPPS, has previously stated its preference for coal to continue to be sourced from the Lithgow region.

Collectively, the project and Springvale West will maintain Centennial's ability to supply coal to MPPS but with a lower impact mining method than previous longwall operations. This primary coal supply stream for MPPS could also be supplemented by the continued operation of Airly Mine and the proposed extension of operations at Clarence Colliery.

2.1.2 Mining methods and coal delivery

Angus Place remains strategically important to the long-term, secure, local coal supply chain for electricity generation at MPPS, which it has previously supplied coal to. The project will enable optimal recovery of available high-quality thermal coal resources within existing mining tenements using existing infrastructure. The project will use bord and pillar mining method consisting of first workings which is considered low impact in comparison to previously used longwall mining methods. Coal will be supplied directly from Angus Place to MPPS via a private haul road which has been maintained since 2015. This will avoid transport of coal over long distances via rail or trucking on public roads with increased environmental impacts.

Coal is also proposed to be supplied via the Springvale West project mining area (subject to approval) to the existing Springvale pit top to utilise the existing coal handling, processing and conveyance infrastructure to SCS and MPPS.

2.1.3 Economic benefits

Angus Place is located within a long-established coal mining region. The Lithgow community and the surrounding townships have a long industrial history which includes coal mining and energy generation. This industrial base represents the economic security for the area which in turn delivers significant local economic and social benefits. The project will provide employment opportunities and ongoing local economic contribution. Centennial's workforce lives predominately locally and therefore ongoing employment keeps families in the community, supports local schools and businesses and binds the social fabric of the region.

As a member of the Lithgow community for over 20 years, Centennial has a close working relationship with Lithgow City Council and other community stakeholders. Centennial is invested in the community, recognising its obligations as one of the largest local employers to ensuring the ongoing economic and social stability of the region.

2.2 Strategic planning framework

The strategic planning framework applicable to the project is summarised in Table 2.1.

Table 2.1 Strategic planning framework

Document	Description	Alignment
Australia's Long-Term Emissions Reduction Plan (Commonwealth of Australia 2021)	Australia's Long-Term Emissions Reduction Plan (ALERP) provides a pathway to meet the Paris Agreement goals, including reaching global net zero emissions. It focusses on the implementation of lower cost low emissions technologies, accelerating their deployment at scale, and positioning the economy to take advantage of new and traditional markets. While sectors like thermal coal and natural gas are expected to be affected by falling global demand and the shifting choices of international consumers which will unfold over decades, and the coal and gas sectors will continue to provide jobs and underpin regional communities for years to come.	The ALERP does not require reductions in greenhouse gas (GHG) emissions or reduction in production levels in the coal mining sector to achieve its goals. The life of the project (2040) aligns with the ALERP and the commitments made to reach net zero emissions by 2050.
Strategic Statement on Coal Exploration and Mining in NSW (NSW Government 2020)	The <i>Strategic Statement on Coal Exploration and Mining in NSW</i> (NSW Government 2020) sets out how the NSW Government is taking a responsible approach to the global transition to a low carbon future, consistent with Australia's ambition under the Paris Agreement, and is planning to manage the impact for coal-reliant communities. The statement has four plans of action: 1. Improving certainty about where coal mining should not occur. 2. Supporting responsible coal production in areas deemed suitable for mining. 3. Addressing community concerns about the impacts of coal mining. 4. Supporting diversification of coal-reliant regional economies to assist with the phase-out of thermal coal mining.	The project is an extension to an existing operation and is located within a long-established coal mining region near Lithgow which is identified in the strategy as a potential area for future coal exploration. The project will provide coal to a local power station, which will be critical in providing energy security during the transition to clean energy.
Net Zero Plan Stage 1: 2020-2030 (DPIE 2020a)	The Net Zero Plan (DPIE 2020) is a NSW Government plan to fast-track emissions reductions with the objective to achieve net zero emissions by 2050 by: 1. Driving uptake of proven emissions reduction technologies that grow the economy, create new jobs or reduce the cost of living. 2. Empowering consumers and businesses to make sustainable choices. 3. Investing in emissions reduction innovation to ensure economic prosperity from decarbonisation beyond 2030. 4. Ensure the NSW Government leads by example. The 10-year plan recognises that coal mining in NSW is a large economic contributor, supplying the high-quality resource to both domestic and export markets. The plan acknowledges that while the State pursues actions on climate change, this should not undermine communities that are reliant on mining.	The project will provide employment opportunities in the Lithgow regional community and is crucial in supporting the NSW economy through the renewable energy transition.

Document	Description	Alignment
Central West and Orana Regional Plan 2041 (DPE 2022)	The Central West and Orana Regional Plan 2041 (DPE 2022) (the regional plan) guides land use planning priorities and decision making in the Central West and Orana Region, including Lithgow. The regional plan identifies that Lithgow LGA currently provides approximately 15% of the state's power and coal and contributes \$2 billion to gross regional product annually.	The project is consistent with the regional plan as the extended life of Angus Place will contribute to the diversity of economic development and employment in the Central West and Orana region and will enable the realisation of the economic opportunity that mining presents.
Lithgow 2040 Local Strategic Planning Statement (LCC 2020)	The Lithgow 2040 Local Strategic Planning Statement (LCC 2020) is a 20-year strategic plan which sets out land use directions and priorities for the future of the LGA. The statement identifies mining as the largest contributor to the local economy (comprising \$241 million or 23%). It also includes actions to maintain the mining industry, including the protection of coal mining titles, extractive industry areas (such as sand and construction materials) and surface and supporting operational facilities from further land use conflict. Developing a more diversified energy generation profile (including the skills required to construct and operate new energy developments) will take time. The Western Coalfield has a long history of mining as part of the regional economy, and mining has provided jobs and supply chain opportunities for local and regional businesses, resulting in a strong reliance on the coal mining sector for employment across the Lithgow LGA.	The project will continue to contribute to the aims and objectives of the statement through the continued employment of the project workforce and continued support of local communities through service contracts and ongoing contributions to local initiatives. The project will provide stability and certainty to local and regional workforces and businesses in a period of transition and will increase business continuity for those that provide products and services to the coal industry.
Draft Lithgow Land Use Strategy 2010-2030 (LCC 2011)	The draft Lithgow Land Use Strategy 2010–2030 (LLUS 2011) (draft strategy) is a framework that guides how land in the Lithgow region should be used, developed and managed over the 20-year period. One issue identified in the draft strategy is that the employment streams of mining and retail are linked. A reduction in mining employment would significantly reduce the disposable income of the Lithgow LGA which, in turn, would reduce retail opportunities. Mining contributes 27% of the gross regional product of the LGA and represents 12% of the share of employment. An aim noted in the draft land-use strategy is managing employment and to protect all forms of primary production, including mining.	The project is aligned with the draft strategy as it will provide employment opportunities in the Lithgow LGA. The project will also contribute to the gross regional product of the LGA and support the local retail industry.
Gardens of Stone State Conservation Area Plan of Management (NPWS 2022)	The Gardens of Stone SCA was reserved on 6 May 2022. It forms a strategic link between Blue Mountains National Park, Wollemi National Park and the Gardens of Stone National Park. The Plan of Management outlines the main values, issues, management directions and priorities for NSW National Parks and Wildlife Service (NPWS) for managing Gardens of Stone SCA. The Plan of Management acknowledges that access to established mining infrastructure will be required for as long as underground mining and associated monitoring continues, and that mining activities will be continuing to be managed in accordance with the consents and associated performance measures granted under relevant legislation. The Plan of Management recognises that existing surface infrastructure, predominantly to manage water and ventilation, within the Gardens of Stone SCA is required to continue to support Angus Place.	To align with the general principles of the Plan of Management, the bord and pillar mining method consisting of first workings only will result in negligible subsidence effects. Subsequently, impacts to existing surface features within the Gardens of Stone SCA are anticipated to be minimal. Nonetheless, potential impacts to the natural and cultural values of the Gardens of Stone SCA will be assessed.

Document	Description	Alignment
Greater Blue Mountains World Heritage Area (GBMWhA) Strategic Plan (NPWS 2009)	The GBMWhA Strategic Plan recognises that mining could have potentially major impacts to the GBMWhA, and notes that Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) provisions may apply to the project. The Strategic Plan also identifies past and present mining activity at the head of the Wollangambe River catchment as a potential threat to downstream ecosystems and water quality.	The project has been designed to ensure there are negligible impacts to the GBMWhA and the water quality of the Wollangambe River catchment. This ensures the project aligns with the principles of the GBMWhA Strategic Plan.
Statutory Review, Part 5 of the Net Zero Economy Authority Act 2024 (Statutory Review) (LCC 2025)	The Statutory Review outlines the integral role the mining industry plays in the Lithgow LGA in providing employment opportunities and supporting the economy. The review recognises that Lithgow is regarded as a high risk and priority coal region in NSW in terms of economic transition, with 43% of its economy derived from coal-fired power generation and associated mining.	The project will provide employment opportunities in the Lithgow LGA and is crucial in supporting the NSW economy as the renewable energy transition continues.

2.3 Key features of the project area and surrounds

Key features of the project area and surrounding environment are described in Table 2.2 and shown in Figure 1.2.

Table 2.2 Key features of the project area and surrounds

Aspect	Description
LGA	The project area is within the Lithgow LGA.
Land zoning	Under the Lithgow Local Environment Plan 2014 (Lithgow LEP), there are seven land use zones mapped within the project area: • IN1 – General Industrial • R5 – Large Lot Residential • RU1 – Primary Production • RU2 – Rural Landscape • RU3 – Forestry • SP2 – Infrastructure (Electricity Generating Works) • SP2 – Infrastructure (Roads and Traffic Facility). Within the proposed mining area, there are three land use zones mapped under the Lithgow LEP: • RU1 – Primary Production • RU2 – Rural Landscape • RU3 – Forestry.
Mining and exploration tenements	The project area occupies the western portion of the Angus Place Colliery Holding and extends into CCL702 held by Shoalhaven Coal. Centennial and its entities hold ML1424, ML1699, ML1720, ML853 and CCL704 all of which are within the project area. Centennial holds Exploration Licences (EL) EL 6856 and EL 6293 within the project area.
Nearby townships	The pit top is approximately 3.5 km north of Lidsdale, 7.5 km north-east of Wallerawang and 15 km north-west of Lithgow.
Landscape	The landscape within the project area is diverse ranging from densely vegetated, undulating ridgelines, to open, flat valleys and cleared and heavily disturbed areas. Parts of the project area are on Newnes Plateau with landscape features comprising undulating ridgelines, narrow gorges and sandstone cliffs and pagodas and dense bushland within Gardens of Stone SCA. Lambs Creek and Kangaroo Creek flow through the project area into Coxs River. Topographically, the project area can be divided into the Newnes Plateau and areas of lower elevation in the Wolgan Valley and the Coxs River Valley. Elevation within the project area ranges from 900 to 1,175 m Australian Height Datum (AHD).

Aspect	Description
Land use	Land use within the project area predominantly consists of historical and existing mining operations (including the pit top and private haul roads) and, until 2022, commercial forestry in the Newnes State Forest and Ben Bullen State Forest. Newnes State Forest and Ben Bullen State Forest comprised pine plantation and native hardwood forest that were selectively logged under Forestry Corporation of NSW tenure and management. Newnes State Forest and parts of Ben Bullen State Forest within the project area were reserved to create the Gardens of Stone SCA in May 2022. Gardens of Stone SCA supports a number of recreational land uses (including areas for sightseeing, bushwalking and camping). Other land uses within the project area include agricultural operations (primarily grazing) and rural residential properties. There is no intensive cropping in the project area. The area surrounding the project area is comprised of underground coal mining, coal handling, coal transport and supporting infrastructure, power stations (including MPPS and the former Wallerawang Power Station), agriculture (including cattle and sheep grazing) and additional areas of Gardens of Stone SCA managed by the NPWS. The project is within the Sydney Drinking Water Catchment, which is made up of five major catchments including Warragamba, Shoalhaven, Upper Nepean, Woronora and the Blue Mountains. The catchment covers around 16,000 km² and collects rainfall and runoff which is stored in dams and weirs for public use.
Site history	The project area is within the Western Coalfield where coal mining activities have taken place for over 150 years. The region has also been the site of coal-fired power generation for over 50 years. The general area surrounding Angus Place is comprised of various operating and non-operating open cut and underground coal mining operations. Other mining operations in the Western Coalfield which are either operating or in care and maintenance, include: • Clarence Colliery – currently operating • Springvale Mine – currently operating • Airly Coal Mine – currently operating • Invincible Colliery – currently operating • Pine Dale Coal Mine – currently in care and maintenance • Cullen Valley Colliery – currently in care and maintenance.
Land ownership	The project area is on land owned by NSW Government (including Crown land and Gardens of Stone SCA) and Centennial (and its subsidiaries), as well as freehold land. The proposed mining area is partly within Gardens of Stone SCA. Other properties not owned by Centennial and its entities generally relate to road and utility infrastructure providers such as Lithgow City Council, Ausgrid, and Crown Land. With the exception of exploration activities, installation of groundwater bores and groundwater monitoring, no surface disturbance on privately-owned land (i.e. private land not owned by Centennial or its entities) is required for the project. Agreement from the landholder will be sought prior to activities occurring on privately-owned land.
Residences	The project area and the land surrounding it is sparsely populated. There are a small number of private residences in close proximity to the pit top, the closest, R1, is approximately 800 m south-west of the pit top (Figure 1.2). The closest small lot urban development is Lidsdale, approximately 3.5 km south of the pit top. Other residential localities include Wallerawang, Portland and Ben Bullen.

Aspect	Description
Nearby natural features	The areas of Gardens of Stone SCA that are within the project area are densely vegetated and are characterised by natural features such as pagodas, cliff lines, swamps, creeks and deep valleys. Other natural features within the locality include: • Greater Blue Mountains World Heritage Area (GBMWH) – listed on the World Heritage List and National Heritage List and approximately 2.8 km from the project area • Gardens of Stone National Park approximately 2.9 km from the project area • Wollemi National Park approximately 6.2 km from the project area • Blue Mountains National Park approximately 9.5 km from the project area. The GBMWH comprises 10,000 km² area of bushland, covering seven national parks (Wollemi, Yengo, Gardens of Stone, Blue Mountains, Kanangra-Boyd, Nattai and Thirlmere Lakes) and the Jenolan Karst Conservation Area (Figure 1.1). The GBMWH was listed as a World Heritage Area in 2000 for significant biological evolutionary processes and the importance and diversity of habitats including wet and dry sclerophyll forest, mallee heathlands, swamps, wetlands and grasslands. Approximately 75% of the project area lies within the ‘Greater Blue Mountains Area - Additional Values and Areas’ (nominated place) (Figure 1.2). This nomination is currently under assessment by the Australian Heritage Council for acceptance onto the National Heritage List.
Nearby infrastructure	There is existing surface infrastructure at the pit top, which can be accessed via the Castlereagh Highway and Wolgan Road. Access to Wolgan Road is provided via the intersection of Castlereagh Highway, Wolgan Road and Main Street; or via the intersection of Castlereagh Highway and Ian Holt Drive. There are two private haul roads that operate as part of the Western Coal Services Project and connect the pit top to either the former Wallerawang Power Station or MPPS. The use of these roads is regulated by SSD-5579. There are also water transfer pipelines that connect the pit top to MPPS and SCSS as well as dewatering facilities that connect to the SWTP at MPPS. The Main Western Railway line runs generally east-west to the south of the project area.
Surrounding development	Coal mining, coal handling, transport and distribution infrastructure and power stations are on the land surrounding the project area, and include: • MPPS (ongoing operation of the power station and SWTP) • Pine Dale Coal Mine (currently under care and maintenance) • Western Coal Services Project (ongoing operation of SCSS and coal and water transfer activities, including an overland conveyor network connecting to Lidsdale Siding and Springvale Mine) • Springvale Mine (ongoing operation of the pit top, underground coal mining and associated activities) • Wallerawang Power Station (the power station has closed; however, rehabilitation of ash storage areas (including Sawyers Swamp Creek Ash Dam) and alternative land use planning continues including a battery energy storage system) • Lidsdale Siding (ongoing operation of the rail unloading and loading facility, which can receive or export coal). Where relevant, cumulative impacts from the project and surrounding developments will be assessed in accordance with the <i>Cumulative Impact Assessment Guidelines for Significant Projects</i> (DPIE 2022b).
Planning context	The project area is not within any land identified as: • biophysical strategic agricultural land (BSAL) • flood planning area • mine subsidence district. The majority of the project area is mapped as bushfire prone land. Parts of the project area are also mapped as ‘environmentally sensitive – biodiversity’ and ‘environmentally sensitive – groundwater vulnerable’ on the Lithgow LEP.

2.4 Cumulative impacts

In accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (CIA Guidelines) (DPIE 2021a), a CIA has been scoped to identify relevant current and future projects, and to determine the matters likely to result in cumulative impacts. Relevant current and future projects have been identified and are outlined in Table 2.3.

Potential cumulative impacts primarily relate to potential noise, air quality, traffic, water resources and social impacts, especially from concurrent mining operations. The project also has the potential to contribute positively to the region through employment and economic opportunities arising from concurrent developments.

The EIS will include a cumulative assessment in line with the CIA Guidelines, and a CIA scoping table detailing relevant current and future projects is provided in Appendix C.

Table 2.3 Nearby major projects

Project	Approximate distance to pit top	Project status
Western Coal Services Project	4 km	Operating
Pine Dale Coal Mine	4 km	Care and maintenance
Springvale Mine	5 km	Operating
Pinecrest BESS	5 km	Preparing EIS
Mt Piper Power Station	6 km	Operating
Springvale Water Treatment Project	6 km	Operating
Lidsdale Siding	6 km	Operating
Wallerawang Power Station	6 km	Closure and rehabilitation
Wallerawang BESS	6 km	Approved
Great Western BESS	6 km	Approved
Invincible Colliery	6 km	Operating
Clarence Colliery	6 km	Operating
Mt Piper BESS	7 km	Approved
Cullen Valley Mine	9 km	Operating
Ben Bullen Wind Farm	10 km	Preparing EIS
Sunny Corner Wind Farm	13 km	Preparing EIS
Mount Lambie Wind Farm	16 km	Preparing EIS
Lake Lyell Pumped Hydro Energy Storage Project	17 km	Preparing EIS
Airly Coal Mine	27 km	Operating

3 Existing operations

3.1 Approval history

Mining commenced at Angus Place in 1949. Initially known as Newcom Mine, it produced coal for domestic power generation using bord and pillar mining methods. In 1976, the then Blaxland Shire Council (now Lithgow City Council) approved the construction and operation of an underground coal mine and associated ancillary facilities at Newcom Mine, Kerosene Vale.

The current Angus Place mine was developed as an extension to Newcom Mine. Mining commenced in 1979 using longwall mining method. At that time, the approved extraction limit was 1.3 Mtpa and this coal was supplied directly to Wallerawang Power Station.

A further expansion of Angus Place was approved in 1984. This increased production to 2.3 Mtpa and expanded the mining area. It also allowed coal to be supplied to MPPS, while still supplying coal to Wallerawang Power Station.

Mining operations are currently regulated under project approval MP 06_0021, which was granted in 2006 by the then Minister for Planning. This approval allowed the consolidation of previous development consents, a further extension to the approved mining area and for an increase in the production limit to 3.5 Mtpa. Mining operations were allowed under MP 06_0021 until 18 August 2024.

MP 06_0021 has been modified eight times. A summary of the current approvals held by Angus Place is provided in Table 3.1, including modifications to MP 06_0021, the environment protection licence and Commonwealth approvals.

Table 3.1 Current approvals and licences

Reference	Determination	Summary of approved/licenced activity
MP 06_0021	13 September 2006	Extraction of 3.5 Mtpa of ROM coal a year until 2024. Operating the pit top to handle and process coal.
MP 06_0021 (MOD1)	29 August 2011	Development of two new longwall panels - Longwall 910 and Longwall 900W. Increase extraction rate to 4 Mtpa.
MP 06_0021 (MOD2)	22 April 2013	Development of a ventilation facility and supporting infrastructure. Approval for trial mining, to support the existing and approved surface exploration programme and pre-feasibility assessment for the available resource within the Angus Place mining lease.
MP 06_0021 (MOD3)	9 December 2013	Extend the length of Longwall 980 and Longwall 900W and increase the extraction height.
MP 06_0021 (MOD4)	4 August 2014	Development of nominated roadways and headings within the project application area (associated with Longwall 1001 and Longwall 1003).
MP 06_0021 (MOD5)	14 September 2018	Temporary treatment and discharge of mine water to the Coxs River catchment.
MP 06_0021 (MOD6)	19 March 2021	Transfer water to MPPS for treatment. Construction and operation of a water softening plant at the pit top. Transfer treated mine water to SWTP. Underground storage of treated mine water.

Reference	Determination	Summary of approved/licenced activity
MP 06_0021 (MOD7)	25 November 2011	Administrative modifications to align the rehabilitation management and reporting requirements within the Development Consent with the regulatory requirements as part of the Rehabilitation Reforms under the Mining Act.
MP 06_0021 (MOD8)	Withdrawn	Transfer of 10 ML/day of water from Angus Place Colliery to Springvale Coal Services Site.
MP 06_0021 (MOD9)	9 October 2025	Modification to Schedule 2, Condition 5 of MP 06_0021 to limit the consent lapsing provision to mining operations only, enabling mine decommissioning, rehabilitation, mine closure and other requirements to continue to be carried out under MP 06_0021 after 18 August 2024.
EPBC 2011/5952	17 April 2012	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) approval for the development and extraction of longwall panels LW910 and 900W.
Environment Protection Licence (EPL 467)	23 February 2000	Coal works greater than 2,000,000 to 5,000,000 tonnes (t) annual handling capacity. Mining for coal greater than 3,500,000 to 5,000,000 t annual production capacity.

3.2 Mining methods

Mining methods used at Angus Place have been a combination of bord and pillar and longwall mining methods. In response to a prolonged downturn in coal markets, Angus Place was placed into care and maintenance in March 2015. No coal production has taken place since this time.

3.3 Coal processing

Coal is processed at the Angus Place pit top. It is not required to be washed and instead is crushed and sized to MPPS specifications.

3.4 Coal transport

All coal is transported off-site by truck in accordance with the conditions of consent for Centennial's Western Coal Services Project (SSD-5579). In accordance with SSD-5579, up to 4 Mtpa of ROM coal from Angus Place can be transported from the Angus Place pit top to:

- MPPS
- Wallerawang Power Station (now closed)
- Kerosene Vale stockpile area
- SCSS for processing and transfer to MPPS or Lidsdale Siding rail loading facility for transfer into the export market.

Limits on the number of coal haulage trucks apply under SSD-5579. Specifically, for coal transportation using the Mt Piper haul road, truck movements are restricted to the day period only prior to longwall extraction. During longwall extraction a maximum of eight trucks are allowed to operate in the evening period. Two trucks can operate during the night period unless there are adverse weather conditions.

It is also noted that the transfer of coal to SCSS for processing is subject to the construction of new haul road to link Mt Piper Haul Road to SCSS. This link road has yet to be constructed.

In the event of an emergency and with the prior approval of the Secretary, coal may be transported to MPPS via Wolgan Road and Castlereagh Highway.

3.5 Supporting infrastructure

Infrastructure at the pit top and Newnes Plateau includes (but is not limited to):

- coal handling, preparation and transport infrastructure
- coal conveyors
- coal loading plant
- hardstand/laydown areas
- coal stockpile areas
- mine portal and associated infrastructure
- ventilation shafts and associated infrastructure
- substations and switchyards
- refuelling infrastructure, workshops and equipment/materials storage areas
- services, bathhouse and administration facilities
- workshops
- firefighting infrastructure
- car, truck, machinery and plant parking areas
- powerlines (overhead and trenched)
- pipelines (trenched)
- water management infrastructure, including:
 - water tanks
 - transfer pipelines and associated infrastructure
 - sewage treatment plant and associated irrigation area
 - dewatering and service bore facilities and associated water management structures
 - pollution, filter, settling and aerating ponds
- bunded fuel storage and bays
- access roads
- pollution control infrastructure, including LDP 002.

The pit top layout is shown in Figure 4.3.

3.6 Water management

Existing water management at Angus Place is described in detail in the *Angus Place Colliery Water Management Plan* (WMP) (Centennial 2021a).

i Surface water management

The clean water management system at the pit top consists of a series of diversion bunds and drains that intercept clean catchment runoff prior to it entering disturbed areas. This water is directed off-site into Kangaroo Creek or the Coxs River.

Dirty water management at the pit top focuses on the capture of surface water runoff by surface water storages including the Primary Ponds, Secondary Ponds and Filter Pond (collectively known as the Pollution Ponds) and the Settling Ponds, 302 Portal and oil and water separator. Water cascades through a series of storages and ultimately reports to the Settling Ponds. Water from the Settling Ponds is pumped underground to the 800 Panel Area, with overflows discharged via LDP 002 into the Coxs River, which are measured by an online flow gauge.

Additional surface water management infrastructure is used to manage dirty water at the Angus Place Ventilation Facility (APC-VS2) on Newnes Plateau. Diversion drains to the south-east and south-west of the ventilation facility divert clean runoff from external catchments around the site. Runoff from disturbed and/or workshop areas is directed to a number of dirty water management storages prior to being transferred via Bore 5 for temporary storage within the Springvale Mine underground water storage areas.

ii Underground water management

Groundwater inflows into the underground mine workings at Angus Place are transferred and stored underground as necessary via a series of collection points and pumps prior to being pumped to the surface. Groundwater within the 800 Panel Area is extracted through the in-seam water management system and directed to a tank at the pit top. Extracted volumes are measured using an electromagnetic flow meter and recorded. A small volume of water is reused at the pit top, with the remainder transferred to the Angus Place Haul Road Pipeline where water can be reused at Pond D at MPPS, SCSS and SWTP.

Groundwater is also extracted from the 900 Panel Area by the 940 Bore on the Newnes Plateau. This water is extracted using submersible pumps from the lowest point in the mine workings to the surface where it is transferred to SWTP via the SWTP Water Transfer Pipeline. Pump rates are used to calculate daily transfer totals.

iii Potable and wastewater systems

Potable water is provided to the administration and bathhouse buildings at the pit top by the municipal water supply to Lithgow City Council. Grey water and sewage are collected in a tank before being directed to a series of ponds connected to spillways and disposed by applying spray irrigation to the designated utilisation area. Overflows from the effluent maturation pond are discharged through LDP 005 which are recorded consistent with the requirements of EPL 467.

4 Project description

4.1 Project description

Centennial Angus Place seeks approval for the project to allow:

- bord and pillar mining methods consisting of first-workings only within the proposed mining area
- extraction of approximately 8.5 million tonnes of ROM coal at a maximum rate of up to 1.2 Mtpa until 31 December 2042. Mining operations are proposed to be permitted to 31 December 2042 to allow operational and planning flexibility to accommodate the proposed closure of the MPPS
- the continued transfer of coal to the surface, coal handling at the pit top and coal loading into trucks for dispatch via the private coal haul road regulated under the Western Coal Services consent (SSD-5579)
- the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either SCSS or MPPS using the existing coal handling, processing and conveyance infrastructure
- the continued operation of the pit top, approved water management infrastructure and existing ancillary mining infrastructure (including ventilation, electrical and water management infrastructure within Gardens of Stone SCA)
- construction of a transfer pipeline between the pit top and Pumping Station Facility No.1 (proposed for construction as part of the McPhillamys Gold Project on land adjacent to the Angus Place pit top)
- transfer of water to SWTP, SCSS, MPPS and Pumping Station Facility No.1 (for transfer to the McPhillamys Gold Project)
- exploration and monitoring activities within the project area
- rehabilitation of the pit top and disturbed areas associated with the operation of Angus Place.

Other than as set out above, all activities that are approved under MP 06_0021 are intended to continue.

4.2 Comparison between approved operations and the project

A comparison between approved operations under MP 06_0021 and the project is provided in Table 4.1.

Table 4.1 Comparison between approved operations and the project

Aspect	As approved under MP 06_0021	Angus Place West
Project life (mining operations)	Until 18 August 2024.	Until 31 December 2042.
Development consent boundary	10,460 hectares (ha) as defined in Appendix 2 of MP 06_0021 (including colliery holding boundary and project application area).	5,624 ha as defined by the project area presented in Figure 4.1.
Hours of operation	24 hours per day, seven days per week.	No change.
Employment	300 FTE personnel.	180 FTE personnel.

Aspect	As approved under MP 06_0021	Angus Place West
Mining method	Underground mining using continuous miner and longwall mining methods.	Underground mining using bord and pillar mining methods consisting of first workings only.
Mining area	Existing underground workings in Figure 4.1.	Proposed mining area defined in Figure 4.1.
Annual coal production limit	4 Mtpa of ROM coal.	1.2 Mtpa of ROM coal.
Coal handling and preparation	Up to 4 Mtpa of ROM coal can be handled and processed at the pit top. The primary coal processing operations are crushing and sizing. No coal washing is required.	Up to 1.2 Mtpa of ROM coal will be handled and processed at the pit top. No change to the primary coal processing operations. No coal washing is required.
Coal stockpile	90,000 t capacity ROM coal stockpile.	No change.
Coal transport	Coal transport off-site is not regulated under MP 06_0021. Note: Coal transported off-site by truck in accordance with the development consent for Western Coal Services Project (SSD-5579).	Coal will continue to be transported off-site by truck in accordance with the development consent for Western Coal Services Project (SSD-5579). Approval will also be sought for the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either SCSS or MPPS using the existing coal handling, processing and conveyance infrastructure.
Waste and rejects management	As product coal is not washed at Angus Place, coarse and fine reject material is not generated. General waste, recyclable materials, oil drums and filters, waste oil and oily water are transported off-site and disposed of at appropriately licensed facilities. Sewage is treated at the on-site sewage treatment plant and applied to land at the pit top via LDP 005.	A new on-site sewage treatment plant or upgrades to the existing on-site sewage treatment plant may be required. Note: If required, a separate development application will be submitted to Lithgow City Council to facilitate the construction and operation of a wastewater pipeline.
Site access	The pit top is accessible from Wolgan Road. Infrastructure in Gardens of Stone SCA is accessible via designated access routes (Section 4.4.5).	No change.
Supporting infrastructure	The use, repair and maintenance of mine support infrastructure designed to control and manage water, ventilation, material delivery and equipment maintenance. Infrastructure is situated at the pit top and on Newnes Plateau. As required, existing underground workings are accessed, maintained, remediated, ventilated, dewatered and/or flooded (for water storage).	No change.

Aspect	As approved under MP 06_0021	Angus Place West
Underground water management	Mine inflows during mining operations are: • stored underground in appropriate storage areas • transferred to the fire tank at the pit top for reuse • transferred to SWTP for treatment and subsequent reuse at MPPS with a combined total of 42 ML/day from Springvale and Angus Place transferred to SWTP • transferred to MPPS (up to 2.6 ML/day).	Mine inflows during mining operations will: • continue to be stored in appropriate underground storage areas • continue to be transferred to the fire tank at the pit top for reuse • continue to be transferred to SWTP (as authorised by SSD-7592) • continue to be transferred to MPPS (as authorised by SSD-7592) • be transferred to SCSS (as authorised by SSD-5579) • be transferred to McPhillamys Gold Project (as authorised by SSD-9505).
Surface water management	A clean water management system, consisting of a series of diversion bunds and drains around the pit top, intercepts clean surface runoff before it can enter disturbed areas. Clean water is directed off-site and into Kangaroo Creek and Coxs River. A dirty water management system, consisting of a series of on-site storages which are designed to capture water within the site to manage off-site discharges. Surface water from surface facilities at Angus Place can be discharged from the settling ponds into the Coxs River via LDP 002 in accordance with EPL 726. Transfer of water from ventilation shaft APC-VS2 to Springvale Mine. Construction and operation of a water softening plant at Angus Place pit top (if required). All other aspects of surface water management are undertaken in accordance with the <i>Angus Place Colliery Water Management Plan</i> (Centennial 2021a) (WMP).	No change.
Ancillary infrastructure	Use, repair and maintenance of: coal handling, preparation and transport infrastructure; coal conveyors; coal loading plant; hardstand/laydown areas; bunded storage tanks; coal stockpile areas; mine portals and associated infrastructure; ventilation shafts and associated infrastructure; substations and switchyards; roads and tracks; workshops and equipment storage areas; services, bathhouse and administration facilities; car, truck, machinery and plant parking areas; refuelling facilities; firefighting infrastructure; powerlines (overhead and trenched); pipelines (trenched); water management infrastructure (including: water tanks; transfer pipelines and associated infrastructure; sewage treatment plant and associated irrigation area; dewatering and service bore facilities and associated water management structures; and pollution, filter, settling and aerating ponds); bunded fuel storage and bays; access roads; and pollution control infrastructure including LDP 002.	No change. A transfer pipeline and associated infrastructure will be constructed between the Angus Place pit top and Pumping Station Facility No.1 (proposed as part of the McPhillamys Gold Project).

Aspect	As approved under MP 06_0021	Angus Place West
Mine ventilation	Use, maintenance and repair of the existing ventilation and supporting infrastructure at the pit top and APC-VS2.	No change. Note: The construction, installation and operation of ventilation fans associated with the 4.5 m shaft situated at APC-VS2 is not proposed and does not form part of the project.
Exploration activities	Exploration activities undertaken within EL 6856 and EL 6293. Approval for activity sought under Part 5 of the EP&A Act.	No change.
Offset liabilities and responsibilities	Ongoing implementation of the <i>Persoonia hindii</i> Management Research program (refer to Schedule 3, Condition 24 of MP 06_0021).	No change. Obligations set out within the <i>Western Region – Biodiversity Offset Strategy</i> (Centennial 2019) as they relate to the existing consent (MP 06_0021) will continue.
Rehabilitation and closure	Undertaken in accordance with the Rehabilitation Management Plan for Large Mines – Angus Place (RMP) (Centennial 2023).	The RMP will be updated following project approval and in accordance with relevant guidelines.

4.3 Project area

The project area shown on Figure 4.1 covers an area of 5,624 ha and comprises:

- existing mine workings
- proposed mining area
- pit top
- water management and mine ventilation infrastructure (including associated pipelines and power supply infrastructure).

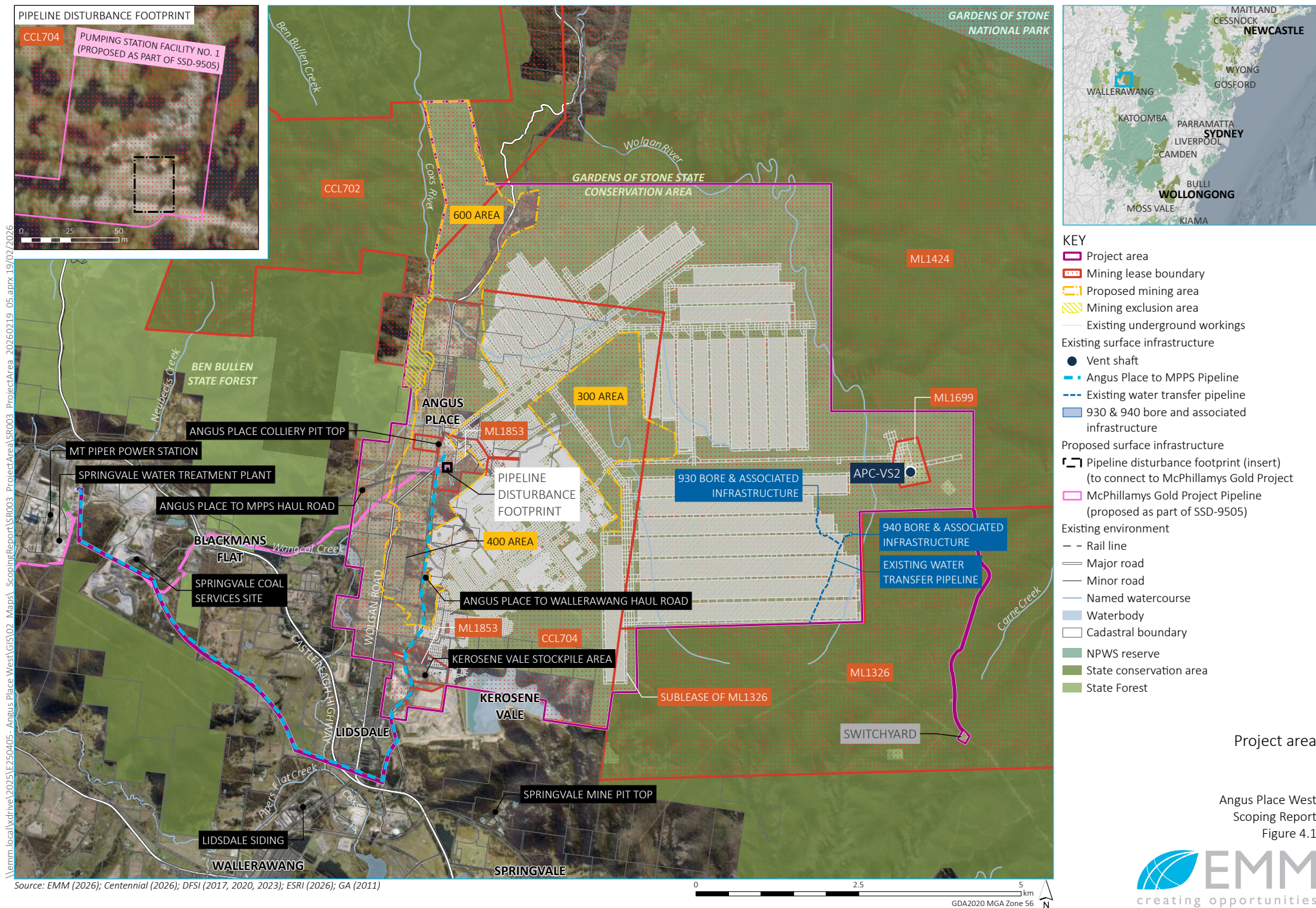
4.4 Physical layout and design

4.4.1 Mine design

Approval is sought for first workings to take place within the entire proposed mining area, with the exception of the mining exclusion area identified in Figure 4.1.

An indicative mine layout for first workings within the proposed mining area is provided on Figure 4.2. This layout is subject to change during detailed design.

To protect natural and built features above the proposed mining area, no mining is proposed at <40 m depth of cover. Pillar dimensions will be designed to a life of mine factor of safety of a minimum of 2.11 (i.e. a probability of failure of ≤ 1 in a million).





KEY

 Project area	Existing environment
 Proposed mining area	 Rail line
 Mining exclusion area	 Major road
 Existing underground workings	 Minor road
 Proposed underground first workings	 Vehicular track
	 Named watercourse
	 Named waterbody
	 State conservation area
	 State Forest

Indicative mine layout

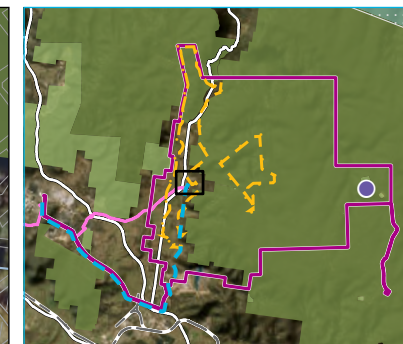
Angus Place West
Scoping Report
Figure 4.2

4.4.2 Pit top and Newnes Plateau infrastructure

Infrastructure at the pit top and Newnes Plateau that will continue to be used (including required maintenance and repair) includes (but is not limited to):

- coal handling, preparation and transport infrastructure
- coal conveyors
- coal loading plant
- hardstand/laydown areas
- coal stockpile areas
- mine portal and associated infrastructure
- ventilation shafts and associated infrastructure
- substations and switchyards
- refuelling infrastructure, workshops and equipment/materials storage areas
- services, bathhouse and administration facilities
- workshops
- firefighting infrastructure
- car, truck, machinery and plant parking areas
- powerlines (overhead and trenched)
- pipelines (trenched)
- water management infrastructure, including:
 - water tanks
 - transfer pipelines and associated infrastructure
 - sewage treatment plant and associated irrigation area
 - dewatering and service bore facilities and associated water management structures
 - pollution, filter, settling and aerating ponds
- bunded fuel storage and bays
- access roads
- pollution control infrastructure, including LDP 002.

The pit top layout is shown in Figure 4.3. The project includes the continued use of infrastructure at the pit top. With the exception of the construction of a water transfer pipeline within the pipeline disturbance footprint, no changes are proposed to existing infrastructure at the pit top or on Newnes Plateau.



- KEY**
- Project area
 - Existing underground workings
 - Existing surface infrastructure
 - Vent shaft
 - Existing infrastructure
 - Service borehole
 - Angus Place to MPPS Pipeline
 - Proposed surface infrastructure
 - Pipeline disturbance footprint (to connect to McPhillamys Gold Project)
 - McPhillamys Gold Project Pipeline (proposed as part of SSD-9505)
 - Existing environment
 - Major road
 - Minor road
 - Vehicular track
 - Named watercourse
 - NPWS reserve
 - State conservation area
 - State Forest

Pit top layout

Angus Place West
Scoping Report
Figure 4.3

4.4.3 Underground infrastructure

A combination of shuttle cars, belts and/or continuous haulage systems will be used for the transport of coal during roadway development and coal extraction. Additional mobile underground plant and equipment includes (but is not limited to) auxiliary fans and ventilation equipment, roof bolting rigs, equipment handlers, equipment transporters and loaders, underground personnel transporters and associated pumping and electrical reticulation equipment. Underground conveyors will be established as the mine progresses to transport the coal to the surface. A network of pipelines, valves and sumps and pumps will be used to manage water and compressed air.

Additional infrastructure may be required to facilitate the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either SCSS or MPPS using the existing coal handling, processing and conveyance infrastructure.

4.4.4 Mine ventilation

Existing approved ventilation infrastructure at Angus Place pit top will provide adequate ventilation for the project. Apart from regular maintenance activities, no changes to existing surface ventilation infrastructure are required.

The project includes the continued use of three drifts at the pit top, which are all used to facilitate intake air and access connections to the workings. There is also an upcast shaft with two centrifugal electric fans. A diesel generator can also be used as a backup energy supply in the event of an emergency.

Two ventilation shafts (3.5 m and 4.5 m) are approved at APC-VS2 on the Newnes Plateau (Figure 4.1) with ventilation fans to be installed on the upcast shaft. To date, only the 3.5 m shaft has been constructed, which once connected to the underground workings will operate as a fresh air intake shaft to the existing mine workings below as well as a means of emergency egress from the underground mine as required. The completion of construction and use of the APC-VS2 ventilation shafts are not required for the project.

4.4.5 Access

The pit top will continue to be accessed from Wolgan Road via one of two site access intersections (AP1 and AP2 on Figure 4.1). There is sufficient car parking at the pit top to handle commuter and delivery traffic associated with the project. Access to the proposed mining area will be via the existing underground portals at the pit top.

Access to existing infrastructure (including monitoring equipment) in Gardens of Stone SCA will continue and will include the continued use of:

- Old Bells Line of Road from Chifley Road for light and heavy vehicles (once on Newnes Plateau, heavy vehicles also use Glowworm Tunnel Road and Blackfellows Hand Trail for access)
- State Mine Gully Road, Blackfellows Hand Trail, Beecroft Trail, Angus Place Trail and Glowworm Tunnel Road for light vehicles only.

Light and heavy vehicles may also use other established trails within Gardens of Stone SCA as required.

4.4.6 Water management

i Underground water management

Water will continue to be stored underground, including but not limited to, within the existing 800 and 900 panel areas. Water from within these areas will continue to be distributed via the in-seam water management system and existing bore network, which includes the 930 and 940 bore.

Groundwater inflows to the mine workings will be managed through transfers to the existing underground water management system. From there, water inflows will be transferred to:

- the pit top for storage, treatment (if required) and reuse
- the SWTP for treatment and subsequent reuse in MPPS via existing infrastructure
- the SCSS for reuse in accordance with the Western Coal Services Project (SSD-5579), subject to approval
- MPPS for use within its water management system
- Pumping Station Facility No. 1, which forms part of the McPhillamys Gold Project.

ii Surface water management

The project will continue to use and maintain the surface water management system at Angus Place, which separates clean and dirty water (Section 3.6).

iii Wastewater management

Prior to the recommencement of mining operations, a new on-site sewage treatment plant or upgrades to the existing on-site sewage treatment plant may be required.

iv Potable water

Potable water is supplied by Lithgow City Council. This water is, and will continue to be, used in the bathhouse and administration building. Bottled drinking water for employees is sourced from a local commercial drinking water supplier.

4.4.7 Fuel

Fuel and oil will continue to be stored within bunded areas or in self-bunded containers.

4.4.8 Lighting

Permanent lighting at the pit top ensures safe operating conditions. This lighting is positioned downwards and away from sensitive receptors to minimise emissions and nuisance impacts to surrounding landowners and road users. Security lighting will continue to be used.

4.5 Uses and activities

4.5.1 Mining method

The project will use bord and pillar mining method consisting of first workings only. This mining method involves the formation of roadways and pillars that are designed to be geotechnically long-term stable. Using this mining method at Angus Place is expected to result in negligible vertical subsidence.

Mining will occur within the proposed mining area (Figure 4.2). The final mine design will avoid known mining constraints, including existing underground workings and geological and geotechnical conditions where feasible. The proposed first workings will be adapted in response to geological and geotechnical conditions to maintain the minimum factor of safety and to maintain negligible vertical subsidence.

The proposed mining method will leave behind an amount of the coal resource during resource recovery to function as supporting pillars to the strata above the target coal seam.

First workings will be undertaken within the Lithgow Seam, the floor of which generally dips from the west to the east. There are no historic workings above or below the Lithgow Seam within the proposed mining area.

4.5.2 Underground activities

Mining will be carried out using continuous miners, which will develop roadways and cross cuts to form up long-term stable pillars. Coal will be delivered to the surface via an installed coal clearance system (conveyor belts). Coal extraction will not exceed 1.2 Mtpa.

As required, existing and proposed underground workings will be accessed, maintained, ventilated, dewatered and/or flooded (for water storage).

4.5.3 Coal handling and processing

ROM coal will be delivered to the surface for handling at the pit top or transferred underground to Springvale Mine. If delivered to the pit top, ROM coal will be stockpiled before being conveyed to the coal preparation plant for crushing and sizing. Coal will then be conveyed to the product coal bin for loading into trucks via the product coal conveyor. Coal extracted from the project will not require washing on-site.

If delivered underground via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top, ROM coal will be transferred to either SCSS or MPPS using the existing coal handling, processing and conveyance infrastructure

Existing coal processing infrastructure including that which is required for conveying, crushing, sizing and stockpiling will continue to be operated under the project.

4.5.4 Coal transportation

Coal transportation from the Angus Place front gate to MPPS does not form part of the project. All coal will be transported off-site by truck using existing private haul roads. Coal transportation will continue to be regulated under the conditions of consent for the Western Coal Services Project (SSD-5579). In accordance with SSD-5579, up to 4 Mtpa of ROM coal from Angus Place can be transported from Angus Place to:

- MPPS
- Kerosene Vale stockpile area
- SCSS for processing and transfer via conveyor to MPPS or the Lidsdale Siding rail loading facility for transfer to export markets.

The existing coal transport hours of operation in place under SSD-5579 will continue to be applied to coal haulage from Angus Place West, which are shown for reference in Table 4.2.

Table 4.2 **Transport hours of operation under SSD-5579**

Activity	Hours
Coal transportation operations on the Wallerawang haul road	Truck movements restricted to the day period only prior to longwall extraction at the Angus Place Colliery. Maximum of three trucks operating during the evening period following the commencement of longwall extraction at Angus Place Colliery. No truck movements to occur in the night period.
Coal transportation operations on the Mt Piper haul road	Truck movements restricted to the day period only prior to longwall extraction at the Angus Place Colliery. Maximum of eight trucks operating during the evening period following the commencement of longwall extraction at Angus Place Colliery. Maximum of two trucks operating during the night period. No truck movements to occur in the night period during adverse meteorological conditions.

Notes: The text within this table is taken directly from SSD-5579. Underground mining using longwall mining methods is not proposed as part of the project. Day refers to the period from 7:00 am to 6:00 pm on Monday to Saturday and 8:00 am to 6:00 pm on Sundays and public holidays. Evening refers to the period from 6:00 pm to 10:00 pm. Night refers to the period from 10:00 pm to 7:00 am on Monday to Saturday and 10:00 pm to 8:00 am on Sundays and public holidays.

In the event of an emergency and with the prior approval of the Secretary, coal may be transported to MPPS via Wolgan Road and Castlereagh Highway.

Approval is also sought for the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either SCSS or MPPS using the existing coal handling, processing and conveyance infrastructure. Coal handling at the Springvale Mine pit top and the transfer of coal from the Springvale Mine pit top to SCSS or MPPS are not included in the project.

4.5.5 Ancillary activities

Existing infrastructure at the pit top and Newnes Plateau will continue to be used throughout the life of the project.

4.5.6 Water transfer

i Pit top

Mine water will continue to be transferred from underground areas to the pit top for storage, treatment, transfer and reuse.

ii McPhillamys Gold Project water supply

To supply water to the McPhillamys Gold Project (SSD-9505) near Blayney in the Central West of NSW, the project includes the:

- construction and operation of a pipeline and associated infrastructure to connect the Angus Place pit top to the McPhillamys Gold Project water pipeline Pumping Station Facility No.1 (approved for construction adjacent to the pit top)
- transfer of water to Pumping Station Facility No. 1 via a new pipeline.

If McPhillamys Gold Project is constructed and there is demand for water from Angus Place, construction activities associated with the installation of the pipeline and associated infrastructure will occur within the pipeline disturbance footprint (Figure 4.1) and are described in Section 4.5.13.

iii Water transfer to Springvale Coal Services Site

The project also includes transferring water from Angus Place to SCSS for use in coal handling and preparation activities. The infrastructure required to facilitate the transfer of water from Angus Place to SCSS formed part of MOD 4 to the Western Coal Services Project (SSD-5579).

iv Water transfer to Springvale Water Treatment Project

The project includes the continued transfer of mine water to SWTP for treatment and subsequent reuse at MPPS. The Angus Place transfer pipeline and Springvale Mine Water Transfer Scheme (also referred to as 'the raw water transfer pipeline' as approved under SSD-7592), transfer water from underground mine dewatering facilities at Angus Place to SWTP. Water will continue to be transferred to the surface from either the 800 Area or 900 Area.

v Water transfer to Mt Piper Power Station

The project includes the continued transfer of mine water to MPPS. A water transfer pipeline connects Angus Place and MPPS (Figure 4.1) and facilitates the transfer of up to 2.6 ML/day of untreated mine water to MPPS. Water is transferred to the surface from either the 800 Area or 900 Area.

4.5.7 Waste and rejects management

No coarse or fine coal reject material will be generated by the project.

General waste will be taken off-site by licensed waste contractors. Materials will be recycled whenever possible. Used oil drums and filters will be recycled with other waste metals and removed from site by a metal recycling company. Waste oil and oily water will be disposed of by licensed waste transporters at a suitably licensed waste treatment plant. Spoils or cuttings generated during exploration activities will be returned to the pit top, dewatered in a bunded facility and reused for rehabilitation purposes.

4.5.8 Hours of operation

Angus Place will continue to operate 24 hours a day, seven days a week.

Transport of coal on the Mt Piper haul road will be restricted to the day period only consistent with Western Coal Services Project (SSD-5579) (Table 4.2).

4.5.9 Mine life

The proposed mining method will provide flexibility in the coal extraction rate to meet changes in coal demand requirements from MPPS. To account for the uncertainty of MPPS demands, the project is seeking approval for Angus Place to operate mining operations until 31 December 2042, which will align the project with the planned operational life of MPPS. Water transfers will also continue throughout this period to 31 December 2042. Rehabilitation activities will commence following this period.

4.5.10 Decommissioning and rehabilitation

The project will include the rehabilitation of disturbed areas. The general principle will be to rehabilitate the pit top and previously disturbed areas back to woodland, commensurate with nearby remnant vegetation at the completion of mining. However, water management structures may be retained in the post-mining landform. Infrastructure with a post-mining beneficial use may also be retained. Final land use options will be considered closer to mine closure and will be subject to future approvals.

The *Angus Place Rehabilitation Strategy* (Centennial 2024) will be updated following project approval and in accordance with relevant guidelines.

The rehabilitation of the former Newcom Colliery (Kerosene Vale) pit top, Commonwealth Colliery and Vale of Clwydd No. 2 Colliery are not included in the project; however, the rehabilitation of these sites will be undertaken in accordance with the *Angus Place Rehabilitation Strategy* (Centennial 2024).

4.5.11 Workforce

The project will provide employment opportunities for up to 180 FTE personnel.

Angus Place will be managed as a flexible operation with the ability to flex coal production up or down in response to the changing coal supply requirements of MPPS.

Centennial's workforce within its Western Region operations, which includes Angus Place, Springvale Mine, Airly Mine and Clarence Colliery, with the ability to be mobilised across these different operations as required.

4.5.12 Exploration activities

Ongoing exploration drilling within tenement areas may occur throughout the life of the project to obtain further information regarding resources to be mined, as well as geological and geotechnical information relevant to the mining activities that will be undertaken. Drilling may also be undertaken as required for gas and hydrogeological monitoring and investigations. These activities are included in the project.

4.5.13 Construction

Construction activities associated with the project will be limited to the installation of a water transfer pipeline and associated infrastructure within the pipeline disturbance footprint (Figure 4.1). The pipeline disturbance footprint is in a heavily disturbed context (Photograph 4.1) south of the pit top and is limited to an area of 20 metres (m) by 28 m.



Photograph 4.1 Pipeline disturbance footprint

Construction activities are anticipated to take up to three months and will include the delivery of pipes, valves, concrete and associated infrastructure, excavation and fill and laying pipe. Works will be conducted during standard construction hours in accordance with the *Interim Construction Noise Guideline* (ICNG) (DECC 2009).

4.5.14 Minor surface disturbance

Minor surface disturbance may be required to facilitate monitoring and exploration activities and the maintenance and repair of existing access tracks and infrastructure, including on Newnes Plateau and within Gardens of Stone SCA.

Centennial Angus Place will prepare and implement a Minor Surface Disturbance Management Plan, which will include a description of the measures that will be implemented for:

- managing operation of minor surface infrastructure and associated access tracks
- consulting with affected landowners
- avoiding threatened species and ecological communities
- minimising clearance and disturbance of native vegetation
- minimising erosion and sedimentation
- rehabilitating disturbed areas.

The Minor Surface Disturbance Management Plan will be prepared in consultation with the NSW Department of Planning, Housing and Infrastructure (DPHI) and NPWS prior to causing surface disturbance.

4.6 Timing

It is intended that coal from Angus Place will continue to be supplied to MPSS after the completion of mining operations at Springvale Mine and in conjunction with Springvale West, Clarence Colliery and Airly Mine. This portfolio of operating mines will play an essential role in ensuring the coal supply requirements of MPPS are met over its remaining life. Centennial needs the operational flexibility to replace or supplement coal from Centennial's coal mine portfolio to meet the needs of its customer (i.e. MPPS).

Angus Place will be a flexible operation with mining operations proposed to 31 December 2042 with the ability to flex coal production up or down, in response to the changing coal supply requirements of MPPS.

4.7 Project options and alternatives considered

4.7.1 'Do nothing'

The option of not developing the project would avoid the environmental and amenity impacts; however, the potential project benefits would not occur, including:

- utilisation of existing coal mining, handling and processing infrastructure, as well as an existing private haul road that connects the pit top directly to the end user of the extracted coal (i.e. MPPS)
- ensuring energy security for NSW by supplying a critical demand for coal to support the continued operation of MPPS through to 2040 as other coal fired power stations retire and NSW transitions to renewable energy generation
- retention of up to 180 skilled jobs throughout operations

- significant direct and indirect social and economic benefits to the local and regional economy, including opportunities for local businesses and suppliers, general growth and community development
- diversification of local revenue streams
- beneficial reuse of mine water in other industrial facilities within the region.

The project has the ability to be scaled up and down according to the needs of MPPS and reducing any risk posed by a shortfall in supply from Centennial's other Western Region operations. Ultimately, the opportunity to provide local coal using a lower impact mining method would not be realised in the event that the project does not proceed.

4.7.2 Alternative mining method

A number of alternative mining methods have been assessed as part of the mine layout and review process:

- first workings only (the selected mining method)
- first workings followed by secondary extraction techniques, including:
 - single-sided lifting
 - double-sided lifting
 - shortwall
 - miniwall
 - splitting and quartering
- combination of first workings and secondary extraction techniques at varying depths of cover.

The project will use first workings only. Using this mining method at Angus Place is expected to result in negligible vertical subsidence. Subsidence levels anticipated for the project are expected to be imperceptible for all practical purposes because natural, seasonal variations in ground level can be 20 mm or more.

First workings is a reliable and consistent mining method. Centennial has successfully implemented first workings at its other NSW underground coal mining operations. This mining method will provide operational flexibility at Angus Place in order to navigate geological structures, adverse geotechnical conditions and sensitive surface features. It will also provide flexibility in coal extraction rates to meet changes in coal demand requirements from MPPS.

The proposed mining method will leave behind an amount of the coal resource during resource recovery to function as supporting pillars to the above strata. The reduced subsidence associated with this mining method will minimise and/or avoid impacts on known surface features, including:

- Coxs River, Lambs Creek, Kangaroo Creek
- Long Swamp, Lambs Creek Swamp, Kangaroo Creek Swamp
- pagoda and rock structures
- an area that is the subject of a BioBanking Agreement (BA 427)
- dwellings on private land (to the greatest extent feasible).

4.7.3 Alternative mine design

The recommencement of underground mining at Angus Place has been carefully considered by Centennial. Mine planning studies have considered the future supply demands of MPPS whilst balancing social, environmental and economic outcomes. The mine layout and mine design process has involved rigorous review from external specialists and internal mining, technical and environmental practitioners. As a result, multiple alternatives have been considered.

Centennial has considered various secondary extraction mine designs from multiple areas within the existing mining leases held by Centennial Angus Place; however, these have not been pursued due to associated social, environmental, operational geotechnical and economic impacts.

The mine planning and design process has considered various alternatives, substitution measures and engineering controls with the ultimate goal being to minimise and manage potential environmental impacts associated with the project while maintaining a productive and safe mine. In these respects, the mine design selected for the project has considered:

- feasibility of mine development (i.e. practical considerations associated with access to and extraction of the coal resource)
- geotechnical conditions
- maximising extractable reserves
- coal quality
- avoidance of sensitive surface features.

An alternative mine design would potentially contribute to increased subsidence-related impacts within the project area which may not be considered suitable in areas with sensitive surface features. The proposed mine design also allows for the avoidance of known mining constraints, including:

- existing underground workings
- depth of cover (i.e. no planned workings <40 m)
- unexpected geological and geotechnical conditions (adaptive management can be implemented).

The proposed mine design represents the lowest potential for impacts and highest yield of the targeted coal resource.

5 Statutory context

The key relevant requirements for the project, having regard to the EP&A Act, other NSW and Commonwealth legislation, and environmental planning instruments are summarised in Table 5.1.

This table has been set out in accordance with the *Scoping report guidelines* (DPIE 2022a) and *State significant development guidelines – preparing an Environmental Impact Statement* (DPIE 2021) to cover:

- power to grant approval (i.e. approval pathway)
- permissibility
- consistent approvals
- Commonwealth approvals
- approvals not required (pursuant to section 4.41 of the EP&A Act)
- mandatory matters for consideration.

Detailed consideration of relevant statutory requirements will be provided in the EIS.

Table 5.1 Statutory context

Approval	Requirement
Power to grant approval	
EP&A Act and Planning Systems SEPP	Approval for the project is sought under Division 4.7 of the EP&A Act, which relates to the assessment of SSD. The project is SSD as it meets the requirements of section 2.6 of the Planning Systems SEPP, as it is development which: • requires development consent • is specified in Schedule 1, section 5 (development for the purpose of coal mining). Under section 4.5(a) of the EP&A Act, the consent authority for SSD is the Minister for Planning and Public Spaces or the NSW Independent Planning Commission (IPC). Pursuant to section 2.7(1) of the Planning Systems SEPP, the IPC will be the consent authority for the project if: • Lithgow City Council makes a submission by way of objection • at least 50 submissions (other than from a council) are made by the public by way of objection • a reportable political donation under section 10.4 of the EP&A Act has been made by Centennial. Under the EP&A Act the development application (DA) for an SSD project must be accompanied by an EIS that addresses the SEARs that have been notified for the project. The assessments which form the EIS need to be prepared in accordance with relevant guidelines. Should approval be granted for the project, the existing Angus Place project approval (MP 06_0021) would be surrendered.
Permissibility	
State Environmental Planning Policy (Resources and Energy) 2021	Angus Place is within the Lithgow LGA. The applicable local planning instrument is the Lithgow Local Environmental Plan 2014 (Lithgow LEP). There are seven land use zones within the project area: • IN1 – General Industrial • R5 – Large Lot Residential • RU1 – Primary Production • RU2 – Rural Landscape • RU3 – Forestry • SP2 – Infrastructure (Electricity Generating Works; Roads and Traffic Facility). Underground coal mining is a prohibited land use in all the above zones.

Approval	Requirement
	Notwithstanding the above prohibition, the permissibility of the project is governed by State Environmental Planning Policy (Resources and Energy) 2021 (the Resources and Energy SEPP). Section 2.9 of the Resources and Energy SEPP provides for development that is permissible with consent, and relevantly states that: (1) Mining Development for any of the following purposes may be carried out only with development consent – (a) underground mining carried out on any land, (b) mining carried out – (i) on land where development for the purposes of agriculture or industry may be carried out (with or without development consent), or (ii) on land that is, immediately before the commencement of this clause, the subject of a mining lease under the <i>Mining Act 1992</i> or a mining licence under the <i>Offshore Minerals Act 1999</i>, ... (e) mining on land that is reserved as a state conservation area under the NSW <i>National Parks and Wildlife Act 1974</i>. In relation to any inconsistency between the Resources and Energy SEPP and an LEP, the Resources and Energy SEPP prevails to the extent of the inconsistency (sub-clause 5(3)). Therefore, the project is permissible with development consent as it relates to underground mining.
Commonwealth approvals	
EPBC Act	Under the EPBC Act, an action that may or will have a significant impact on matters of national environmental significance (MNES), or the environment generally for ‘Commonwealth agencies’, is to be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) for determination as to whether or not it is a controlled action. On 26 August 2022, Angus Place West was determined to be a controlled action (EPBC 2022/09270). This decision was made under section 75 of the EPBC Act. Commonwealth DCCEEW determined that the project was likely to have a significant impact on: • Greater Blue Mountains World Heritage Area • Greater Blue Mountains National Heritage Place • Temperate Highland Peat Swamps on Sandstone • Swamp Everlasting (<i>Xerochrysum palustre</i>) • Black Gum (<i>Eucalyptus aggregata</i>) • Latham’s Snipe (<i>Gallinago hardwickii</i>) • a water resource, in relation to coal seam gas development and large coal mining development. The validity of a controlled action decision is not explicitly time-bound under the EPBC Act. Instead, the decision remains in effect until one of the following occurs: • Approval granted or refused – the Minister makes a final decision under section 133 of the EPBC Act to either approve or refuse the proposed action • Revocation or substitution – the decision is revoked or substituted under specific circumstances outlined in section 78 of the EPBC Act, such as the emergence of substantial new information or unforeseen changes in circumstances. Under section 78, the Minister may revoke and replace/substitute a controlled action decision if: • new, significant information has emerged about the impacts of the action on matters protected under Part 3 of the EPBC Act • there has been a substantial, unforeseen change in circumstances relating to the action’s impacts on protected matters

Approval	Requirement
	- the action was initially deemed “not a controlled action” based on it being undertaken in a particular manner, but it is not being, or will not be, carried out as specified - the decision was based on a bilateral agreement or accredited management arrangement that no longer applies or is no longer in force - a request for reconsideration has been made under section 79 of the EPBC Act. Given this, it is unlikely that the controlled action decision will be revoked or replaced. Therefore, engagement with Commonwealth DCCEEW will be initiated to confirm this approach and determine if any aspects of the previous referral require updating to accurately reflect the proposed project.
<i>Native Title Act 1993</i>	The Commonwealth <i>Native Title Act 1993</i> recognises and protects native title rights in Australia. It allows a native title determination application (native title claim) to be made for land or waters where native title has not been validly extinguished, for example, extinguished by the grant of freehold title to land. Claimants with registered native title claims have the right to negotiate about some future acts, including mining and granting of a mining lease over the land covered by the claim. Where a native title claim is not registered, a development can proceed through mediation and determination processes, though claimants will not be able to participate in future act negotiations. There are two active claim applications (i.e. non-finalised) encompassing part of the project area: - Warrabinga-Wiradjuri #7 (NC2018/002) - Wendy Lewis, Mavis Agnew & Martin de Launey on behalf of Warrabinga-Wiradjuri #2 (NC2013/001). Should these claims be finalised, the Native Title Claimants would form key stakeholders to consult with during the project. It is noted that representatives of these organisations were consulted as part of the Aboriginal cultural heritage assessment (ACHA). Most land within the project area is also subject to an Ancillary Deed which was entered into on the 31 January 2003 by the Gundungurra Native Title Claim Group, the Gundungurra Tribal Council Aboriginal Corporation and a number of Centennial entities, including Centennial Angus Place. As such, Angus Place is bound by the terms of this Deed. The Deed is subject to a confidentiality clause and as such further detail is unable to be provided in this document.
Approvals not required (Section 4.41 of the EP&A Act)	
A permit under the NSW <i>Fisheries Management Act 1994</i> to block fish passage or dredge or carry out reclamation work on water land	Generally, a permit must be obtained under the <i>Fisheries Management Act 1994</i> for any works that involve dredging or reclamation, any structure that may inhibit or obstruct the movement of fish within a waterway or cause damage or destruction on marine vegetation. Approvals under the <i>Fisheries Management Act 1994</i> are covered by the SSD approval. Potential impacts to fish passage will be assessed through the EIS process.
An approval under Part 4, or an excavation permit under section 139 of the NSW <i>Heritage Act 1977</i> (Heritage Act).	A historic heritage assessment will be undertaken for the project. The project involves underground mining utilising an existing pit top and surface infrastructure and therefore will ensure that minimal surface disturbance occurs, thereby significantly reducing the risk to known or unidentified heritage items. The Western Region Historic Heritage Management Plan (HHMP) (Centennial 2018), or an updated version of it, will be implemented for the project.
An Aboriginal heritage impact permit under section 90 of the NSW <i>National Parks and Wildlife Act 1974</i>	Avoidance of Aboriginal cultural heritage values by minimising surface impacts has been a key aspect of the mine design process. The project will use first workings only, which is expected to result in negligible vertical subsidence and therefore impacts on Aboriginal sites within the proposed mining area are considered very unlikely. Angus Place has well established protocols in place to guide Aboriginal cultural heritage management. These protocols are detailed in Centennial’s Western Region Aboriginal Cultural Heritage Management Plan (ACHMP) (Centennial 2025a). Aboriginal sites within the proposed mining area that are considered sensitive to subsidence impacts will be recorded, where safe, prior to the commencement of mining and monitored during mining, where safe.
A bushfire safety authority under Section 100B of the NSW <i>Rural Fires Act 1997</i>	Not applicable to the project.

Approval	Requirement
A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the <i>Water Management Act 2000</i> (WM Act)	The requirement to obtain an aquifer interference approval under section 91(3) of the WM Act is triggered only when a proclamation has been made under Section 88A that the particular type of approval is required. To date, no proclamation has been made specifying that an aquifer interference approval is required in any part of NSW. Therefore, the <i>NSW Aquifer Interference Policy</i> (AIP) sets the policy with respect to aquifer interference. The AIP requires that potential impacts on groundwater sources, including their users and groundwater dependent ecosystems, be assessed against minimal impact considerations. If the predicted impacts are less than the Level 1 minimal impact considerations, then these impacts will be considered as acceptable. An assessment of the project against the minimal impact considerations will be completed as part of the EIS. A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 may be required for the project.
Water access licences under the WM Act	Centennial Angus Place holds several water access licences.
Consistent approvals (Section 4.42 of the EP&A Act)	
An environment protection licence (EPL) under Part 3 of the <i>NSW Protection of the Environment Operations Act 1997</i>	Angus Place currently operates under EPL 467. EPL 467 will be varied as required if the project is approved.
A mining lease under the <i>NSW Mining Act 1992</i>	The project area occupies the western portion of the Angus Place Colliery holding and extends into CCL702 held by Shoalhaven Coal. Centennial and its entities hold ML1424, ML1699, ML1720, ML1853 and CCL704 all of which are within the project area. Negotiations are underway to secure a Part Transfer agreement with Shoalhaven Coal for part of CCL702. No new mining leases are required to enable the project.
An aquaculture permit under section 114 of the <i>Fisheries Management Act 1994</i>	The project does not involve aquaculture.
A production lease under the <i>NSW Petroleum (Onshore) Act 1991</i>	The project does not involve petroleum production.
A consent under section 138 of the <i>NSW Roads Act 1993</i> (Roads Act)	A consent is required under section 138 of the Roads Act to work on or above a road or to connect a road to a classified road. No works on or above a road are likely to be required for the project.
A licence under the <i>NSW Pipelines Act 1967</i>	The pipelines that will be used as part of the project will convey wastewater and mine water. In accordance with section 5.1(d) of the <i>NSW Pipelines Act 1967</i> , these pipelines are considered exempt of licence requirements.
An approval under section 22 of the <i>Coal Mine Subsidence Compensation Act 2017</i>	The project would include a detailed subsidence assessment and geotechnical review. The proposed mining methods would take into consideration the sensitivity of surface features and propose appropriate mitigation measures to ensure damage to features does not occur.
Other NSW approvals	
Approvals under Part 4 and Part 5 of the <i>NSW Crown Land Management Act 2016</i>	There is Crown land within the project area; however, a licence to occupy or otherwise use this land is not required as all activities associated with the project that occur on Crown land will occur underground.

Approval	Requirement
Mandatory considerations – Considerations under other legislation	
Commonwealth <i>Climate Change Act 2022</i>	The <i>Climate Change Act 2022</i> legislates Australia’s commitments under the Paris Agreement to reduce Australia’s GHG emissions, outlining both the 2030 and 2050 emissions reduction targets. A GHG assessment will be completed and included as part of the EIS, including details of emission reduction targets. Where relevant, other technical assessments will include consideration of the impacts of climate change.
NSW <i>Climate Change (Net Zero Future) Act 2023</i>	The <i>Climate Change (Net Zero Future) Act 2023</i> establishes a statutory framework for effective action on climate change in NSW, setting legally binding targets to reduce GHG emissions. It also presents a set of guiding principles for action to address climate change that consider the impacts, opportunities and need for action in NSW. The project’s integration of these principles will be detailed in the EIS.
NSW <i>Biodiversity Conservation Act 2016</i> (BC Act)	In accordance with section 7.14(2) of the BC Act, the consent authority is to take into consideration the likely impact of a project on biodiversity values as assessed in a biodiversity development assessment report (BDAR). An assessment of biodiversity values and the likely biodiversity impacts of the project will be prepared in accordance with section 7.9 of the BC Act and the <i>Biodiversity Assessment Method</i> (BAM) and will be documented in a BDAR. In accordance with section 7.16(3) of the BC Act, if the project is likely to have serious and irreversible impacts (SAII) on biodiversity values, the consent authority is required to take those impacts into consideration and, if consent is to be granted, determine whether there are any additional and appropriate measures that will minimise those impacts. The BDAR will include consideration of the project’s potential impacts on SAII entities.
Mandatory considerations – Environmental planning instruments	
Resources and Energy SEPP	This SEPP provides for the orderly development of resources to promote the social and economic welfare of NSW. It also established planning controls to encourage ecologically sustainable development. Chapter 2 specifies certain non-discretionary standards for management of impacts associated with mining and the project’s compliance with these will be assessed in the EIS.
State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP)	This SEPP aims to facilitate the effective delivery of infrastructure across NSW. Under section 2.48 of the Transport and Infrastructure SEPP, the consent authority must notify the electricity supply authority for the area and invite comments about potential safety risks. The EIS will include an assessment of impacts on electricity transmission lines and will describe the consultation that has been undertaken to date in respect of the project with transmission line owners (where relevant).
State Environmental Planning Policy (Resilience and Hazards) (Resilience and Hazards SEPP) 2021	The EIS will consider the following relevant departmental guidelines: • <i>Applying State Environmental Planning Policy No. 33 Hazardous and Offensive Development</i> • <i>HIPAP No. 3 – Risk Assessment</i> • <i>HIPAP No. 12 – Hazards related Conditions of Consent.</i> The Resilience and Hazards SEPP regulates the determination of development applications to carry out a “potentially hazardous industry” or “potentially offensive industry”. The EIS will document the established best management practices for hydrocarbons and explosives used within the project area, as well as effective implementation of the approved environmental management strategy (EMS) and occupational health and safety management systems. The project is not considered to comprise a “potentially hazardous industry” or a “potentially offensive industry” and therefore a preliminary hazard analysis will not be undertaken as required by section 3.11 of the Resilience and Hazards SEPP and nor does section 3.12 of the Resilience and Hazards SEPP apply to the consent authority's determination of the project's development application.

Approval	Requirement
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP)	The B&C SEPP applies to land within the Sydney Drinking Water Catchment. Section 6.61 of the SEPP provides that a consent authority must not grant consent to the carrying out of development on land within the Sydney Drinking Water Catchment unless it is satisfied that the carrying out of the proposed development would have a “neutral or beneficial effect” (NorBE) on water quality. The project is defined in the B&C SEPP as ‘continuing development’. Section 6.62 of the B&C SEPP holds that continuing development satisfies NorBE if it will have the same or a lesser adverse impact on water quality than the adverse impact the continuing development would have, if it were extended or expanded under similar conditions to the existing development consent. Nonetheless, the water resources impact assessment will undertake a NorBE assessment.
Lithgow LEP	Lithgow LEP contains pre-conditions to being able to grant approval and mandatory considerations in relation to: • zone objectives (Clause 2.3(2)) • earthworks (Clause 7.1) • stormwater management (Clause 7.3) • terrestrial biodiversity (Clause 7.4) • groundwater vulnerability (Clause 7.5) • riparian land and watercourses (Clause 7.5) • sensitive lands (Clause 7.5) • essential services (Clause 7.10). These matters and their relevance to the project will be considered in the EIS.

6 Engagement

Centennial engages regularly with key stakeholders from government, special interest groups, the Aboriginal community and the wider community. This chapter outlines the key stakeholder and community engagement carried out prior to and during the scoping phase of the project. It provides an overview of the strategic planning and engagement approach, stakeholder identification and engagement activities. A summary of community views expressed about the project is also provided. The responses received will be used to inform stakeholder engagement activities during EIS preparation.

Centennial engages project stakeholders in accordance with the following guidelines:

- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI 2024a)
- *Social Impact Assessment Guideline for State Significant Projects* (DPIE 2023a)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010a).

In accordance with *Undertaking Engagement Guidelines for State Significant Projects* (DPHI 2024a), Centennial are committed to:

- early and ongoing engagement, during project planning, development and impact assessment
- consideration of diverse viewpoints to better understand potential issues and impacts
- being open and transparent when providing information and engaging with stakeholders
- providing readily accessible project information via multiple communication channels and assistance with enquiries
- actively listening and demonstrating how feedback has been considered and addressed as part of developing the project and undertaking the impact assessment.

6.1 Community and stakeholder engagement strategy

Centennial recognises the importance of early and effective engagement and is committed to implementing a transparent and inclusive approach during planning, development and impact assessment.

A Community and Stakeholder Engagement Strategy (CSES) has been developed to drive comprehensive and meaningful engagement during the scoping and EIS phases of the project. The CSES is a live document, which will be updated as required in response to stakeholder and community feedback.

A key objective of the CSES is to facilitate open and inclusive engagement. The CSES includes a schedule for the provision of timely and relevant project information, across different communication channels, that is tailored to stakeholders' needs. Engagement will include informing, involving and collaborating, with the level of engagement tailored to the stakeholder.

The CSES will be updated to refine the communication and engagement activities during the EIS phase.

6.2 Scoping phase consultation

6.2.1 Community stakeholders

Centennial commenced project engagement with the local community, Western Region Community Consultative Committee and special interest groups in 2021 and this engagement is ongoing.

Centennial has established a dedicated project web page on the Centennial website to provide the local community with an overview of the project.

Feedback received during scoping phase engagement will be considered as part of identifying project assessment requirements.

Community consultation carried out during the scoping phase is summarised in Table 6.1.

Table 6.1 Summary of community stakeholder engagement activities

Stakeholder	Engagement type	Timing	Key outcome
Community open sessions	Drop-in sessions	February 2026	Community stakeholders were provided an overview of the project, assessment approach and timeframes.
Centennial employees	Toolbox talks Newsletter	February 2026	Employees were provided an overview of the project, assessment approach and timeframes. Employees were interested in the continuation of employment across Centennial's Western Region operations.
Western Region CCC	Meetings	Quarterly (since 2021)	The Western Region CCC is the forum through which Centennial discusses key operational updates, environmental performance, regulatory approvals and community concerns. Since 2021, Western Region CCC meetings have included discussion of the project and regular updates on the project are provided.
Western Region Aboriginal Cultural Heritage Committee	Meetings	Bi-annually (since 2021)	Since 2021, the Western Region Aboriginal Cultural Heritage Committee meetings have included discussion of the project. Committee members are interested in potential impacts on cultural heritage sites and cultural values in general.
Landholders within the proposed mining area and general project area	Meetings Phone calls Emails Briefing letters	February 2021 March 2021 August 2021 March 2022 October 2022 December 2022 January 2023 February 2026	Since 2021, Centennial has engaged with landholders in the proposed mining area and general project area in relation to the project. Concerns have been raised around potential impacts on water resources, biodiversity and amenity impacts. A briefing letter was sent to all landholders within the proposed mining area to provide up-to-date project information in February 2026.
Special interest groups: - Blue Mountains Conservation Society - Lithgow Environment Group - Nature Conservation Council of NSW 4Nature - Wilderness Australia	Meetings	November 2023 July 2024 December 2024 April 2025 August 2025 October 2025 February 2026	Centennial meet regularly with representatives from these special interest groups. As part of these meetings, representatives have been provided an overview of the project, assessment approach and timeframes. These special interest groups have expressed their strong opposition to the continuation of coal-fired power generation and subsequent demand for coal mining. They've raised concerns around the project's contributions to climate change, as well as impacts on biodiversity and water resources (with a focus on groundwater drawdown and impacts on swamp systems), visual amenity and rehabilitation impacts.
Wallerawang/Lidsdale Progress Association	Email	February 2026	Representatives were provided an overview of the project, assessment approach and timeframes.
Lithgow Business Chamber	Email	February 2026	Representatives were provided an overview of the project, assessment approach and timeframes.

To provide an opportunity for the local community to find out more about the project and engage with the project team, Centennial coordinated community drop-in sessions in Clarence, Wallerawang, Portland and Lithgow across 3 and 4 February 2026. The sessions were well-attended with approximately 60 attendees across four separate sessions. Participants were provided with information about the project, including an overview of key project components, the assessment approach, project schedule and how to provide feedback throughout the assessment process.

The majority of attendees supported the project, with a focus on local employment opportunities and economic benefits from the continuation of mining operations within the Lithgow LGA. The project will provide greater certainty for businesses dependent on coal mining as the energy transition continues. Concerns were raised around the project’s contribution to climate change, water management (including discharges) and impacts on water resources. Feedback was also provided on how to advertise and coordinate additional community drop-in sessions in the future.

The majority of attendees were interested in receiving up-to-date project information as the development application process continues. A project-specific web site has been established and will remain active throughout the assessment process and provides an avenue through which the community can share their views, concerns and ideas with the project team.

Semi-structured telephone interviews were also held with four CCC members between 28 October and 11 November 2025. Matters raised by these community representatives included support for ongoing employment and economic opportunity, and discussion of noise, dust, biodiversity and subsidence considerations, as well as location of mining activities with relation any residences or water sources.

The lower impact mining method selected for the project has been chosen in response to community concerns around mining-related impacts on biodiversity and water resources.

Community engagement will continue during the EIS phase and beyond.

6.2.2 Government and regulatory stakeholders

Government and regulatory stakeholder consultation carried out during the scoping phase is summarised in Table 6.2.

Table 6.2 Summary of government and regulatory stakeholder engagement activities

Stakeholder	Engagement type	Timing	Key outcome
NSW Government			
DPHI	Meetings	October 2023	Centennial meets regularly with DPHI to discuss their Western Region operations, including Angus Place. Since 2023, meetings have included updates on the project. DPHI have asked that particular attention is paid to water management, subsidence, biodiversity and social impacts.
		February 2024	
		March 2024	
		April 2024	
		June 2024	
		December 2024	
		January 2025	
		April 2025	
		May 2025	
		June 2025	
		July 2025	
		August 2025	
		September 2025	
		February 2026	

Stakeholder	Engagement type	Timing	Key outcome
NPWS	Meetings	Monthly	Representatives from NPWS attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates. Centennial also liaise with NPWS regularly to coordinate land access within Gardens of Stone SCA. A NPWS representative attends the Western Region CCC that provide project updates. NPWS have raised concerns around interactions with Gardens of Stone SCA, subsidence impacts and impacts on biodiversity and water resources.
DCCEEW – Water Group	Meetings	July 2025	An overview of the project and proposed groundwater modelling approach has been provided.
DCCEEW – Energy Security Office	Meetings	Monthly	The Energy Security Office coordinate monthly inter-agency consultation with Centennial and EnergyAustralia for energy security issues with a focus on water management. These meetings include regular project updates.
EPA	Meetings	Monthly	Representatives from EPA attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates. EPA have raised concerns around the proposed water management strategy.
DEECCW - CPHR	Meetings	Monthly	Representatives from DEECCW - CPHR attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates.
WaterNSW	Meetings	Monthly	Representatives from WaterNSW attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates.
NSW Resources Regulator NSW Resources	Meeting	August 2025	Representatives from NSW Resources Regulator and NSW Resources were provided an overview of the project. Attendees were interested in potential opportunities to maximise resource extraction within the proposed mining area, as well as employment opportunities generated by the project. In response to feedback from NSW Resources Regulator and NSW Resources, resource estimates will be completed as part of the preparation of the EIS.
Commonwealth Government			
Commonwealth DCCEEW	Meetings Site tour	April 2022 October 2022 November 2022 March 2023	As part of the EPBC Act referral, Commonwealth DCCEEW were provided an overview of the project and potential impacts on MNES (including threatened species and ecological communities, water resources and GBMWHA). Representatives from DCCEEW joined DPHI on a site tour in November 2022.
Local Government			
Lithgow City Council (including Lithgow Emerging Economy Project)	Meetings	April 2022 June 2022 September 2025 October 2025	Lithgow City Council have been provided an overview of the project, assessment approach and timeframes. They are generally supportive of continued operations at Angus Place as a result of the continuation of mining employment and economic contributions to Lithgow LGA.

6.3 EIS phase consultation

During the preparation of the EIS, Centennial will consult with relevant Commonwealth, State and local government authorities, infrastructure and service providers, community groups, the local Aboriginal community, Native Title claimant groups, neighbours and affected landowners.

Aboriginal stakeholders will be identified and consulted in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DEECCW 2010) and the *First Nations Guidelines* (Office of Energy and Climate Change 2022).

Consultation during the development of the EIS will aim to:

- proactively inform, consult and involve stakeholders using clear and consistent key messages
- continue to collaborate with key stakeholders to identify potential issues, impacts, opportunities and benefits
- communicate the progress of the project and key findings or outcomes of assessments
- enable stakeholders to have input into the preparation of the EIS, project planning and refinement and opportunities for benefits sharing
- implement response and feedback strategies to address stakeholder concerns and use these to inform the evolution of the project.

A range of tools and methods will be used to communicate and engage with the community and other stakeholders during preparation of the EIS, with examples provided in Table 6.3. Issues raised during engagement will be documented by the project team to inform the project design, environmental assessment, and the preparation of the EIS.

Table 6.3 Engagement tools and methods during preparation of the EIS

Engagement methods	Detail
Advertising	Advertising in local media to advise of upcoming consultation opportunities and provide project updates.
Briefings	Formal letters or meetings with key stakeholders including landowners, MPs, Councillors and council staff to provide updates on the project.
Door-knocking	Project representatives go door to door to speak with impacted landowners and neighbours and/or provide them with project briefings and information.
Drop-in sessions	Multi-hour time periods when stakeholders can drop in to speak to the project team, view documents and plans and ask questions.
Feedback form	A dedicated online feedback form for community and stakeholder correspondence via the project website.
Letterbox drops or unaddressed mail	General information about the project delivered by the project team or Australia Post.
Letters	Addressed mail containing information, clarification, responses or requests to a particular household, business or individual.
Media releases/statements	Proactive or responsive media statements or announcements provided to the media and other key stakeholders to provide updates, address concerns and clarify information.
Meetings	One-on-one or small group meetings to discuss project issues and concerns in more detail.
Newsletters	Regular project information distributed by email or in hard copy to registered stakeholders.

Engagement methods	Detail
Presentations	Presentations about the project delivered to a group of interested persons, club or committee on request or by invitation.
Surveys	Online or offline surveys to obtain input and feedback on project decision-making.
Social media	Online social connection platforms used to share project information and interact with stakeholders.
Website	Updates to the existing website including descriptions of the project, company information, frequently asked questions, plans, maps, media releases and contact information.

7 Proposed assessment of impacts

7.1 Approach and issue identification

A preliminary environmental assessment has been carried out to identify matters requiring further assessment in the EIS and the level of assessment that should be carried out. In accordance with the *Scoping Report Guidelines* (DPIE 2022), the following factors have been considered in the identification of matters needing further assessment for the project:

- the scale and nature of the likely impact of the project and the sensitivity of the receiving environment
- whether the project is likely to generate cumulative impacts with other relevant future projects in the area
- the ability to avoid, minimise and/or offset the impacts of the project, to the extent known at the scoping phase
- stakeholder consultation and engagement outcomes (Chapter 6).

A scoping summary table has been prepared in accordance with the *Scoping Report Guidelines* (DPIE 2022) and is included in Appendix A. The level of assessment for each matter is:

- detailed: water resources, social, biodiversity (terrestrial and aquatic) and subsidence
- standard: air quality, GHG, Aboriginal heritage, historical heritage, traffic and access, noise and vibration, economic, rehabilitation and mine closure.

The EIS will include proportionate, risk-based assessments in line with the objects of the EP&A Act.

7.2 Detailed assessment

7.2.1 Water resources

i Existing environment

a Groundwater

The project area is within the Sydney Basin West Groundwater Source, regulated under the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2023.

Within a 3 km radius of the project area, there are 19 registered groundwater works (excluding exploration and/or monitoring bores). The majority of these are licensed as basic landholder rights (i.e. limited use for domestic and stock purposes). One bore has a license for 'water supply' purposes. There are two plant community types (PCTs) within the proposed mining area that are highly dependent on groundwater:

- PCT 3385 Southern Tableland Creekflat Swamp Woodland
- PCT 3932 Central and Southern Tableland Swamp Meadow Complex.

The relevant groundwater systems include:

- surficial and localised alluvial and colluvial deposits in the Cocks River Valley, including tributaries in the project area
- regional, porous rock hydrogeological system comprising deeper aquifer units (limited to Permian-aged Illawarra Coal Measures units and the lower units of the Triassic hydrogeological units).

In the lower hydrogeological system, the regional groundwater flow direction is from south-west to north-east consistent with the regional stratigraphic dip direction, discharging (locally) into the Wolgan Valley. However, existing mine voids, which act as groundwater sinks, can alter local groundwater flow pathways.

Groundwater flow direction in the upper alluvial/colluvium groundwater water table aligns with surface water flow directions and is influenced by topography (i.e. generally flows north-east to south-west, and opposite to the regional deeper system).

There is an existing groundwater monitoring network which includes five shallow alluvial/colluvial monitoring bores positioned along sections of the Coxs River, and one vibrating wire piezometer (Figure 7.1). Monitoring indicates that the groundwater levels generally respond quickly following rainfall in direct response to rainfall infiltration and associated overland flow and overbank surface water flows. Levels decline following sustained periods of below average rainfall, indicating a reliance on both rainfall, surface water flows and groundwater discharge to sustain these systems.

b Surface water

The project area lies within the Coxs River and Wolgan River catchments, both part of the greater Hawkesbury-Nepean catchment. The proposed mining area and the pit top are within the Coxs River catchment, while a small area of surface infrastructure is located within the Wolgan River catchment.

The proposed mining area includes the catchments of the Coxs River, Kangaroo Creek, Lambs Creek. In the upper catchment of the Coxs River, drainage lines are typically poorly defined to non-existent with overland sheet flow being the typical mode of discharge during high rainfall events. Agricultural activities on properties along the Coxs River have resulted in some minor diversion works of waterways, removed riparian vegetation and created areas of bank erosion due to stock grazing.

Swamp systems within the project area, include Long Swamp, Coxs River Swamp, Kangaroo Creek Swamp, Coxs River North-Eastern Arm Swamp and Lambs Creek Swamp and are shown on Figure 7.1.

There is one licensed surface water user downstream of the project and upstream of Lake Wallace.

ii Potential impacts

a Groundwater

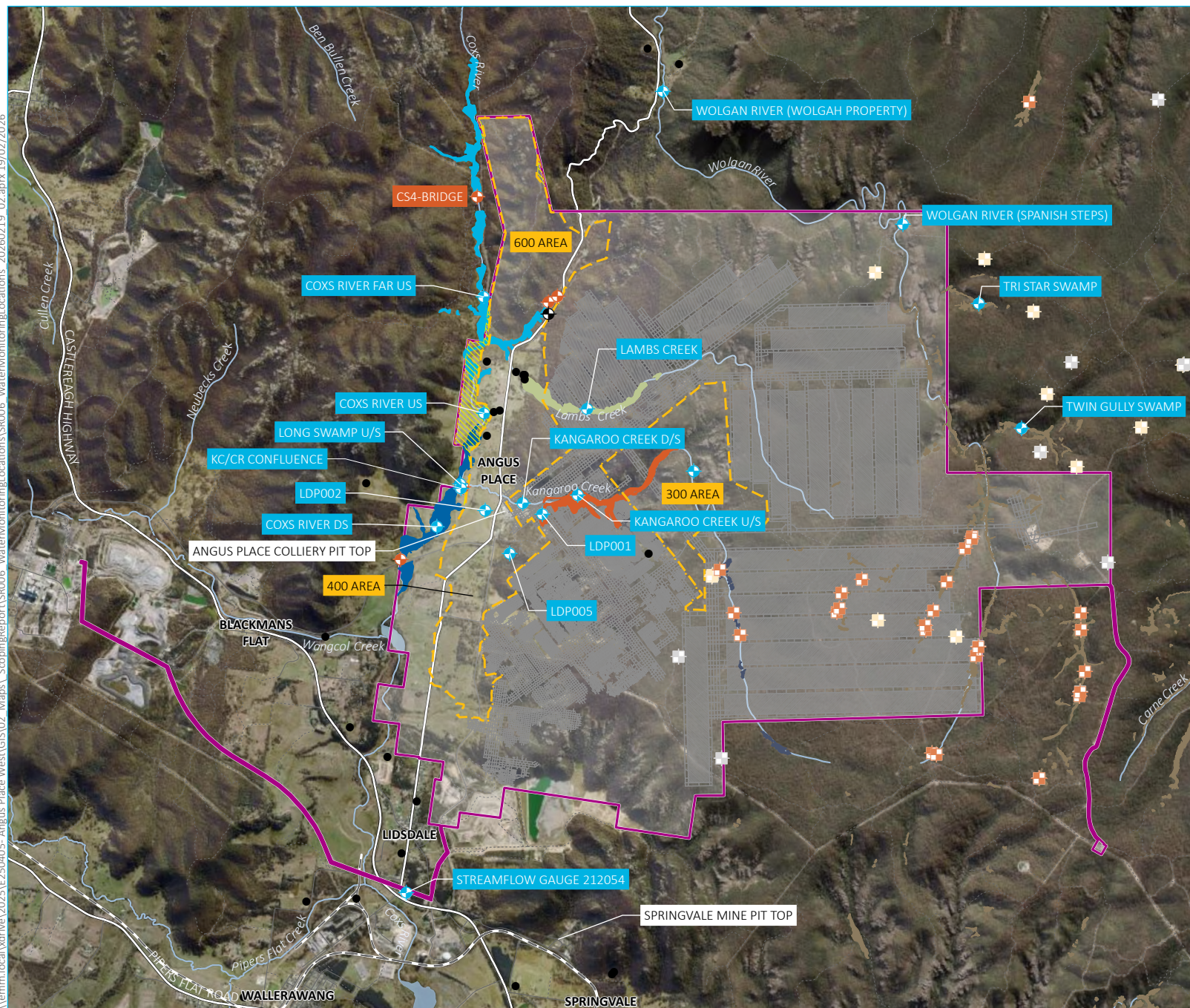
It is expected that the proposed first workings mine design will result in negligible vertical subsidence. As such, the project is not expected to result in significant impacts to the groundwater regime. Any groundwater drawdown may have an impact on baseflows within the surrounding water catchments and this aspect will be considered in the EIS. The project is also expected to have a negligible impact on groundwater quality and therefore the current beneficial use category of the groundwater for other users is not expected to change as a result of the project.

Operational water demand for the project includes:

- potable water supply to the administration and bathhouse buildings at the pit top
- process water demand
- vehicle washdown.

Water supply to meet operational demands will continue to be sourced from Lithgow City Council (potable supply) and groundwater inflows to underground workings, which can also be stored in the 1 ML tank at the pit top. Given the security of groundwater extracted from the underground workings and local council potable supply, there are no water supply security risks associated with the project.

\\emm.local\drive\2025\E250405-Angus Place West\GIS\02_Maps\ScopingReport\SR006-WaterMonitoringLocations_20260219_02.aprx 19/02/2026



- KEY**
- Project area
 - Proposed mining area
 - Mining exclusion area
 - Existing underground workings
 - Private landholder bore
 - Angus Place West monitoring location
 - Surface Water
 - Swamp standpipe
 - VWP
 - Centennial monitoring location
 - Standpipe
 - Surface Water
 - Swamp standpipe
 - VWP
 - Swamp system**
 - Coxs River swamp system
 - Kangaroo Creek hanging swamp system
 - Kangaroo Creek swamp system
 - Lambs Creek swamp system
 - Long Swamp swamp system
 - Other swamps
 - Existing environment**
 - Rail line
 - Major road
 - Minor road
 - Vehicular track
 - Named watercourse
 - Named waterbody

Water resources and monitoring locations

Angus Place West
Scoping Report
Figure 7.1

b Surface water

It is expected that surface water impacts will be minimal, with mine water discharges at Angus Place ceasing in 2020 and not proposed to resume. Impacts, although considered unlikely, will be considered for the following receivers:

- downstream waterways
- downstream water users
- swamp ecosystems
- the Sydney Drinking Water Catchment.

It is considered unlikely that significant water depletion of the Coxs River and nearby swamp systems would occur. The watercourses and swamp systems in the project area are supported by large catchment areas, with the alluvium/colluvium relying on multiple recharge sources (i.e. streamflow, overland flow, interflow, localised lateral baseflow and direct rainfall recharge), with groundwater contribution representing a minor proportion of the overall water sources to watercourses and swamp systems. There is expected to be negligible change to surface water contributions to waterways and swamp systems. Therefore, the viability of watercourses and swamp systems are not expected to be impacted by the project.

c Greater Blue Mountains World Heritage Area and National Heritage Place

The GBMWhA is located approximately 3 km from the proposed mining area. The interaction between the project and the GBMWhA is anticipated to be confined to indirect impacts. No infrastructure is proposed for construction within the GBMWhA, and it will not be undermined as part of the project.

The project's potential impacts on water systems within the GBMWhA are expected to vary depending on the type of water system, and could include impacts to:

- streams and riparian habitats (including downstream impacts on the Wolgan River and Coxs River)
- freshwater wetlands
- swamps
- other groundwater dependent ecosystems.

There is potential for the project to result in a negligible change to streams and riparian habitats within the GBMWhA through downstream impacts on the Wolgan River and Coxs River, however these impacts are unlikely to be material. The project is not expected to impact freshwater wetlands, swamps or other groundwater dependent ecosystems within the GBMWhA.

iii Assessment approach

A water resources impact assessment will be prepared and will include a comprehensive assessment of potential impacts to groundwater and surface water resources and receptors. The assessment will meet the requirements of the Independent Expert Scientific Committee on coal seam gas and large coal mines and will include:

- review of available data (including regional hydrogeological and water balance modelling, water quality, flow and level and existing water management systems at Angus Place)
- water and salt balance modelling

- swamp balance modelling
- groundwater modelling
- surface water quality assessments (including recommendations for additional monitoring locations and/or parameters for future modelling if required)
- an assessment of the potential impact that the project may have on water resources, users and receptors.

Impacts will be assessed on the following receptors:

- downstream waterways and water users
- swamp ecosystems
- potential groundwater dependent ecosystems (in addition to the swamps)
- local surface water and groundwater users
- the Sydney drinking water catchment (including WaterNSW requirements for NorBE on water quality).

7.2.2 Social

A social impact assessment (SIA) scoping report has been prepared (Appendix B) in accordance with the *Social Impact Assessment Guideline* (DPHI 2025a) and the *Technical Supplement: Social Impact Assessment Guideline* (DPHI 2025b).

i Existing environment

The study area for the SIA scoping report is based on the description of the project and the community profile, and consists of the following areas:

- Local area: Lidsdale, Wallerawang, Marrangaroo, Newnes Plateau, Blackmans Flat and Wolgan Valley
- Key urban areas: Lithgow, Wallerawang, Marrangaroo, Portland and Cullen Bullen
- Regional area: Lithgow LGA and Bathurst LGA.

The key demographic characteristics of the social localities are detailed in Table 7.1.

Table 7.1 Demographic characteristics of the social localities

Location	Population	Unemployment rate	Labour force participation	Percentage of residents working in the mining industry
Regional area				
Lithgow City LGA	20,842	5.5%	50.4%	3.6% (combined Lithgow and Bathurst LGAs)
Bathurst City LGA	43,567	4%	60.2%	
Key urban areas				
Lithgow	11,197	6.8%	48%	7.7%
Wallerawang	2,079	5.5%	58.1%	9.1%

Location	Population	Unemployment rate	Labour force participation	Percentage of residents working in the mining industry
Marrangaroo	297	3.2%	62.1%	18%
Portland	1,841	8.7%	45.1%	Data not available
Cullen Bullen	117	6.7%	44.1%	Data not available
Local area	3,666	4.2%	52.2%	15.5%
NSW	8,072,163	4.9%	58.7%	Data not available

Key features in the regional area include a range of National parks, conservation areas and State forests which have rich cultural and recreational value, including the Marangaroo National Park, Gardens of Stone SCA, Ben Bullen State Forest, Sunny Corner State Forest and the Winburndale Nature Reserve.

The local area is also surrounded by protected areas and National parks. Recreational opportunities in the local area include several walking and hiking tracks, caravan and camping sites and lookouts. There are limited services within the local area, with most services located in the larger urban centres.

Lithgow is a regional service centre and has a range of social infrastructure including medical facilities, public spaces, education facilities, aged and disability care. There are accommodation options and accessible public transport.

Wallerawang urban centre is approximately 7.5 km south of Angus Place Colliery. In Wallerawang, there are emergency services, public transport services, medical centres and a school. Other community facilities include a library, churches and retail stores. Wallerawang is near the Lidsdale State Forest and Marangaroo National Park. These features, along with Lake Wallace attract recreational visitors.

In Marangaroo, there are camping grounds, Lithgow City Raceway, Lithgow Golf Club, Lithgow Correction Centre, Marangaroo National Park and Lost City walking track and lookout.

Social infrastructure in Portland includes medical centres, a fire station, a school and public spaces. Portland is a historical mining town and is surrounded by National parks and State forests.

Angus Place Colliery is approximately 6 km from the urban locality of Cullen Bullen. Social infrastructure in Cullen Bullen is limited to a school, a church, few local businesses, surrounding hiking trails and the Cullen Bullen Raceway.

ii Potential impacts

The identification of potential social impacts and benefits was an iterative process formed by the review of project activities and social effects they could generate, the analysis of baseline socio-economic conditions across the social locality and analysis of feedback from stakeholders.

Potential positive social impacts of the project based on the preliminary social impact evaluation could include employment and procurement opportunities for local and regional workers and businesses, respectively. The project could also result in enhanced community wellbeing and cohesion through community investment via a voluntary planning agreement with Lithgow City Council.

iii Assessment approach

As part of the EIS, the next stage for the SIA will include:

- preparing a comprehensive and targeted social baseline that builds on the profiles provided in the social impact scoping report, including:
 - analysis of the regional planning context and associated community views and values
 - further supporting research as required, which may include the media context and contemporary social research
- identification of, and consultation with, affected communities and stakeholders
- a robust evidence-based assessment of social impacts and benefits against existing baseline conditions, including consideration of the social consequences resulting from the findings of other technical investigations (such as water, noise, biodiversity, air quality and Aboriginal heritage)
- development of project enhancement and mitigation measures
- consideration/assessment of cumulative impacts in the context of other projects within the region.

Development of the SIA will be informed by SIA-specific engagement activities, together with input drawn from the outcomes of the project's broader community and stakeholder engagement program. Engagement activities will be approached in an integrated way to ensure consistency of information provision and to manage consultation fatigue.

7.2.3 Biodiversity

i Existing environment

The proposed mining area is primarily within the Wollemi subregion of the Sydney Basin Bioregion (IBRA 7), with the remaining area being in the Capertee Uplands subregion of the South Eastern Highlands Bioregion. The proposed mining area is partially within the Gardens of Stone SCA, and is approximately 3 km from the GBMWWHA, listed for its diversity of habitats and significant biological evolutionary processes.

Nine PCTs occur within the proposed mining area, as well as Category 1 exempt land. The PCTs identified are listed in Table 7.2 and shown in Figure 7.2. Alignment of these PCTs with BC Act and/or EPBC Act listed threatened ecological communities (TECs) will be confirmed as part of the preparation of the BDAR.

Table 7.2 PCTs identified within the proposed mining area

PCT	PCT name	Total area
3932	Central and Southern Tableland Swamp Meadow Complex	19.1 ha
3688	Newnes Plateau Silvertop Ash Woodland	235.1 ha
3687	Newnes Plateau Peppermint-Ash Tall Forest	56.7 ha
3294	Central Tableland Peppermint-Gum Montane Forest	71.3 ha
3746	Southern Tableland Snow Gum-Candlebark Shrub Forest	53.2 ha
3347	Southern Tableland Creekflat Ribbon Gum Forest	8.4 ha
3747	Southern Tableland Western Hills Scribbly Gum Forest	153.4 ha

PCT	PCT name	Total area
3863	Upper Blue Mountains Mallee Heath	97.6 ha
3385	Southern Tableland Creekflat Swamp Woodland	42.4 ha

Native vegetation within the project area was burnt during the Gaspers Mountain fire in 2019/2020, with the majority of the 400 Area and 600 Area experiencing a medium to high burn intensity, and the 300 Area experiencing a medium to very high burn intensity.

There are three main watercourses within the proposed mining area, Coxs River, Kangaroo Creek and Lambs Creek, as well as drainage lines associated with the Wolgan River. All watercourses are mapped as key fish habitat. There are several small wetlands of freshwater habitat associated with Coxs River, Kangaroo Creek and Lambs Creek. These wetland areas primarily occur toward the valley floor, where the relatively flat topography allows for the pooling of water.

The project area features a variety of internal habitat linkages along creeks, gullies and ridgelines. Native vegetation within the project area is connected to large, continuous expanses of native vegetation which extend into the Gardens of Stone SCA, Wollemi National Park, Gardens of Stone National Park and Yengo National Park.

ii Potential impacts

The bord and pillar mining method consisting of first workings only is expected to result in negligible subsidence and therefore the project is not predicted to have any direct impacts on threatened species, TECs or threatened species habitat within the proposed mining area. Due to this, the project is not expected to generate an offset liability.

The project is not expected to have any measurable impacts on water quality, water bodies and hydrological processes that sustain threatened species or TECs. No significant changes to groundwater resources are predicted and therefore impacts to the health or extent of native vegetation and species dependent on these resources is not expected.

Surface disturbance will be restricted to previously disturbed areas at or adjacent to the pit top.

The project has been determined to be a controlled action under the EPBC Act and was deemed to have potential to impact the GBMWWHA. The project will not result in vegetation clearance within the GBMWWHA.

iii Assessment approach

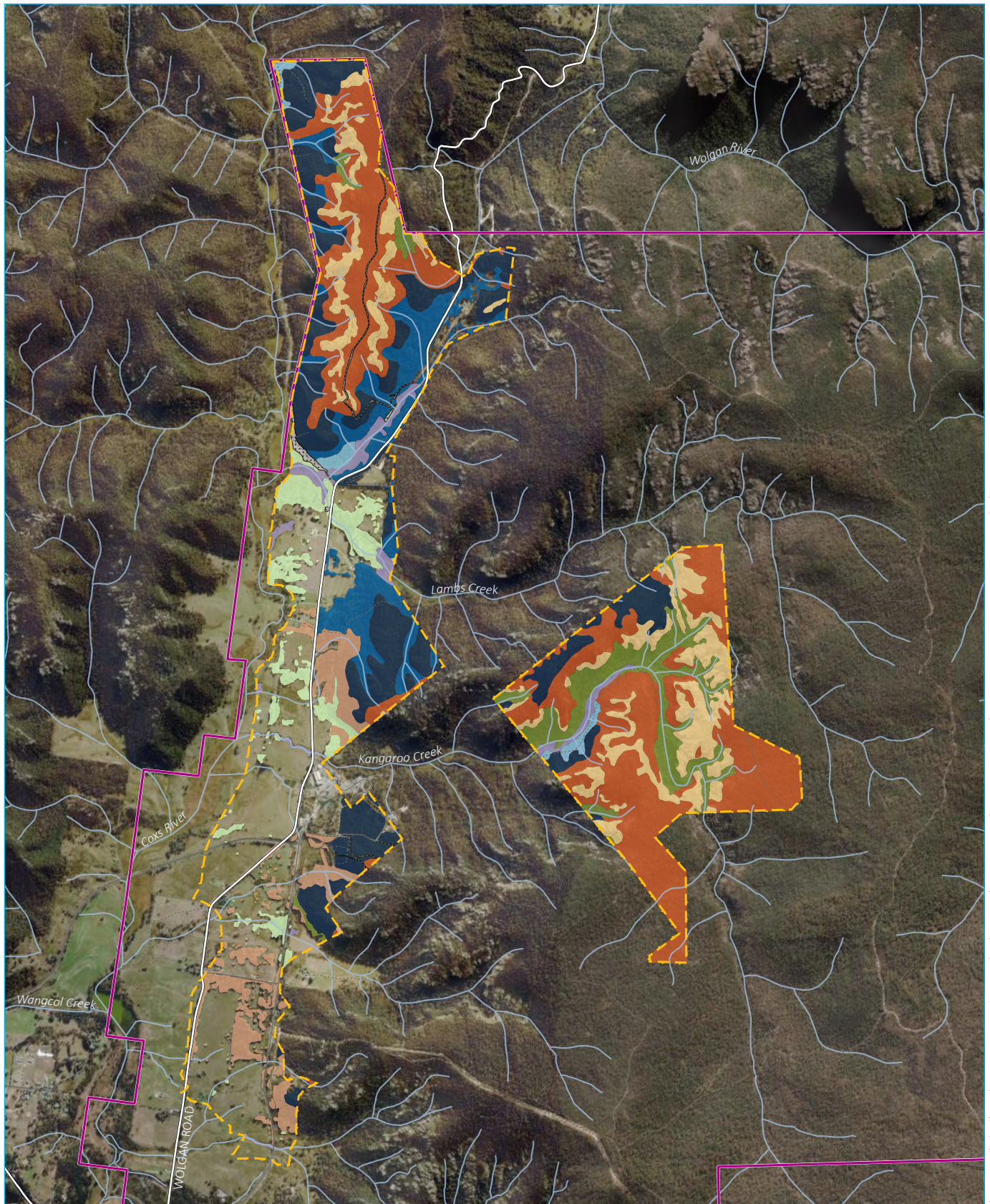
A BDAR will be prepared by an accredited assessor in accordance with the *Biodiversity Assessment Method* (BAM) (DPIE 2020b).

Terrestrial ecology surveys will be conducted to define biodiversity values relevant to the project, inform avoidance in design and act as baseline data for operational stage monitoring. Surveys will confirm the boundaries of PCTs, map fine-scale habitat features and inform the scope of vegetation integrity surveys (BAM plots). It is expected that BAM plots will be focused on areas of moist habitat (i.e. swamps, seepage areas, riparian areas and areas of groundwater dependent ecosystems (GDEs)) and in rock habitat.

The BAM will also be applied to identify reasonable measures and strategies that can be taken to avoid and minimise impacts on biodiversity. The BDAR will confirm if any offsets are required (including ecosystem and species credits), however, it is considered that offsets are unlikely to be required for this project.

The BDAR will provide an overview of the adaptive management plan for uncertain impacts. This will include a monitoring program for biodiversity values sensitive to project-related impacts, a plan to determine the point at which management action is required and a reporting process to communicate monitoring results and management actions to DPPI, DEECW - CPHR and Commonwealth DCCEEW.

An aquatic ecology impact assessment will be prepared to assess potential impacts to aquatic ecology values from the project, in accordance with the Australian River Assessment Scheme guidelines. This will include confirming key fish habitat and habitat for threatened listed species, and identifying potential impacts associated with subsidence and altered water levels on aquatic ecology function and health.



Source: EMM (2026); Centennial (2026); DCSGS (2024); ESRI (2026); GA (2009)

0 1 2 km
GDA2020 MGA Zone 56

KEY

- Project area
- Proposed mining area
- Existing environment
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line

Vegetation

Cleared and severely disturbed land

PCT ID | Name

- 3294 | Central Tableland Peppermint-Gum Montane Forest
- 3347 | Southern Tableland Creekflat Ribbon Gum Forest
- 3386 | Southern Tableland Creekflat Swamp Woodland
- 3687 | Newnes Plateau Peppermint-Ash Tall Forest
- 3688 | Newnes Plateau Silvertop Ash Woodland
- 3746 | Southern Tableland Snow Gum-Candlebark Shrub Forest
- 3747 | Southern Tableland Western Hills Scribbly Gum Forest
- 3863 | Upper Blue Mountains Mallee Heath
- 3932 | Central and Southern Tableland Swamp Meadow Complex

PCTs within the proposed mining area

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Figure 7.2

7.2.4 Subsidence

i Existing environment

The proposed mining area is in the south-western part of the Western Coalfield of the Sydney Basin and will target the Lithgow Seam. There are no historic workings above or below the Lithgow Seam within the proposed mining area. Bord and pillar and longwall mining has been carried out adjacent to the proposed mining area.

Natural features within the proposed mining area and surrounds include Cox's River, Kangaroo Creek, Lambs Creek, cliffs, minor cliffs, rock outcrops, steep slopes, swamp systems and swamp meadows.

There are eight houses within the proposed 400 Area and 600 Area. There are no houses within the proposed 300 Area. Other structures on properties within the proposed mining area include sheds, garages and tanks. There are four additional houses within the project area, but outside the proposed mining area. There is a bridge where Wolgan Road crosses the haul road that connects the pit top to MPPS. This bridge is a single-span concrete structure supported by concrete abutments.

ii Potential impacts

Vertical subsidence within the proposed mining area is predicted to be negligible and similar to the amount of vertical movement that can occur because of wetting and drying of soils. The proposed mining method is not expected to result in measurable tilts, curvatures, strains, far-field horizontal or valley related movements.

Additional vertical subsidence can develop after mine closure because of the flooding of mine workings. Additional long-term subsidence could be up to half of the immediate subsidence. Should it occur, this low-level additional subsidence is not expected to be associated with measurable tilts, curvatures or strains.

Project-related subsidence is not predicted to result in impacts to streams, cliffs, minor cliffs, rock outcrops, steep slopes, swamp systems or native vegetation within the proposed mining area.

The proposed mining area is 3 km from the GBMWhA, and at this distance, it is not predicted to experience measurable conventional, far-field horizontal or valley-related effects. Project-related subsidence is not predicted to impact the Outstanding Universal Values of the GBMWhA.

It is considered unlikely that subsidence will impact any of the built features within the proposed mining area and surrounds.

iii Assessment approach

An assessment of subsidence effects, impacts and environmental consequences will be prepared as part of the EIS. The assessment will:

- identify historical mine workings, the geological setting, natural and built features in the vicinity of the proposed mining area
- outline depth of cover, mining geometry, mining method and the proposed mine plan
- assess the stability of the proposed mine plan (including maximum subsidence predictions and far field effects)
- assess conventional and non-conventional mine subsidence effects and impacts
- assess impacts on natural and built features
- identify subsidence monitoring requirements.

7.3 Standard assessment

7.3.1 Air quality

i Existing environment

The local air quality environment is likely influenced by existing activities in the area including local industrial activities such as MPPS, Western Coal Services Project, Lidsdale Sliding, rehabilitation activities at the former Wallerawang Power Station and Springvale Mine. Other factors that influence air quality include:

- wind generated dust from exposed areas
- dust entrainment and exhaust emissions from vehicle movements along unsealed and sealed roads
- emissions from household wood heaters
- episodic emissions from bushfires
- long-range transport of fine particles into the region.

ii Potential impacts

Dust generation during construction will be limited to a period of approximately three months and will be confined to the pipeline disturbance footprint (Figure 4.1). Therefore, it is expected that air quality impacts during construction will be small-scale and for a short duration of time.

Sources of atmospheric emissions during operations will include:

- coal transfer by conveyor
- bulldozers working on ROM stockpile
- wind erosion from ROM stockpile
- coal sizing
- loading coal to trucks
- upcast ventilation shafts.

It is anticipated that concentration and deposition rates for all pollutants will be below the applicable assessment criteria, and it is not expected that the project will result in significant air quality impacts at sensitive receivers.

iii Assessment approach

A detailed assessment of potential impacts on air quality will be undertaken in accordance with the assessment guidelines from the EPA, namely the *Approved Methods for the modelling and assessment of air pollutants in NSW* (EPA 2016). Air dispersion modelling (CALPUFF) will be used to predict off-site dust concentrations and deposition levels due to estimated emissions from the project. Model predictions will be compared with EPA air quality assessment criteria and the potential for adverse impacts will be assessed based on the level of compliance with the criteria.

7.3.2 Greenhouse gas

i Existing environment

Angus Place monitors and reports annually on GHG emissions in accordance with the National Greenhouse and Energy Reporting Scheme. The *Angus Place Annual Review for 2024* (Centennial 2025b) presents a summary of estimated scope 1 and 2 GHG emissions from financial year 2020 to 2024. As Angus Place is currently in care and maintenance with no active mining operations, scope 1 and 2 emissions are below approved predictions. Emission sources include fuel combustion, oil and grease consumption, sulphur hexafluoride (SF₆) use, fugitive emissions and electricity consumption. Total estimated emissions ranged from 12,649 to 19,121 tonnes of CO₂-e per year over the five-year period.

ii Potential impacts

The project will result in Scope 1, 2 and 3 GHG emissions generated at Angus Place. Additional GHG emissions sources from the project are expected to include:

- fugitive emissions of coal seam methane (CH₄) and CO₂ from the ventilation shafts
- indirect upstream emissions from the extraction, production and transport of diesel, oil and grease, as well as electricity lost in delivery in the transmission and distribution network and fuel for employee travel
- indirect downstream emissions from product coal combustion and the transport of coal
- indirect emissions associated with solid waste disposal in landfill.

iii Assessment approach

A GHG assessment will be completed in line with the *NSW Guide for Large Emitters* (EPA 2025) which sets specific requirements for projects considered as large emitters. The steps in the guide will be followed to determine if the project is a 'large emitter'. As part of the GHG assessment Scope 1, 2 and 3 emissions will be calculated for every financial year through to the completion of mining operations. Feasible mitigation measures and emission reduction targets will also be identified.

7.3.3 Aboriginal cultural heritage

i Existing environment

The project area sits broadly at the intersection of three Aboriginal language groups, on the fluid edges of Wiradjuri, Darug and Gundungurra Country. The environmental characteristics of the project area influenced the way Aboriginal people used the landscape. In the past, the availability of resources such as water, flora, fauna, stone material and topography played a substantial role in the choice of camping, transitory movement and ceremonial areas used by Aboriginal people.

A search of the Aboriginal Heritage Information Management System (AHIMS) identified 149 Aboriginal sites and one Aboriginal Place (Maiyingu Marragu) within a 180 km² search area, centred on the project area. Recorded sites are dominated by closed rockshelter sites and open artefactual sites, which relates to the underlying geology and topography of the project area and surrounds. This is characterised by rugged scarp, cliff and pagoda territory and narrow incised valleys, as well as areas of gentler terrain associated with major river plains of the Cocks River.

There are 19 Aboriginal sites within the proposed mining area (Figure 7.3). The majority of these are rockshelter sites (n=11). There are also two potential grinding grooves, two culturally modified trees and four artefact sites.

ii Potential impacts

No Aboriginal sites are expected to be directly impacted by the project. As the project is likely to result in negligible vertical subsidence, the risk of indirect impacts to Aboriginal sites at the surface above the proposed mining area is very low.

Unforeseen impacts such as rockfalls, fracturing or toppling within rockshelters are unlikely to result from the project. Unforeseen impacts will be managed in accordance with the strict protocols within the ACHMP (Centennial 2025a) which will be updated for the project.

The Greater Blue Mountains is a place of outstanding importance in the Aboriginal cultural history of Australia. Due to the separation distance between the project and GBMWhA, there is no risk of direct or indirect impacts to Aboriginal cultural heritage sites or objects within the GBMWhA.

iii Assessment approach

The project area requires further investigations to characterise potential cultural materials and identify suitable management and mitigation measures. An ACHA will be prepared in consultation with registered Aboriginal parties with general consideration to the following guidelines:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011)
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010b).

Following project approval, the ACHMP will be updated to include reference to Aboriginal sites identified as part of the ACHA.

7.3.4 Historical heritage

i Existing environment

The GBMWhA, as listed on the World Heritage List and National Heritage List, is approximately 2.8 km from the project area and approximately 3 km from the proposed mining area.

There is one item nominated for listing on the National Heritage List, which overlaps with part of the project area and proposed mining area, the Greater Blue Mountains Area - Additional Values and Areas (#105696). The nomination is currently under consideration by the Australian Heritage Council. The listing has been nominated for nationally significant biodiversity, geodiversity, aesthetic and historic heritage values under the National Heritage criteria (a), (b) and (e).

Three items of local heritage significance, listed on the Lithgow LEP, intersect the project area (Figure 7.4).

ii Potential impacts

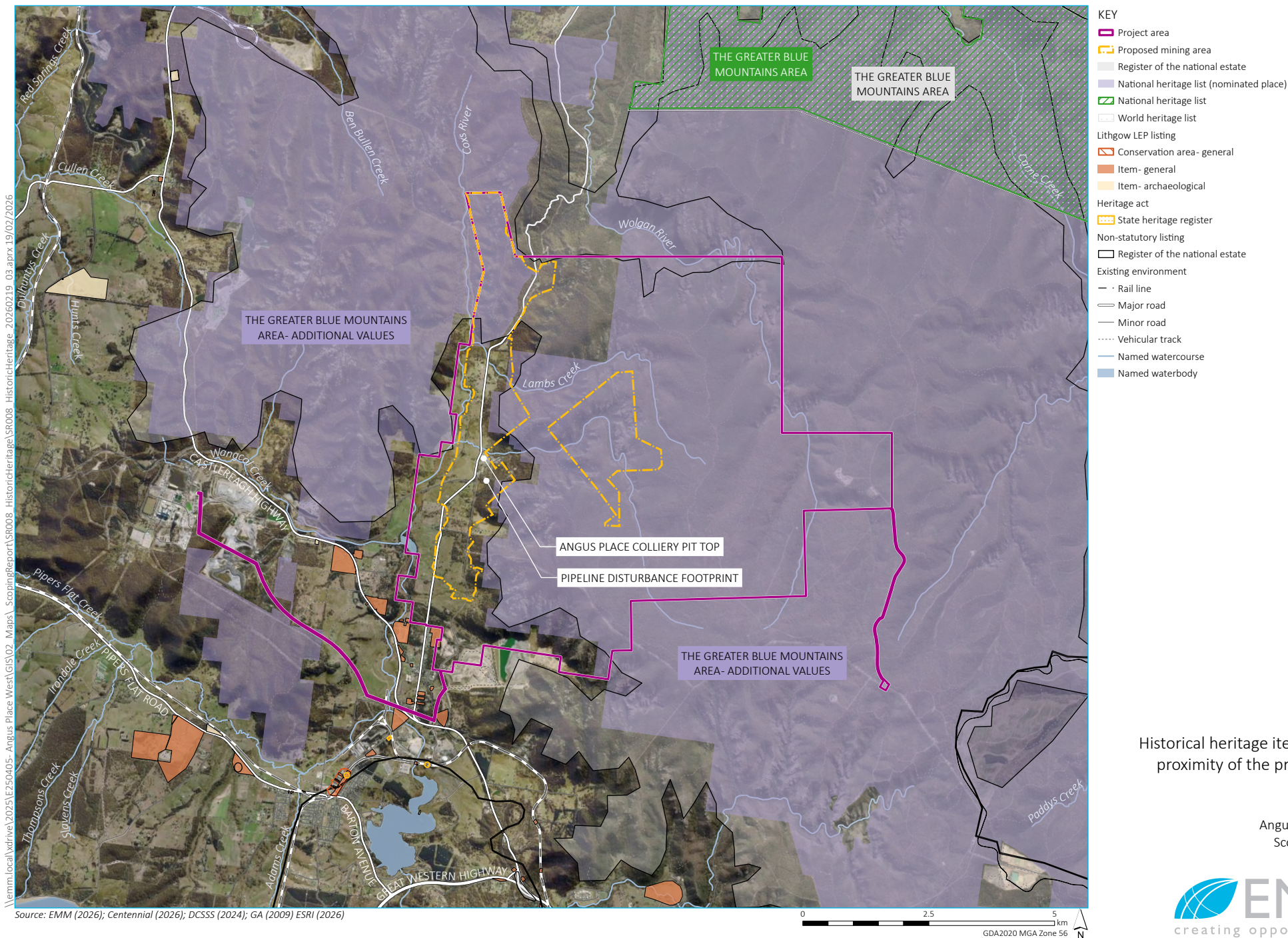
While the Greater Blue Mountains Area - Additional Values and Areas (nominated place) will be undermined by the project, no surface disturbance is proposed within the nominated listing. As the project is predicted to result in negligible vertical subsidence, the risk of impacts to the unique landscape within the nominated area (including geology) are low and it is unlikely that impacts will be perceptible. While existing infrastructure on Newnes Plateau will continue to be used for the project, overall, this is unlikely to reduce the significance of the nominated listing.

Due to the separation distance between the project area and the GBMWhA, impacts to historical heritage sites within the GBMWhA are not anticipated. No impacts to the Lithgow LEP listed heritage items within the project area are anticipated as these items will not be undermined.

iii Assessment approach

The project area overlaps with Lithgow LEP listed heritage items and the nominated 'Greater Blue Mountains Area – Additional Values and Areas'. The EIS will include a statement of heritage impact that assesses the potential for impacts to the National Heritage List nominated 'Greater Blue Mountains Area – Additional Values and Areas', with reference to the BDAR and water resources impact assessment and will provide management measures, if required. The statement of heritage impact will be prepared in accordance with the *Guidelines for Preparing a Statement of Heritage Impact* (DPE 2023).

Following project approval, the HHMP will be updated.



Historical heritage items within proximity of the project area

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Scoping Report
Figure 7.4

7.3.5 Traffic

i Existing environment

Local and regional roads used by light and heavy vehicles to access the pit top are the Castlereagh Highway, Ian Holt Drive and Wolgan Road. The primary vehicle access routes include the following key intersections:

- Castlereagh Highway/Wolgan Road/Main Street
- Castlereagh Highway/Ian Holt Drive
- Wolgan Road/AP1 (southern access intersection), which generally provides for light vehicle access to staff and visitor car parking areas
- Wolgan Road/AP2 (northern access intersection), which generally provides for heavy vehicle access to service areas.

Access to infrastructure in the Gardens of Stone SCA is via Old Bells Line of Road from Chifley Road for light and heavy vehicles. Light vehicles can also use State Mine Gully Road, Blackfellows Hand Trail, Beecroft Trail, Angus Place Trail and Glowworm Tunnel Road.

ii Potential impacts

During operation, there will be a maximum of approximately 360 light vehicle movements and 72 heavy vehicle movements per day accessing the pit top. It is anticipated that employees will be divided into three shifts with the maximum number of employees in the weekday day shift. Existing car parking areas at the pit top will continue to be used by employees. Due to the rural location of the pit top, the project is not anticipated to create a high demand for public transport services, pedestrian or bicycle access.

iii Assessment approach

A traffic impact assessment (TIA) will be prepared for the project to assess potential impacts to road and intersection capacity, traffic safety and accessibility, including roads and tracks in the Gardens of Stone SCA. The TIA will also include an assessment of cumulative impacts of nearby industrial operations. The assessment will be prepared in accordance with the following guidelines, policies and design requirements:

- *Guide to Transport Impact Assessment* (TfNSW 2024)
- *Austroads Guides to Road Design* (various publications)
- *Austroads Guides to Traffic Management* (various publications)
- *Australian Standard AS 2890 Parts 1 and 2*
- *Australian Code for Dangerous Goods Transport*.

7.3.6 Noise and vibration

i Existing environment

The area surrounding the project area is comprised of underground coal mining, coal handling, coal transport and supporting infrastructure, power stations (including MPPS and the former Wallerawang Power Station), agriculture and Gardens of Stone SCA. The pit top is in a rural area, with a small number of rural residences along Wolgan Road. The closest residence is approximately 800 m south-west of the pit top.

Angus Place currently operates under the existing approved noise limits specified in MP 06_0021 and in accordance with the approved Western Region Noise Management Plan (NMP) (Centennial 2021b). The NMP details the measures to manage and mitigate noise generated by Centennial's Western Coalfield operations, including Angus Place.

ii Potential impacts

Noise emissions are expected to be generated from construction activities within the pipeline disturbance footprint over a period of approximately three months, however, given the small-scale and short duration of these works, construction noise impacts are likely to be negligible. Vibration levels from these activities are predicted to be negligible and below levels of human perception at the nearest sensitive receivers.

It is anticipated that noise levels will be similar to the noise levels that would have been experienced during the previous underground mining operations at Angus Place. As the project involves underground mining, the noise impacts of the project will be mostly related to the pit top and trucking operations.

iii Assessment approach

A noise and vibration impact assessment will be prepared and will consider noise and vibration impacts to sensitive receivers within the vicinity of the pit top. The assessment will be completed with reference to:

- *NSW Noise Policy for Industry* (EPA 2017)
- *Voluntary Land Mitigation and Acquisition Policy* (NSW Government 2018)
- *Interim Construction Noise Guideline* (DECC 2009)
- *Assessing Vibration: A Technical Guideline* (DEC 2006)
- *Road Noise Policy* (DECCW 2011).

The assessment will include consideration of construction and operation noise and vibration and will include operational noise modelling. If required, noise and vibration management and mitigation strategies will also be identified.

7.3.7 Economic

i Existing environment

The Lithgow area has thrived for many generations based on the socio-economic benefits that mining has provided. Employment in the mining industry provides significant flow-on effects for local support services via direct and indirect employment opportunities across a range of sectors.

ii Potential impacts

The project will enable operations to continue at Angus Place up to 2040. The project will secure ongoing employment opportunities for up to 180 people and provide wages, business to local suppliers, contributions to Lithgow City Council and payment of royalties to the State of NSW.

iii Assessment approach

An economic assessment will be prepared and will assess the economic impacts and benefits of the project for the region and State. The assessment will be prepared in accordance with the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (DPIE 2015) and will include:

- cost benefit analysis
- a local effects analysis
- quantification of the economic cost, benefits and impacts of the project at the local, regional and State levels
- recommendations on any relevant management and mitigation measures.

7.3.8 Rehabilitation and mine closure

The RMP is the primary rehabilitation and decommissioning management plan for Angus Place, documenting long-term rehabilitation objectives and principles for the life of the operation. The RMP will be updated following approval of the project. Due to the nature of the project (i.e. underground mining) and the relatively minor and static areas of surface disturbance, the ability to undertake progressive rehabilitation is limited.

A conceptual rehabilitation and closure strategy will be included in the EIS and prepared in accordance with relevant guidelines and will identify the preferred post-mining land use for infrastructure areas. The strategy will establish preliminary objectives for the decommissioning of project infrastructure and rehabilitation of disturbed land and will consider the pit top as well as additional mine-related infrastructure within Gardens of Stone SCA. A key objective of the strategy will be to not preclude any potential beneficial land use option following successful lease relinquishment.

7.3.9 Cumulative impacts

Other operational, under construction, approved and proposed developments within and in the vicinity of the project would be considered for the potential for cumulative environmental impacts.

The EIS will include a cumulative impact assessment (CIA) in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE 2022b). The CIA scoping summary table (Appendix C) outlines the cumulative impact assessment matters for a large number of projects in the region. While the projects are listed in the scoping table, they would be assessed for their relevance with the project during the preparation of the EIS.

The Clarence Consolidation Project, Springvale West and Angus Place West are all SSD applications to extend and expand existing mining operations. Extension of operations at these sites is expected to deliver sustained employment for local communities and generate ongoing economic benefits associated with the purchase of goods and services. In addition to supporting jobs and regional growth, the projects will support the continued operation of MPPS, maintaining energy reliability during the transition to renewable energy generation.

The project may contribute to cumulative impacts with surrounding projects during operation. There will also be cumulative benefits to local communities through the generation of jobs and contribution to local economies associated with the purchase of goods and services.

7.4 Matters requiring no further assessment

Matters listed in Appendix B of the Scoping Report Guidelines (DPIE 2022a) that do not require further assessment in the EIS are identified in Table 7.3.

Table 7.3 Matters requiring no further assessment

Matter	Relevance
Access – parking	Sufficient parking for vehicles of employees and visitors is available at the pit top.
Access – rail, port and airport facilities	The project will not interact with rail, port or airport facilities.
Amenity – odour	The project will not generate odour emissions.
Amenity – visual	The pit top will not materially change as a result of the project. Existing visual mitigation measures will continue to be applied to the project.
Built environment	The project will not impact the built environment.
Hazards and risks – biosecurity	The project will not have impacts on biosecurity.
Hazards and risks – dam safety	The project will not interact with dams.
Hazards and risks – coastal hazards	The project area is not within a coastal zone.
Hazards and risks – environmental hazards	Environmental hazards relevant to the project will be addressed in other assessments.
Hazards and risks – land movement	The project area does not contain land mapped as landslide risk.
Hazards and risks – dangerous goods	The existing risks posed from dangerous goods are not expected to change because of the project. Appropriate mitigation measures will be considered in the EIS.
Hazards and risks – bushfire	The existing bushfire risk to the project area is not expected to change because of the project. Appropriate mitigation measures will be considered in the EIS.
Hazards and risk – land contamination	The existing land contamination risks are not expected to change because of the project. Appropriate mitigation measures will be considered in the EIS.
Hazards and risk – waste	The existing management of waste is not expected to change because of the project. Appropriate measures will be considered in the EIS.
Land – soil chemistry	The project will not alter the soil chemistry within the project area.
Land – land capability	The project will not alter the land capability within the project area.
Land – topography	The project will not alter the topography within the project area.

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Abbreviations

ACHA	Aboriginal Cultural Heritage Assessment
ACHMP	Western Region Aboriginal Cultural Heritage Management Plan
AHIMS	Aboriginal Heritage Information Management System
AIP	<i>NSW Aquifer Interference Policy</i>
ALERP	Australia's long-term emissions reduction plan
Angus Place	Angus Place Colliery
B&C SEPP	State Environmental Planning Policy (Biodiversity and Conservation) 2021
BC Act	<i>NSW Biodiversity Conservation Act 2016</i>
BAM	Biodiversity Assessment Method
BDAR	biodiversity development assessment report
Centennial	Centennial Coal Company Limited
Centennial Angus Place	Centennial Angus Place Pty Limited
CIA	cumulative impact assessment
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPHI	NSW Department of Planning, Housing and Infrastructure
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FTE	full time equivalent
GBMWhA	Greater Blue Mountains World Heritage Area
GDE	groundwater dependant ecosystem
GHG	greenhouse gas
HHMP	Western Region Historic Heritage Management Plan
ICNG	Interim Construction Noise Guideline
km	kilometre
LCC	Lithgow City Council
LGA	Local Government Area
Lithgow LEP	Lithgow Local Environmental Plan 2014
MNES	Matters of National Environmental Significance
MOP	Mining Operations Plan
MPPS	Mt Piper Power Station
Mtpa	million tonnes per annum

NMP	Western Region Noise Management Plan
NorBE	neutral or beneficial effect
NPWS	NSW National Parks and Wildlife Service
NSW	New South Wales
PCT	plant community type
Resources and Energy SEPP	State Environmental Planning Policy (Resources and Energy) 2021
RMP	Rehabilitation Management Plan for Large Mines – Angus Place
Roads Act	<i>Roads Act 1993</i>
ROM	run of mine
SCA	State Conservation Area
SCSS	Springvale Coal Services Site
SEARs	Secretary's environmental assessment requirements
SSD	State significant development
SWTP	Springvale Water Treatment Project
TEC	threatened ecological community
the project	Angus Place West
the regional plan	The Central West and Orana Regional Plan 2041
Transport and Infrastructure SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
WMP	Angus Place Colliery Water Management Plan

Appendix A

Scoping summary table

A.1 Scoping summary table

Table A.1 Scoping summary table

Level of assessment	Matter	Cumulative impact assessment	Engagement	Relevant policies and guidelines	Scoping report reference
Detailed	Water resources	Yes	General	<i>National Water Quality Management Strategy Guidelines</i> (ANZECC & ARMCANZ 2000; ANZG 2018). <i>NSW Groundwater guidelines for State significant projects</i> (DPIE n.d.). <i>NSW Aquifer Interference Policy</i> (DPI 2012). <i>Information guidelines for proponents preparing coal seam gas and large coal mining development proposals</i> (ISEC 2024).	Section 7.2.1
	Social	Yes	Specific	<i>Social Impact Assessment Guideline for State Significant Projects</i> (DPHI 2025a). <i>Technical Supplement: Social Impact Assessment Guideline</i> (DPHI 2025b).	Section 7.2.2
	Biodiversity	Yes	General	<i>Biodiversity Assessment Method</i> (DPIE 2020b). <i>Matters of National Environmental Significance – Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth of Australia 2013).	Section 7.2.3
	Subsidence	Yes	General	N/A	Section 7.2.4
Standard	Air quality	Yes	General	<i>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</i> (EPA 2022).	Section 7.3.1
	Greenhouse gas	Yes	General	<i>NSW Guide for Large Emitters Guidance on how to prepare a greenhouse gas assessment as part of NSW environmental planning processes</i> (EPA 2025).	Section 7.3.2
	Aboriginal cultural heritage	Yes	Specific	<i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH 2011). <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW 2010b). <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW 2010a).	Section 7.3.3
	Historical heritage	Yes	General	<i>Guidelines for Preparing a Statement of Heritage Impact</i> (DPE 2023).	Section 7.3.4
	Traffic	Yes	General	<i>Guide to Transport Impact Assessment</i> (TfNSW 2024). - Austroads Guides to Road Design (various publications).	Section 7.3.5

Level of assessment	Matter	Cumulative impact assessment	Engagement	Relevant policies and guidelines	Scoping report reference
	Noise and vibration	Yes	General	• <i>NSW Interim Construction Noise Guideline</i> (DECC 2009). • <i>NSW Noise Policy for Industry</i> (EPA 2017). • <i>NSW Road Noise Policy</i> (DECCW 2011). • <i>Assessing Vibration: A Technical Guideline</i> (DECC 2006). • <i>Voluntary Land Mitigation and Acquisition Policy</i> (NSW Government 2018).	Section 7.3.6
	Economic	Yes	General	• <i>Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals</i> (DPIE 2015).	Section 7.3.7
	Rehabilitation and mine closure	No	General	• <i>Integrated mine closure: Good Practice Guide</i>, 2nd Edition (ICMM 2019). • <i>Mine rehabilitation - Leading practice sustainable development program for the mining industry</i> (Department of Foreign Affairs and Trade 2016). • <i>Strategic Framework for Mine Closure</i> (ANZMEC 2000).	Section 7.3.8

Appendix B

Social impact assessment scoping report

Angus Place West

Social Impact Assessment Scoping Report

Prepared for Centennial Angus Place Pty Limited

February 2026

Angus Place West

Social Impact Assessment Scoping Report

Centennial Angus Place Pty Limited

E250405

February 2026

Version	Date	Prepared by	Reviewed by	Comments
V1	7 November 2025	Chris Alder	David Richards	Draft for client review
V2	13 February 2026	Chris Alder	Sam McCrea	Final Draft
V3	19 February 2026	Chris Alder	Sam McCrea	Final

Approved by

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19 February 2026

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This report has been prepared in accordance with the brief provided by Centennial Angus Place Pty Limited and, in its preparation, EMM has relied upon the information collected at the times and under the conditions specified in this report. All findings, conclusions or recommendations contained in this report are based on those aforementioned circumstances. This report is to only be used for the purpose for which it has been provided. Except as permitted by the Copyright Act 1968 (Cth) and only to the extent incapable of exclusion, any other use (including use or reproduction of this report for resale or other commercial purposes) is prohibited without EMM's prior written consent. Except where expressly agreed to by EMM in writing, and to the extent permitted by law, EMM will have no liability (and assumes no duty of care) to any person in relation to this document, other than to Centennial Angus Place Pty Limited (and subject to the terms of EMM's agreement with Centennial Angus Place Pty Limited).

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Executive Summary

Angus Place Colliery (Angus Place) is an underground thermal coal mining operation in the Western Coalfields of New South Wales (NSW). Angus Place is approximately 15 kilometres (km) north-west of Lithgow, in the Lithgow local government area (LGA). Angus Place is operated by Centennial Angus Place Pty Limited (Centennial Angus Place), a wholly-owned subsidiary of Centennial Coal Company Limited (Centennial), which is a subsidiary of Banpu Public Company Limited, a public company founded and headquartered in Bangkok, Thailand, and listed on the Stock Exchange of Thailand.

Angus Place comprises a pit top, underground mining area, ventilation infrastructure and water management infrastructure. The existing underground workings are primarily beneath the Gardens of Stone State Conservation Area (SCA). Angus Place also includes supporting infrastructure in Gardens of Stone SCA, including a ventilation facility, dewatering boreholes, switchyard, pipelines, underground cables and a network of monitoring installations.

In response to a downturn in coal markets, Angus Place was placed into care and maintenance in 2015. No coal production has taken place since this time. Centennial Angus Place is proposing a new State significant development (SSD) project which will allow Angus Place to recommence coal supply to Mt Piper Power Station (MPPS). The project is known as Angus Place West.

This Social Impact Assessment (SIA) Scoping Report has been prepared to support the Scoping Report. The purpose of this report is to identify the key social matters requiring further consideration in SIA Phase 2 (detailed social impact assessment), consistent with the *Social Impact Assessment Guideline for State Significant Projects* (SIA Guideline) (DPHI 2025a).

The project has the potential to generate direct and indirect social impacts on local and regional communities during operation, decommissioning and rehabilitation, primarily through continued economic opportunity and real or perceived environmental impacts associated with coal mining.

The preliminary impact analysis within the scoping process has been informed by initial engagement with Lithgow City Council and community representatives. A broader engagement program is proposed for the SIA Phase 2 and EIS, with a focus on stakeholders directly or indirectly affected by the project, including First Nations communities.

Twenty potential impacts have been identified for standard or minor assessment within the SIA. Four impacts are likely to be positive with sixteen likely to be negative in nature. These impacts are broadly:

- impacts to community cohesion
- impacts to economic opportunity
- impacts to local amenity.

These matters will be assessed in detail in SIA Phase 2, in accordance with the SIA Guideline (DPHI 2025a), following receipt of the Secretary's Environmental Assessment Requirements (SEARs). The final SIA will include:

- an update of the social baseline profile
- outcomes of engagement with key stakeholders and social data collection
- assessment of social impacts across the project lifecycle, including cumulative impacts
- identification of mitigation and management measures to avoid, minimise or manage identified impacts.

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1 Introduction

1.1 Background

Angus Place Colliery (Angus Place) is an underground thermal coal mining operation in the Western Coalfields of New South Wales (NSW). Angus Place is located approximately 15 kilometres (km) north-west of Lithgow, in the Lithgow local government area (LGA) (Figure 1.1). Angus Place is operated by Centennial Angus Place Pty Limited (Centennial Angus Place), a wholly owned subsidiary of Centennial Coal Company Limited (Centennial), which is a subsidiary of Banpu Public Company Limited, a public company founded and headquartered in Bangkok, Thailand, and listed on the Stock Exchange of Thailand.

Angus Place comprises a pit top, underground mining area, ventilation infrastructure and water management infrastructure. The existing underground workings are primarily beneath the Gardens of Stone State Conservation Area (SCA). Angus Place also includes supporting infrastructure in Gardens of Stone SCA.

In response to a downturn in coal markets, Angus Place was placed into care and maintenance in 2015. No coal production has taken place at Angus Place since this time. Angus Place continues to meet safety and environmental regulations and is appropriately maintained to enable operations to recommence.

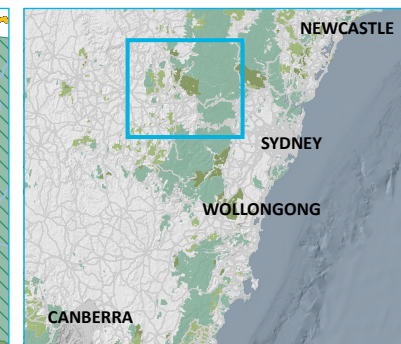
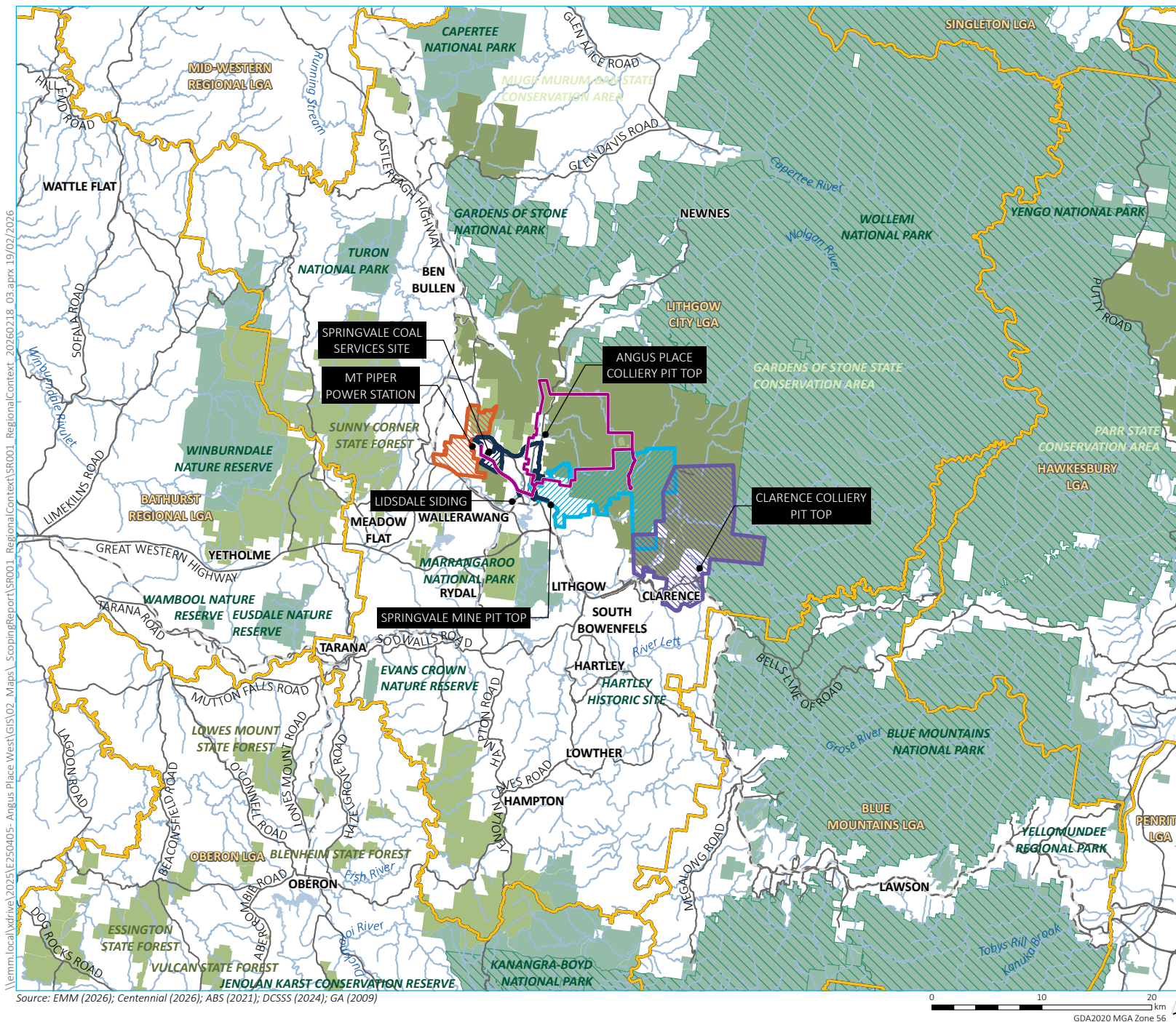
Mine planning studies have been undertaken into a long-term plan for Angus Place beyond the approved mine life, to meet the future coal supply demands of Mt Piper Power Station (MPPS) while balancing social, environmental and economic outcomes. Based on the outcomes of these investigations, Centennial Angus Place will be seeking approval for Angus Place West (the project). Broadly, the project seeks to extend the life of an existing coal mining operation and support the ongoing operation of MPPS.

This Social Impact Assessment (SIA) Scoping Report was prepared by EMM Consulting Pty Limited (EMM) on behalf of Centennial Angus Place. It addresses the scoping requirements of the *Social Impact Assessment Guideline for State Significant Projects* (SIA Guideline) (DPHI 2025a) and the *Technical Supplement: Social Impact Assessment Guideline for State Significant Projects* (SIA Technical Supplement) (DPHI 2025b).

The report informs project development, supports Centennial Angus Place's request to the NSW Department of Planning, Housing and Infrastructure (DPHI) for Secretary's environmental assessment requirements (SEARs) and will inform the preparation of an Environmental Impact Statement (EIS) and SIA for the project.

1.2 Existing operations

Operations at Angus Place commenced in 1979. It is regulated under a Ministerial project approval (MP 06_0021) which was granted in September 2006 by the then Minister for Planning under the now repealed Part 3A of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). MP 06_0021 has since been declared to be State significant development (SSD) under Clause 6 of Schedule 2 of the NSW *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*.



KEY

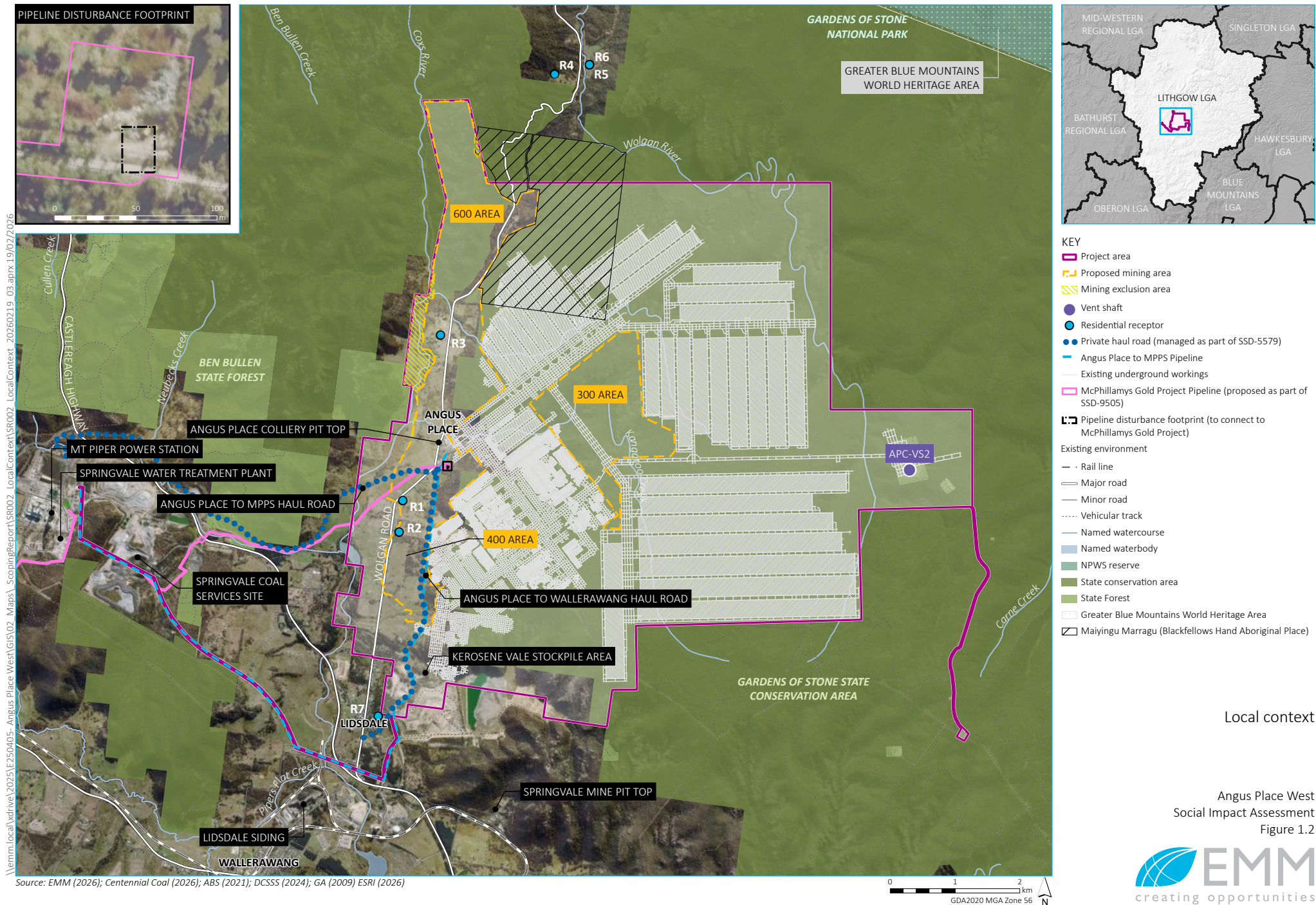
- ▬ Angus Place West project area
- ▬ Clarence Consolidation project area
- ▬ Springvale West project area
- ▬ Ivanhoe project area
- ▬ Western Coal Services project area

Existing environment

- Rail line
- Major road
- Named watercourse
- ▬ Named waterbody
- ▬ Greater Blue Mountains World Heritage Area
- ▬ NPWS reserve
- ▬ State conservation area
- ▬ State Forest
- ▬ Local government area

Regional context

Angus Place West
Social Impact Assessment
Figure 1.1



MP 06_0021 has been modified eight times and allows Centennial Angus Place (amongst other things) to:

- extract up to 4 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal by longwall mining methods until 18 August 2024
- handle and process ROM coal at the Angus Place pit top
- operate 24 hours a day, seven days a week
- store, extract and treat water from the underground mine workings
- employ up to 300 full-time equivalent (FTE) personnel
- transfer water to the Springvale Water Treatment Project (SWTP) for subsequent treatment and reuse within MPPS.

1.3 Project overview

Centennial Angus Place seeks approval for the project to allow:

- bord and pillar mining method consisting of first-workings only within the proposed mining area
- extraction of approximately 8.5 Mt of ROM coal at a maximum rate of up to 1.2 Mtpa until 31 December 2042. Mining operations are proposed to be permitted to 31 December 2042 to allow operational and planning flexibility to accommodate the proposed closure of the MPPS
- the continued transfer of coal to the surface, coal handling at the pit top and coal loading into trucks for dispatch via the private coal haul road regulated under the Western Coal Services consent (SSD-5579)
- the underground transfer of coal via the proposed Springvale West project mining area (subject to approval) to the Springvale Mine's pit top before being transferred to either Springvale Coal Services Site (SCSS) or MPPS using the existing coal handling, processing and conveyance infrastructure
- the continued operation of the pit top, approved water management infrastructure and existing ancillary infrastructure (including ventilation, electrical and water management infrastructure within the Gardens of Stone SCA)
- construction of a transfer pipeline between the pit top and Pumping Station Facility No.1 (approved for construction as part of the McPhillamys Gold Project on land adjacent to the Angus Place pit top)
- transfer of water to Springvale Water Treatment Project (SWTP), SCSS, MPPS and Pumping Station Facility No.1 (for transfer to the McPhillamys Gold Project)
- exploration, monitoring and rehabilitation activities.

Other than as set out above, all activities approved under MP 06_0021 are intended to continue.

The project will provide employment opportunities for approximately 180 FTE employees, as well as contributions to local, regional and State economies.

1.4 Related developments

To ensure adequate consideration of all project-generated impacts, related developments have been considered. These are projects under separate approvals that have key operational linkages to Angus Place West. Related developments, their relevance to the project, and the rationale that each development has been scoped out from further assessment within the SIA is provided in Table 1.1.

Table 1.1 Scoping of related developments

Development	Relevance to the project	Considered as project impact?
Springvale Mine (SD 5594)	Underground transfer of coal to Springvale Mine where it will be handled at Springvale Mine's pit top before being transferred to either SCSS or MPPS by conveyor.	Springvale conveyor infrastructure already exists and operates and is anticipated to do so if the project were not to occur. Impacts from the continued operation of Springvale's conveyor are not considered further.
Springvale Water Treatment Project (SWTP) (SSD 7592)	Water from Angus Place will be piped to the SWTP which treats water and delivers it to MPPS. Centennial is approved to transfer up to 42 megalitres per day (ML/d) from Angus Place and Springvale Colliery to the SWTP. Water from Angus Place is transferred to SWTP via an existing pipeline.	SWTP processes water for use at MPPS. SWTP would remain operational if the project were not to occur. Impacts from the continued operation of SWTP are not considered further.
Western Coal Services Project (WCS) (SSD 5597)	WCS is Centennial's coal handling hub for its Western Coalfield operations. The majority of the coal conveyor that connects the pit top to MPPS is operated as part of WCS. Coal produced at Angus Place to be transported off-site by truck using existing private haul roads or underground transfer of coal to Springvale Mine where it will be handled at Springvale Mine's pit top before being transferred to either SCSS or MPPS by conveyor.	WCS can handle and process coal from various sources. It would remain operational if the project were not to occur. Impacts from the continued operation of WCS are not considered further.
MPPS (DA 80/10060)	MPPS is a major energy producer in NSW. MPPS is anticipated to receive the majority of coal produced by the project.	MPPS can receive coal from various sources and is scheduled to continue to do so. MPPS is anticipated to remain operational if the project were not to occur. Impacts from the continued operation of MPPS are not considered further.
McPhillamys Gold Project (SSD-9505)	McPhillamys Gold Project (approved but not yet constructed) could receive water from Angus Place. The project includes the construction and operation of a water pipeline and associated infrastructure to connect the Angus Place pit top to the pumping station. Water could be sourced from Angus Place, SCSS and MPPS.	Alternative water supply options are available for McPhillamys Gold Project. Impacts from the commencement of McPhillamys Gold Project are not considered further.

1.5 Key features of the project area and surrounds

Key features of the project area and surrounding environment are described in Table 1.2.

Table 1.2 Key features of the project area and surrounds

Aspect	Description
LGA	The project area is within the Lithgow City LGA.
Land zoning	Under the Lithgow Local Environment Plan 2014 (Lithgow LEP), there are seven land use zones mapped within the project area: • IN1 – General Industrial • R5 – Large Lot Residential • RU1 – Primary Production • RU2 – Rural Landscape • RU3 – Forestry • SP2 – Infrastructure (Electricity Generating Works) • SP2 – Infrastructure (Roads and Traffic Facility). Within the proposed mining area, there are three land use zones mapped under the Lithgow LEP: • RU1 – Primary Production • RU2 – Rural Landscape • RU3 – Forestry.
Mining and exploration tenements	The project area occupies the western portion of the Angus Place Colliery Holding and extends into CCL702 held by Shoalhaven Coal. Centennial and its entities hold ML1424, ML1699, ML1720, ML1853 and CCL704 all of which are within the project area. Centennial holds Exploration Licences (EL) EL6856 and EL6293 within the project area.
Nearby townships	The pit top is approximately 3.5 km north of Lidsdale, 7.5 km north-east of Wallerawang and 15 km north-west of Lithgow.
Landscape	The landscape within the project area is diverse ranging from densely vegetated, undulating ridgelines, to open, flat valleys and cleared and heavily disturbed areas. Parts of the project area are on Newnes Plateau with landscape features comprising undulating ridgelines, narrow gorges and sandstone cliffs and pagodas and dense bushland within Gardens of Stone SCA. Lambs Creek and Kangaroo Creek flow through the project area into Coxs River. Topographically, the project area can be divided into the Newnes Plateau and areas of lower elevation in the Wolgan Valley and the Coxs River Valley. Elevation within the project area ranges from 900 m to 1,175 m Australian Height Datum (AHD).
Land use	Land use within the project area predominantly consists of historical and existing mining operations (including the pit top and private haul roads) and, until 2022, commercial forestry in the Newnes State Forest and Ben Bullen State Forest. Newnes State Forest and Ben Bullen State Forest comprised pine plantation and native hardwood forest that were selectively logged under Forestry Corporation of NSW tenure and management. Newnes State Forest and parts of Ben Bullen State Forest within the project area were reserved to create the Gardens of Stone SCA in May 2022. Gardens of Stone SCA supports a number of recreational land uses (including areas for sightseeing, bushwalking and camping). Other land uses within the project area include agricultural operations (primarily grazing) and rural residential properties. There is no intensive cropping in the project area. The area surrounding the project area is comprised of underground coal mining, coal handling, coal transport and supporting infrastructure, power stations (including MPPS and the former Wallerawang Power Station), agriculture (including cattle and sheep grazing) and additional areas of Gardens of Stone SCA managed by the National Parks and Wildlife Service (NPWS). The project is within the Sydney Drinking Water Catchment, which is made up of five major catchments including Warragamba, Shoalhaven, Upper Nepean, Woronora and the Blue Mountains. The catchment covers around 16,000 km² and collects rainfall and runoff which is stored in dams and weirs for public use.

Aspect	Description
Site history	The project area is within the Western Coalfield of NSW where coal mining activities have taken place for over 150 years. The region has also been the site of coal-fired power generation for over 50 years. The general area surrounding Angus Place is comprised of various operating and non-operating open cut and underground coal mining operations. There are six mining operations in the Western Coalfield which are either operating or in care and maintenance, including: • Clarence Colliery – currently operating • Springvale Mine – currently operating • Airly Coal Mine – currently operating • Invincible Colliery – currently operating • Cullen Valley Colliery – currently in care and maintenance. • Baal Bone Colliery – currently in rehabilitation and care and maintenance.
Land ownership	The project area is on land owned by NSW Government (including Crown land and Gardens of Stone SCA) and Centennial (and its subsidiaries), as well as freehold land. The proposed mining area is partly within Gardens of Stone SCA. Other properties not owned by Centennial and its entities generally relate to road and utility infrastructure providers such as Lithgow City Council, Ausgrid, and Crown Land. Private landholdings within the proposed mining area include rural residential, lifestyle, hobby farming and other commercial businesses. With the exception of exploration activities, installation of groundwater bores and groundwater monitoring, no surface disturbance on privately-owned land (i.e. private land not owned by Centennial or its entities) is required for the project. Agreement from the landholder will be sought prior to activities occurring on privately-owned land.
Residences	The project area and the land surrounding it is sparsely populated. There are a small number of private residences in close proximity to the pit top, the closest, R1, is approximately 800 m south-west of the pit top (Figure 1.2). The closest small lot urban development is Lidsdale, approximately 3.5 km south of the pit top. Other residential localities include Wallerawang, Portland and Ben Bullen.
Nearby natural features	The areas of Gardens of Stone SCA that are within the project area are densely vegetated and are characterised by natural features such as pagodas, cliff lines, swamps, creeks and deep valleys. Other natural features within the locality include: • Greater Blue Mountains World Heritage Area (GBMWH) – listed on the World Heritage List and National Heritage List and approximately 2.8 km from the project area • Gardens of Stone National Park approximately 2.9 km from the project area • Wollemi National Park approximately 6.2 km from the project area • Blue Mountains National Park approximately 9.5 km from the project area. The GBMWH comprises 10,000 km² area of bushland, covering seven National parks (Wollemi, Yengo, Gardens of Stone, Blue Mountains, Kanangra-Boyd, Nattai and Thirlmere Lakes) and the Jenolan Karst Conservation Area. The GBMWH was listed as a World Heritage Area in 2000 for significant biological evolutionary processes and the importance and diversity of habitats including wet and dry sclerophyll forest, mallee heathlands, swamps, wetlands and grasslands. Approximately 75% of the project area lies within the 'Greater Blue Mountains Area - Additional Values and Areas' (nominated place). This nomination is currently under assessment by the Australian Heritage Council for acceptance onto the National Heritage List.
Nearby infrastructure	There is existing surface infrastructure at the pit top, which can be accessed via the Castlereagh Highway and Wolgan Road. Access to Wolgan Road is provided via the intersection of Castlereagh Highway, Wolgan Road and Main Street, or via the intersection of Castlereagh Highway and Ian Holt Drive. There are two private haul roads that operate as part of the Western Coal Services Project and connect the pit top to either the former Wallerawang Power Station or MPPS. The use of these roads is regulated by SSD-5579. There are also water transfer pipelines that connect the pit top to MPPS and SCSS as well as dewatering facilities that connect to the SWTP at MPPS. The Main Western Railway line runs generally east-west to the south of the project area.

Aspect	Description
Surrounding development	Coal mining, coal handling, transport and distribution infrastructure and power stations are on the land surrounding the project area, and include: • MPPS (ongoing operation of the power station and SWTP) • Pine Dale Coal Mine (currently under care and maintenance) • Western Coal Services Project (ongoing operation of SCSS and coal and water transfer activities, including an overland conveyor network connecting to Lidsdale Siding and Springvale Mine) • Springvale Mine (ongoing operation of the pit top, underground coal mining and associated activities) • Wallerawang Power Station (the power station has closed; however, rehabilitation of ash storage areas (including Sawyers Swamp Creek Ash Dam) and alternative land use planning continues including a battery energy storage system) • Lidsdale Siding (ongoing operation of the rail unloading and loading facility, which can receive or export coal). Where relevant, cumulative impacts from the project and surrounding developments will be assessed in accordance with the <i>Cumulative Impact Assessment Guidelines for Significant Projects</i> (DPIE 2022b).
Planning context	The project area is not within any land identified as: • biophysical strategic agricultural land • flood planning area • mine subsidence district. The majority of the project area is mapped as bushfire prone land. Parts of the project area are also mapped as ‘environmentally sensitive – biodiversity’ and ‘environmentally sensitive – groundwater vulnerable’ on the Lithgow LEP.

1.6 Proximal projects

Proposed and existing developments within the region have the potential to interact with the project, thereby contributing to cumulative social impacts. Relevant current and future projects have been identified and are outlined in Table 1.3.

Table 1.3 Proximal projects

Project	Approximate distance to pit top	Project status
Western Coal Services Project	4 km	Operating
Pine Dale Coal Mine	4 km	Care and maintenance
Springvale Mine	5 km	Operating
Pinecrest BESS	5 km	Preparing EIS
Mount Piper Power Station	6 km	Operating
Springvale Water Treatment Project	6 km	Operating
Lidsdale Siding	6 km	Operating
Wallerawang Power Station	6 km	Closure and rehabilitation
Wallerawang BESS	6 km	Approved
Great Western BESS	6 km	Approved
Invincible Colliery	6 km	Operating
Clarence Colliery	6 km	Operating
Mt Piper BESS	7 km	Approved

Project	Approximate distance to pit top	Project status
Cullen Valley Mine	9 km	Operating
Ben Bullen Wind Farm	10 km	Preparing EIS
Sunny Corner Wind Farm	13 km	Preparing EIS
Mount Lambie Wind Farm	16 km	Preparing EIS
Lake Lyell Pumped Hydro Energy Storage Project	17 km	Preparing EIS
Airly Coal Mine	27 km	Operating

1.7 Terminology

The following terms are used throughout this report:

- **The project:** Used to describe the Angus Place West Project in its entirety, encompassing the re-start of Angus Place (including operation, use, repair and maintenance of existing surface infrastructure to support mining, coal handling and dispatch), underground coal mining activities within the proposed mining area and construction and operation of infrastructure associated with coal handling, storage and dispatch, as well as laydown and materials storage areas, mine ventilation and water management.
- **Project area:** the proposed development consent boundary for the project in its entirety, encompassing the proposed mining area, the pit top, historic underground mine workings and mine ventilation, electrical and water management infrastructure. The project area occupies the western portion of the Angus Place Colliery Holding and extends into CCL702 held by Shoalhaven Coal. Centennial and its entities hold ML1424, ML1699, ML1720, ML1853 and CCL704 all of which are within the project area.
- **Proposed mining area:** the area within which first workings bord and pillar mining is proposed to be undertaken (also referred to as 300 Area, 400 Area and 600 Area).
- **Pit top:** the Angus Place pit top site and its infrastructure, accessible from Wolgan Road.
- **Sensitive receiver:** locations where people live, work or engage in activities that could be impacted by the project and includes dwellings and recreational areas.
- **Mining operations:** the carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and associated removal, storage and/or emplacement of vegetation, topsoil, overburden, tailings and reject material; including underground development necessary for mining operations to be carried out. Mining operations exclude decommissioning and rehabilitation.
- **First workings:** the development of underground roadways, which involves the formation of main headings, gateroads and cut-throughs and the like.

2 Methodology

This section describes the methodology that has been used to complete SIA scoping and initial assessment, in accordance with the SIA Guideline (DPHI 2025a), and the International Association for Impact Assessment's *SIA guidance for assessing and managing the social impacts of projects* (Vanclay, et al. 2015).

SIA is a process for analysing, monitoring, and managing the social consequences of a development. Social impact scoping is an exercise to identify the main issues of concern and the interested and affected parties for a particular planned intervention (Vanclay, et al. 2015).

As outlined in the SIA Guideline (DPHI 2025a), the SIA process involves three distinct but iterative phases:

- Phase 1: social impact scoping and initial assessment
- Phase 2: social impact assessment
- Phase 3: social impact management and monitoring.

Each phase is underpinned with objectives and key tasks to generate deliverables as detailed in Table 2.1. As a scoping report this document is focused on Phase 1, setting the foundations for later phases of the SIA.

Table 2.1 Phases of the SIA process

	Phase 1: social impact scoping and initial assessment	Phase 2: social impact assessment	Phase 3: social impact management and monitoring
Objective	Ensure that proportionate depth and scope is given to the potentially significant social impacts of the project	Identify, describe and assess the social impacts which may occur in local and regional communities as a result of the project and propose responses to the identified social impacts	Outline how social impacts associated with the project will be managed, monitored and adapted
Key tasks/elements	• Defining the project's social locality • Initial analysis of social baseline • Preliminary identification and evaluation of social impacts • Considering and articulating project refinement • Community and stakeholder engagement.	• Summarising outcomes of scoping • Detailed social baseline analysis • Predict and analyse the extent and nature of likely social impacts • Develop responses (avoidance, mitigation and enhancement measures) to social impacts • Identify and explain residual social impacts • Community and stakeholder engagement.	• Program to monitor predicted social impacts against actual impacts • Program for the ongoing analysis of social risks and opportunities • Process to release monitoring results • Ongoing community and stakeholder engagement.
Deliverable	Social Impact Assessment Scoping Report	Social Impact Assessment report	Social Impact Management Plan (if required)

As shown in Table 2.1, scoping forms an essential element of the SIA process and has been informed by the key tasks described below.

2.1 Defining the SIA study area

Factors considered in defining the SIA study area (referred to as the 'social locality' in the SIA Guideline) include:

- the nature and scale of the project and its associated activities
- the characteristics of the area the project is located in, existing and historical land uses, nearby built or natural features, and levels of access and connectivity
- the characteristics of surrounding communities, including relevant demographic or social trends, cultural values, and community assets including key stakeholder interests likely to be affected by the project
- the project's development in the context of regional development objectives and cumulative project developments.

The SIA study area comprises a local area, key urban areas and a regional area for consideration.

2.2 Initial social baseline analysis

Initial analysis of the social baseline serves to build an understanding of the socio-economic characteristics of the communities within the project's social locality. It draws on a range of primary and secondary information sources to obtain both qualitative and quantitative data.

Quantitative data sources included:

- Australian Bureau of Statistics (ABS) Census
- NSW Department of Planning, Housing and Infrastructure (DPHI) population projections.

Qualitative data sources included:

- analysis of stakeholder and community engagement feedback, for data on community values, capacities and challenges associated with social infrastructure and community facilities, and to verify quantitative data
- local planning and policy documents, and media reports to be used as indicators of community sentiment
- review of literature, to be used as indicators of community sentiment, such as:
 - government policy and publications relevant to the SIA study area
 - media reports
- desktop review for asset and service mapping, including:
 - areas and elements of social interest
 - the location of social infrastructure
 - other major projects.

The initial social baseline analysis for the project is provided in Chapter 5 and will be refined during development of the SIA Phase 2, as outlined in Table 2.1.

2.3 Community and stakeholder engagement

Best practice SIA is participatory and involves understanding impacts from the perspective of those affected by a project activity. SIA scoping involves drawing upon community and stakeholder input to identify potential social impacts. This facilitates consideration of the concerns of potentially affected communities and stakeholders early in the EIS process.

Chapter 6 of this report summarises the key stakeholder and community engagement carried out by Centennial Angus Place during the scoping phase of the SIA.

Targeted SIA-specific engagement was conducted with the CCC as part of the preparation of this SIA Scoping Report, building on broader project engagement, to help capture key themes and considerations relevant to scoping.

The feedback generated through community and stakeholder engagement directly informed preparation of the initial social baseline analysis and the preliminary identification of social impacts and benefits.

2.4 Preliminary identification and evaluation of social impacts

Preliminary identification and evaluation of social impacts was guided through application of the SIA worksheet which constitutes part of the SIA Guideline (DPHI 2025a). The SIA scoping worksheet is a decision support tool which assists in evaluating potential social impacts in order to determine the level of assessment required to address the identified impact as part of the SIA. As defined in the SIA Guideline, the levels of assessment are:

- detailed assessment: may result in significant social impacts, including cumulative impacts
- standard assessment: unlikely to result in significant social and cumulative impacts
- minor assessment: may result in minor social impacts
- not relevant: will have no social impact, or the social impact will be so small that they do not warrant consideration.

The initial identification and evaluation of social impacts included application of the SIA scoping worksheet (DPHI 2025c). This decision support tool is also used to identify potential impacts and inform the level of assessment to be subsequently undertaken for each identified impact in SIA Phase 2.

Table 2.2 presents the categories of social impacts considered to identify impacts, as per the SIA Guideline.

Table 2.2 Social impact categories

Impact category	Description
Way of life	How people live, how they get around, how they work, how they play, and how they interact each day.
Community	Composition, cohesion, character, how the community functions, resilience and people's sense of place.
Accessibility	How people access and use infrastructure, services and facilities, whether provided by a public, private, or not-for-profit organisation.
Culture	Both Aboriginal and non-Aboriginal, including shared beliefs, customs, practices, obligations, values and stories, and connections to Country, land, waterways, places and buildings.
Health and wellbeing	Physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, access to open space and effects on public health.

Impact category	Description
Surroundings	Ecosystem services such as shade, pollution control, erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity.
Livelihoods	People's capacity to sustain themselves through employment or business.
Decision-making systems	Extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms.

Preliminary analysis of the extent of assessment required for each impact, included consideration of:

- the nature of their potential to impact on people, such as extent, duration, intensity
- population sensitivity and interest
- the extent and timing of availability of existing information on the impact
- the potential for combined and cumulative impacts
- any planned mitigation or enhancement measures to reduce negative impacts and enhance positive impacts.

Where this exercise identified any impacts as not relevant, they were removed from the table and subsequent consideration.

The assessment levels additionally indicate the potential nature and detail of information required in SIA Phase 2 with regard to potential impacts. The indicative data requirements associated with each level of assessment are outlined in Table 2.3.

Table 2.3 Levels of assessment and indicative associated data requirements

Level of assessment	Indicative data requirements
Minor	Secondary data and limited engagement (if required)
Standard	Secondary data, targeted engagement and potentially targeted research
Detailed	Secondary data, detailed engagement and targeted research

2.5 Assumptions and limitations

The following limitations and assumptions apply to this SIA Scoping Report:

- This SIA Scoping Report has been based on currently available information for the project. The project may be refined during preparation of the SIA and EIS.
- Baseline demographic and socio-economic data have been sourced from the most recent publicly available datasets, including the ABS 2021 Census of Population and Housing (the Census). These datasets represent a point-in-time snapshot. However, social characteristics and community conditions are dynamic and may have changed since data collection.
- The Census is self-enumerated and, while it is designed to minimise respondent error, it is subject to a degree of inaccuracy. In particular, Aboriginal and Torres Strait Islander peoples are consistently underrepresented in Census counts, resulting in a higher likelihood of undercount and lower data reliability for these populations.

- The SIA study area has been defined in part upon economic impacts including employment. Key locations of employee residence have been extrapolated from internal Centennial data from 2023 (Aigis 2023).
- South Bowenfels is an ABS SAL situated on the western outskirts of Lithgow urban town centre. South Bowenfels is not considered an Urban Centre or Locality (UCL) by the ABS as it doesn't meet the minimum population density and urban infrastructure criteria typical of a locality. It should be noted however that this is a slight anomaly as South Bowenfels SAL has a population of 1,326 people (with 12.1% of the population working in the coal mining industry, and a limited number of services and amenities).
- The baseline social profile in this SIA Scoping Report focuses on the SIA study area, in particular the local area and key urban settlements potentially impacted by the project (Section 5.3). It is recognised that numerous residences and small clusters of dwellings are within the broad vicinity of the project but outside of the local key urban areas as defined for this report (Figure 3.1). While these settlements and residences may not be individually documented or referenced, they are represented by those which are and considered within the preliminary impact assessment.
- Engagement feedback drawn upon for the SIA Scoping Report was not undertaken directly by the author of this SIA Scoping Report. Engagement data within this SIA Scoping Report are referred to as a secondary data source.
- Engagement feedback drawn upon in this report includes insights from stakeholder and community engagement activities. While these provide valuable perspectives, they may not be representative of the views of all community members.
- The project will generate greenhouse gas emissions, and the impacts of climate change will be considered as part of the EIS. The physical effects and broader global social consequences of climate change are outside the scope of the SIA. The SIA will, however, consider direct social impacts within the SIA study area, for example to community cohesion as a result of divergent views on the project's real or perceived role in the energy transition, contributions to climate change and achievement of regulatory greenhouse gas emissions targets.

3 SIA study area

The SIA study area (also referred to as the project's social locality) is shown in Figure 3.1 and has been informed by consideration of key project activities, stakeholders likely to be affected by the project, and the sub-regional and local context.

To enable social baseline data collection and analysis, the ABS Australian Statistical Geography Standard (ASGS) has been used to help define the SIA study area.

The ASGS statistical areas applied to define the SIA study area included:

- Suburbs and Localities (SALs) – approximate representation of the officially recognised boundaries of suburbs and localities as defined by the State and Territory governments of Australia
- Urban Centres and Localities (UCLs) – representation of areas of concentrated urban development
- Local Government Areas (LGAs) – approximate representation of gazetted local government boundaries as defined by each state and territory.

Details of the SIA study area are provided in Table 3.1. The SIA study area will be further refined as required during the assessment phase including further consideration of cumulative regional development, stakeholder feedback and any impacts from other technical studies.

Table 3.1 SIA study area mapped to ASGS

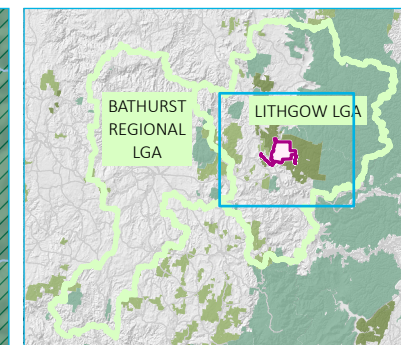
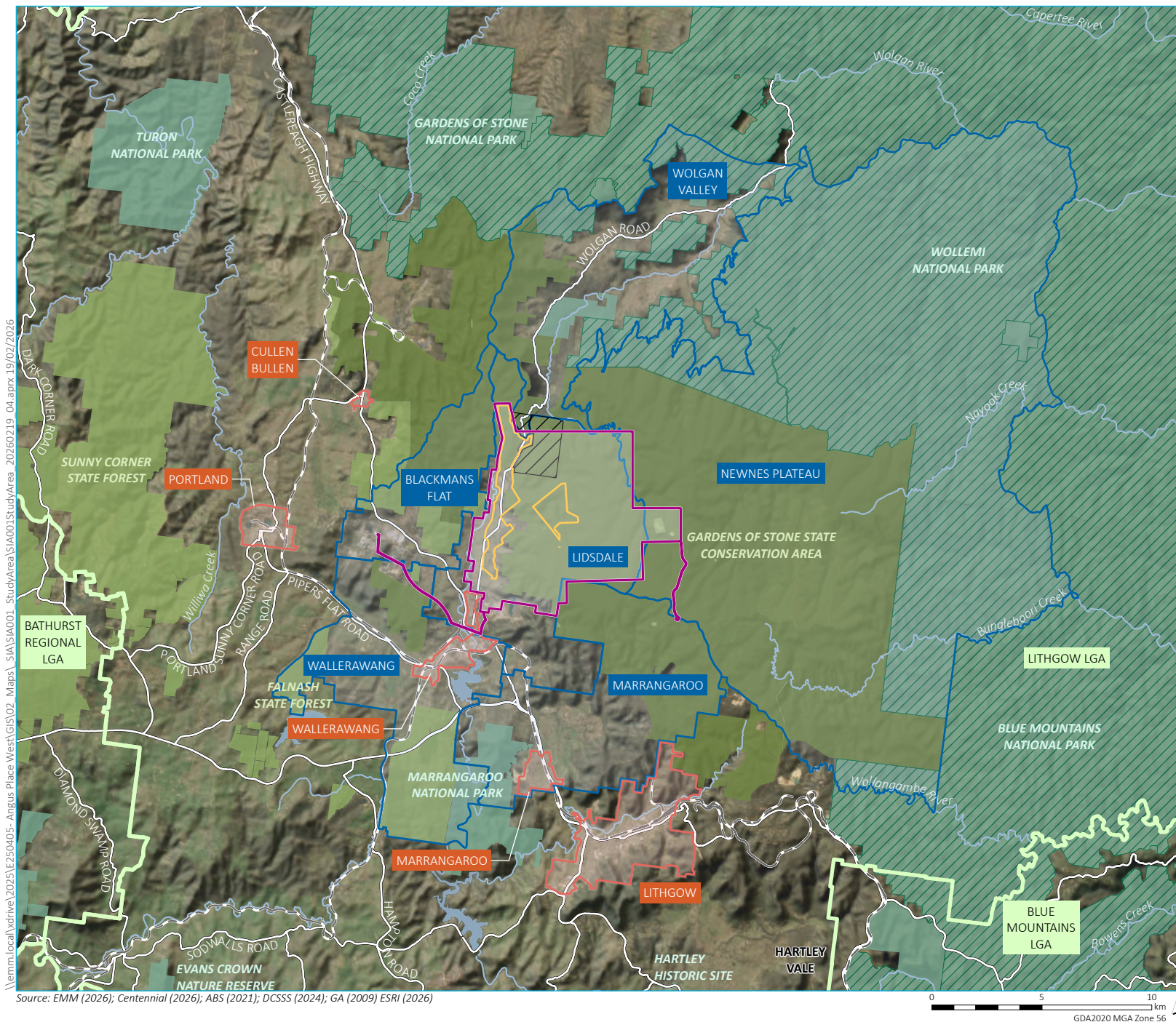
Social locality	Geographic area	ASGS statistical area code	Description/relevance to project
Local area	Newnes Plateau	SAL 12964	The project area is located within the localities of Newnes Plateau, Lidsdale, Wallerawang, Marrangaroo, Blackmans Flat and Wolgan Valley.
	Lidsdale	SAL 12327	
	Wallerawang	SAL 14132	
	Marrangaroo	SAL 12512	
	Blackmans Flat	SAL 10393	
	Wolgan Valley	SAL 14367	
Key urban areas	Portland	UCL 115121	The project area is approximately 4 km east of the urban centre of Portland.
	Wallerawang	UCL 115151	The project area is approximately 1.8 km north of the urban centre of Wallerawang. Wallerawang UCL (115151) forms part of Wallerawang SAL (12512) and is discussed in that regard.
	Marrangaroo	UCL 122083	The project area is approximately 7.2 km north of the urban locality of Marrangaroo.
	Lithgow	UCL 113008	The project area is approximately 10 km north-west of the urban centre of Lithgow.
	Cullen Bullen	UCL 122044	The project area is approximately 6 km from the urban locality of Cullen Bullen.
Regional area	Lithgow	LGA 14870	The project area is within the Lithgow LGA.
	Bathurst Regional	LGA 10470	A substantial proportion (16%) of recent Springvale employees (and thus the project's expected workforce given the potential for transfer part of the existing Springvale workforce to Angus Place) reside in Bathurst LGA.

Social locality	Geographic area	ASGS statistical area code	Description/relevance to project
Area of reference	NSW	S/T 1	The project is within NSW. Where appropriate, NSW data has been referred to as a basis for comparison.

An overview of the key project activities and possible changes to the social environment, which were considered in the design of the SIA study area, are provided in Table 3.2.

Table 3.2 Key project activities and potential change to social environment

Key project activity	Possible change to social environment
Payment for goods and services throughout operation	• New demand for supply of goods and services • New demand for labour • Funding for social services (through royalties/taxes)
Operation of pit top infrastructure (including transportation of coal) and commencement of mining in new areas	• Impact to amenity, including noise and visual • Level of amenity from landscape and wildlife habitat and ecosystem services • Impacts to water reliant businesses operating in project area • Property values of nearby properties (actual or perceived) • Disturbance or displacement of Aboriginal and non-Aboriginal heritage sites and/or items and changes to cultural landscapes • Community health and safety risk (perceived or actual) including road accidents and water safety/security • Health and safety risk to employees • Level of social cohesion resulting from divergent views of continued industry associated with greenhouse gas emissions
Decommissioning and rehabilitation	• Changes to decision-making structures and community cohesion as a result of closure planning engagement and processes • Changes to amenity (including noise and visual) from decommissioning and rehabilitation activities • Changes to community values and identity from transition away from coal • Reduced opportunity for employment and business



- KEY**
- Project area
 - Proposed mining area
 - Regional area
 - Local area
 - Key urban area
 - Existing environment
 - Rail line
 - Major road
 - Named watercourse
 - Named waterbody
 - Maiyngu Marragu (Blackfellows Hand Aboriginal Place)
 - Greater Blue Mountains World Heritage Area
 - NPWS reserve
 - State conservation area
 - State Forest

SIA study area

Angus Place West
Social Impact Assessment
Figure 3.1

4 Administrative framework

4.1 Planning context and requirements

4.1.1 Planning context

The strategic policy and planning context for the project is described in the Scoping Report. This includes an overview of relevant social and economic policies and strategies and describes how the project may contribute to, or support achievement of community goals, aspirations, or actions within them.

The Scoping Report includes commentary with regard to how the project aligns with planning objectives. It is not the role of the SIA to provide justification for the project, but to identify, assess and seek to manage its impacts, both positive and negative.

4.1.2 SIA requirements

This SIA Scoping Report follows the requirements of the SIA Guideline and SIA Technical Supplement. These documents require that SIA be integrated into the EIS for all SSD projects and demonstrate a rigorous, evidence-based, and participatory process. The guidance expects the SIA to identify and evaluate both positive and negative social impacts across the project lifecycle, including attention to, for example, engagement feedback, cumulative impacts, associated infrastructure, the experiences of vulnerable groups, and changes made as a result of all investigations.

4.2 Centennial's approach to social responsibility

Centennial and its entities, including Centennial Angus Place, are committed to enhancing the environmental management of their operations and 'building, developing and maintaining strong community relations' (Centennial 2025).

In addition to its own commitments, Centennial is a member of the NSW Minerals Council (NSWMC) (NSWMC 2025). NSWMC's guiding principles (NSWMC 2023) expect members to:

- put respect, fairness, and transparency at the centre of engagement
- continually improve environmental performance of operations, including stewardship of water, mitigation of noise and dust emissions, and contribution to the conservation of biodiversity and nature
- provide a safe and inclusive work environment
- make a positive economic and social contribution to the communities in which they operate
- engage with and support communities to take advantage of opportunities for use of mine owned land, infrastructure, and workforces in the future
- support decarbonisation policies and programs consistent with agreed international frameworks and achieving the NSW target of net zero emissions by 2050.

5 Initial social baseline analysis

As outlined in Chapter 3, the SIA study area (Figure 3.1) includes:

- Lidsdale, Newnes Plateau, Marrangaroo, Wallerawang, Blackmans Flat and Wolgan Valley (local area)
- Portland, Wallerawang, Marrangaroo, Cullen Bullen and Lithgow (key urban areas)
- Lithgow and Bathurst LGAs (regional area).

This chapter provides an understanding of pre-existing social conditions in the SIA study area. Unless otherwise stated, the data included in this social baseline is derived from the 2021 Census of Population and Housing (ABS 2021, ABS 2016, ABS 2011).

5.1 Community profiles

Community profiles provide a qualitative description of key trends and issues in an area or community (Vanclay, et al. 2015). Community profiles of the local area and key urban areas are provided below. Key social trends and characteristics are identified by comparing population, dwelling and labour force indicators to those for the state (NSW - ASGS code S/T 1). Detailed baseline indicator data is provided in Annexure A.

5.2 Local area

As set out in Chapter 3, the local area, as determined for the SIA, comprises the localities of Newnes Plateau, Lidsdale, Blackmans Flat, Wallerawang, Marrangaroo and Wolgan Valley. In 2021, the local area had a population of 3,366.

The local area had a marginally lower labour force participation rate (53.5%) compared to NSW (58.7%) and had a slightly lower unemployment rate (4.3%) compared to NSW (4.9%), with an Aboriginal and Torres Strait Islander unemployment rate of 12.4%. The top industry of employment in the local area was healthcare and social assistance, which employed 12.5% of residents. This was followed by mining as the second largest industry of employment (11.2%), largely due to the area being within close proximity of operating mines, followed by public administration and safety (9.8%) and retail trade (8.3%). The top occupation in the local area was technicians and trade workers (19.0%), followed by community and personal service workers (15.6%) and clerical and administrative workers (14.2%).

The local area is entirely within the Lithgow LGA. The four component localities, particularly Lidsdale SAL, host surface infrastructure for current and former underground mining operations, such as Angus Place and Springvale Mine. Such infrastructure includes pit top and ventilation systems as well as water management systems.

The local area is surrounded by various protected areas and national parks. Recreational opportunities in the local area include walking and hiking tracks, caravan and camping sites and lookouts. There are limited services within the local area. Most services (such as regional transport, shops, education and health services) are in larger urban centres such as Lithgow. In 2021, 95.8% of the population in the local area lived in separate housing, relative to 65.6% in NSW. The local area had a slightly higher proportion of residents with a long-term health condition (29.7%) compared to NSW (27%), and a marginally lower proportion of residents who need assistance (5.6%) compared to NSW (5.8%).

The local area had a slightly lower proportion of residents who engaged in voluntary work (12.7%), compared to NSW (13%) indicating a standard level of community cohesion, community initiative and sense of belonging.

The Wiradjuri, Darug and Gundungurra people have lived in connection with the project area for millennia. Contemporary traditional owners have maintained close cultural and spiritual connections to *Ngurra*, or “Country”. As cultural custodians of Country, traditional owners continue to exercise cultural responsibility to care for, manage and speak about *Ngurra* and its cultural and natural heritage values.

The local area has a total Aboriginal and Torres Strait Islander population of 254 people. The Lithgow area and surroundings (ILO10501501) had an Aboriginal population of 1,621 people, with a median age of 26, indicating a younger population and demographic compared to the wider community. The Lithgow area had an Aboriginal labour force participation rate of 49.5% and an unemployment rate of 11.8%. The top industry of Aboriginal employment within the area was mining (6.6%) with the top occupation being technicians and trade workers (18.0%) (ABS 2021).

5.2.1 Lidsdale

Lidsdale SAL had a total population of 471 people, 8.3% of which identified as Aboriginal and Torres Strait Islander. Lidsdale SAL had 13.1% of the population working in the mining industry, the top industry of employment in the locality, given its close location to Springvale and Angus Place Colliery. Lidsdale’s unemployment rate at 2.8% is lower than NSW (4.9%), with 66% of the population participating in the labour force, however it had a marginally higher percentage (14.2%) of people who engaged in voluntary work in the community. In 2021, Lidsdale had 155 occupied private dwellings, of which all of these were classified as separate houses. There was 46.5% of the population who owned with a mortgage compared to NSW at 32.5%.

Social infrastructure in Lidsdale SAL consists of an accommodation facility, a memorial park, fire service, Wolgan Valley hiking area, a picnic area, Maiyingu Marragu – Blackfellows Hand Cave, Maxwell’s Peak tourist attraction, local café and catering businesses.

5.2.2 Wallerawang

Wallerawang is north-west of Lithgow, approximately 1.8 km from the project area. Lidsdale Siding is on the northern edge of Wallerawang and has been used as a coal storage and rail loading facility since 1974. In 2021, Wallerawang had a population of 2,079 residents, which was a slight increase (1%) from 2016. In 2021, Wallerawang had a median age of 38, with 42.9% of residents aged between 25 to 64 years. This is similar to NSW, which had the same median age, and 45.1% of the population aged between 25 to 64 years. Wallerawang had a relatively high proportion of Aboriginal and Torres Strait Islander residents (9.5%).

In 2021, Wallerawang had 856 private dwellings, of which 9.5% were unoccupied. Of occupied private dwellings, 72.1% were owned outright or with a mortgage, whilst a lower percentage were rented (25%). Wallerawang had a high proportion of social housing (29.4%) compared to NSW (12.8%). The median house price in Wallerawang between September 2024 and August 2025 was \$615,000, with house prices increasing by 14.8% in the last 12 months (REA Group 2025). In Wallerawang, 12.3% of people participated in volunteering within the community.

Wallerawang’s labour force participation rate aligned with the state at 58.1%, but Wallerawang had a higher unemployment rate of 5.5%, compared to 4.9% in NSW. The median household income was lower than the state median at \$1,441 per week, compared to \$1,829 across NSW. The mining industry was the fourth largest industry of employment at 9.1% in the Wallerawang township.

There are a range of services available in the township, including emergency services, buses and coaches, medical centres and a school. Other community facilities include a library, churches and retail stores. Wallerawang is near the Lidsdale State Forest and Marangaroo National Park, with these natural features drawing a range of recreational visitors. There are several accommodation providers in the township. Wallerawang also hosts recreational facilities for locals and visitors including fishing, sailing and canoeing. Picnic and barbeque areas surround Lake.

5.2.3 Marrangaroo

Marrangaroo is accessible via the Great Western Highway which connects to surrounding localities. It had a population of 297 people, 9.6% of which identified as Aboriginal and Torres Strait Islander. With a 62.1% labour force participation rate, the largest industry of employment for the locality was the mining sector (20.6%). This was followed by education and training (14.2%), and healthcare and social assistance (13.5%). The unemployment rate for the township was 3.2%, lower than the NSW rate of 4.9%. Marrangaroo had a proportion of 19.4% of people who engaged in voluntary work.

In 2021, the median age of Marrangaroo was 47, with 52.2% of the population aged between 25-64 years. Marrangaroo had a total of 94.2% occupied dwellings, with 92.8% owning their property outright or with a mortgage. The total population of Marrangaroo lived in separate housing and had a higher median household income of \$2,349 compared to the state median of \$1,829.

Social infrastructure and attractions in Marrangaroo SAL consist of accommodation facilities, camping grounds, Lithgow City raceway, Lithgow golf club, Lithgow correction centre, Marrangaroo National Park and Lost City walking track and lookout. Marrangaroo SAL is also home to Marrangaroo Creek which connects to surrounding campgrounds. Marrangaroo SAL also includes bus stops which connects the locality to Lithgow urban centre.

5.2.4 Newnes Plateau

Newnes Plateau SAL is located within the Lithgow LGA. Noone resided in this locality in 2021 and therefore no demographic ABS data is available. Newnes Plateau SAL is predominantly made up of the Gardens of Stone SCA, which draws an estimated 200,000 visitors every year (NSW NPWS 2025).

Recreation and tourist destinations within the Newnes Plateau SAL include hiking areas, lookouts such as Newnes Lookout, Newnes Plateau Cliffs and Sunnyside Ridge Lookout, campgrounds and the Spanish Steps. The rugged natural area and challenging terrain is an oasis for adventurers, offering opportunities for canyoning, rock climbing and mountain biking (NSW NPWS 2025).

5.2.5 Blackmans Flat

Blackmans Flat had a total population of 22 people, with 0% identifying as Aboriginal and Torres Strait Islander. The locality had a labour force participation rate of 70.6%. The median weekly household income of Blackmans Flat SAL was \$2,250. Further detailed demographic ABS data is unavailable, due to the low population density of the locality. Infrastructure, recreational and tourist attractions in Blackmans Flat are limited to a goat dairy artisan cheese shop and MPPS.

5.2.6 Wolgan Valley

Wolgan Valley had a total population of 71 people. The median weekly household income for the locality was \$4,999. Further detailed demographic ABS data is unavailable, due to the low population density of the locality. Wolgan Valley is known for its natural beauty, and its connection to 13,000-year-old Aboriginal rock art which are still evident on cave walls today. Surrounded by sandstone cliffs and conservation areas, Wolgan Valley is home to tourism and visitor-accommodation services such as camping grounds, cottages and stays (Wolgan Valley Association 2025). Social infrastructure in Wolgan Valley is limited, with only the education facility of Cranbrook School's Wolgan Valley partial campus located in the locality. Key services are mainly located in surrounding urban centres.

5.3 Key urban areas

The townships of Lithgow, Marrangaroo, Portland, Cullen Bullen and Wallerawang are key urban centres within the SIA study area. Data on population, dwellings and labour force for the key urban areas is provided in Table A.2 in Annexure A.

5.3.1 Lithgow

The Lithgow urban centre is the main township within the Lithgow LGA. Lithgow is located on the Great Western Highway, approximately 160 km from Sydney. Lithgow urban centre is approximately 15 km south-east of Angus Place. In 2021, Lithgow had a population of 11,197 residents, which was a small decline of 2.9% since 2016 (ABS 2021a).

Lithgow is characterised by an older population, with 41.7% of residents aged between 25 to 64 years (adult), and 26.4% of residents aged 65 and over (elderly). The median age of Lithgow residents is 47 years, which is higher than the NSW median age of 38 years (ABS 2021a). There is a relatively high proportion of Aboriginal and Torres Strait Islander residents in Lithgow (7.9%), compared to the NSW average (3.4%) (ABS 2021a). Within Lithgow UCL, 13.4% of the population participated in volunteering within the community.

In 2021, there were 5,450 private dwellings in Lithgow, of which 11% were unoccupied. Of occupied private dwellings, 63.4% were owned outright or with a mortgage, whilst 31.3% were rented. These proportions are similar to those across NSW where 64% of dwellings are owned outright or with a mortgage and 32.6% rented. Lithgow had a high proportion of social housing (23.9%) compared to NSW (12.8%). Between September 2024 and August 2025, the median house price in Lithgow was \$510,000, and the annual growth rate in the last 12 months increased by 5.1% (REA Group 2025).

Lithgow had higher levels of unemployment and lower labour force participation than that recorded for NSW. The 2021 unemployment rate in Lithgow was 6.8%, compared to 4.9% in NSW. The Lithgow labour force participation rate was 48%, compared to 58.7% in NSW (ABS 2021a). Household weekly incomes were lower than the state median of \$1,829, with Lithgow having a median household income of \$1,043. Key industries of employment were healthcare and social assistance (13.8%), and public administration and safety (10.7%) (ABS 2021a). Lithgow had a population of 7.7% who work in the mining industry.

Being a regional service centre, Lithgow provides a range of social infrastructure. This includes medical facilities, public spaces, education facilities, aged and disability care. There are also a number of accommodation options in the township, as well as accessible public transport. Lithgow township is home to a range of tourist and historic attractions, such as the Blast Furnace Park, and surrounding National parks.

5.3.2 Wallerawang

Wallerawang urban centre is approximately 1.8 km south of the project area and forms part of the Wallerawang SAL (Section 5.2.2).

5.3.3 Marrangaroo

Marrangaroo urban centre is approximately 7.2 km south of the project area and forms part of the Marrangaroo SAL (Section 5.2.3).

5.3.4 Portland

Portland is north-west of Lithgow, approximately 4 km east of the project area. In 2021, Portland had a population of 1,841 residents, which represented a decline of 5.3% from 2016 (ABS 2021a). Portland also had a population of 9.2% identifying as Aboriginal and Torres Strait Islander.

Portland had a relatively older average population with 27% of residents aged over 65 years and only 9.8% of residents aged between 15 to 24. The median age of Portland was 48 years, compared to 38 in NSW (ABS 2021a).

In 2021, Portland had 864 private dwellings, of which 7.9% were unoccupied. Of occupied dwellings, 78.9% were owned outright or with a mortgage, and a relatively low proportion of dwellings were rented (17.1%) compared to NSW (32.6%). The median house price in Portland was \$490,000 between September 2024 and August 2025, increasing by 22.8% in the last 12 months from \$404,500, between October 2023 and September 2024 (REA Group 2025).

Like Lithgow, Portland had higher unemployment and lower labour force participation than that recorded in NSW. In 2021, Portland had an unemployment rate of 8.7% and a labour force participation rate of 45.1%. This is compared to the State's unemployment and labour force participation rates of 4.9% and 58.7%, respectively. The largest industry of employment was healthcare and social assistance (12.2%), followed by public administration and safety (10.3%), this was closely followed by construction at 9.2%, then the mining sector (8.7%). Portland residents had significantly lower household incomes than the state, with a median of \$992 per week. Further, the township had a high proportion (26.3%) who earned less than \$650 per week (ABS 2021a). Portland community members (12.6%) participated in voluntary work within the local community.

Social infrastructure available in the township includes medical centres, a school and public spaces. Public transport via bus is also available in the township; however, the closest (operating) train station is in Lithgow. Portland is a historical mining town with attractions such as the Glen Museum showcasing its rich mining history. Portland is surrounded by various national parks and state forests, with access to walking tracks, picnic areas and camping grounds.

5.3.5 Cullen Bullen

In 2021, Cullen Bullen had a total population of 117 people, with an Aboriginal and Torres Strait Islander population of 10.3%. The township had a labour force participation rate of 44.1% and an unemployment rate of 6.7%, higher than the NSW state unemployment rate of 4.9%.

The top industry of employment in Cullen Bullen was transport, postal and warehousing (13.9%), followed by healthcare and social assistance and education and training both employing 11.1% of the population. The median age for Cullen Bullen was 54, with 50.4% of the population aged between 25 to 64 years and 25.6% aged over 65 years, indicating an ageing population. The median household income was \$458, significantly lower than the NSW median income of \$1,829. Cullen Bullen had a total of 25.5% of people who engaged in voluntary work, the highest volunteering rate of the key urban areas, highlighting a strong sense of community cohesion.

Social infrastructure in Cullen Bullen is limited to a school, a church, few local businesses, surrounding hiking trails and the Cullen Bullen Raceway.

5.4 Key social trends and characteristics

A summary of the key social trends and characteristics within the wider regional area (Bathurst and Lithgow LGAs) and the area of reference (i.e. NSW) is provided in Table 5.1.

Table 5.1 **Key relevant social characteristics and trends**

Social themes	Trends and characteristics
Population	- In 2021, the regional area recorded a population of 64,409 residents, of which 20,842 (32%) were located in the Lithgow LGA and 43,567 (68%) in the Bathurst LGA. The population in the Lithgow LGA declined by 1.2% in the 5 years to 2021, meanwhile the population of Bathurst LGA increased by 5.5%. The population of the area of reference (i.e. NSW) experienced a higher growth of 7.9% over the same time period. - Lithgow LGA had a relatively high proportion of residents aged 65+ years (elderly) compared to NSW (24.5% compared to 17.6%). Reflective of Lithgow's older population, the LGA had a lower proportion of children (0 to 14), youth (15 to 24) and adults (25 to 64) when compared to the state. - Bathurst LGA had a relatively high proportion of residents aged 25 to 64 (adult), comparable to NSW. Bathurst LGA recorded a slightly higher proportion of residents aged 65+ (elderly) compared to NSW (18.5% compared to 17.6%), as well as a higher proportion of residents aged 15 to 24 (youth). The proportion of children (0 to 14) was similar to the state. - Both Lithgow and Bathurst LGAs had a higher proportion of Indigenous residents (7.2% and 7.8%, respectively) compared to NSW (3.4%).
Housing	- The proportion of occupied dwellings was lower in the Lithgow LGA (86.8%). Bathurst LGA exhibits high levels of dwelling occupancy (91.0%) aligning with the figure for the broader state (90.6%). Unoccupied dwellings include vacant houses, holiday homes, and dwellings due for demolition or repair. - Lithgow LGA had the highest level of home ownership, with 71.4% of residents owning their house outright or with a mortgage, compared to 66.8% in Bathurst LGA, and 64% in NSW. Both Lithgow and Bathurst LGAs had lower rates of rental tenure (24.1% and 30.3%, respectively) compared to 32.6% in the broader State. - At the 2021 Census, the median rent for Lithgow LGA was the lowest in the regional area at \$270 per week. Median rent in Bathurst LGA was higher at \$320 per week. The regional area had lower median rental prices than NSW, which was recorded at \$420 per week.
Short term accommodation	Within the key urban areas of Lithgow LGA, 49 accommodation options were identified: - Lithgow offers approximately 35 accommodation options, of which 10 are hotels or motels, and 25 are holiday rentals listed on Airbnb. Lithgow also has camping and caravan sites. - Wallerawang has three hotels in the township, as well as six holiday rentals listed on Airbnb. - Portland has five accommodation options, including two hotels and three holiday rentals listed on Airbnb. Within the key urban areas of the Bathurst LGA, approximately 234 accommodation options were identified: - There were 59 accommodation options, of which most were hotels or motels in the Bathurst urban centre. - There were 152 accommodation options listed on Airbnb in the Bathurst urban centre. - Surrounding townships had accommodation offerings, including approximately 22 hotels in Mount Panorama and a farm stay in Perthville.
Tourism	Based on a four-year average from 2016 to 2019, Lithgow LGA received a total of 673,000 visitors which resulted in a total expenditure of \$67 million for the Lithgow economy (Australian Trade and Investment Commission, 2019). The main reasons for travel were either holiday reasons or visiting friends and relatives. Lithgow LGA is host to a range of regional attractions including: - Lake Wallace Campground - Thomson Creek Campground - Gardens of Stone Conservation Area. Events and festivals held in the Lithgow LGA which attract tourists include: - Seven Valleys Live and Local Music Festival - LithGlow Festival - Lithgow Halloween Street Festival. In 2022, tourism in Bathurst Regional LGA has contributed approximately \$383 million (Bathurst Regional Council 2024). The main reasons for visitors to Bathurst LGA were holiday reasons, visiting friends and relatives and business, with 327,000 people visiting from within NSW and 91,000 from interstate (Australian Trade and Investment Commission, 2019). Ongoing research from 2014 to 2017 consistently identified Bathurst is best known outside of the region for motor racing at Mount Panorama and European cultural heritage (Bathurst 2019).

Social themes	Trends and characteristics
Social infrastructure and services in Lithgow LGA	- The Great Western Highway is the main connecting road across the region, passing through the Lithgow township. The Great Western Highway connects to Portland and Wallerawang via the Castlereagh Highway, where it connects to Barton Avenue. The M4 Highway also connects to the Great Western Highway, linking Lithgow to Greater Sydney. - The Blue Mountains Line is a part of the intercity train network and connects Lithgow to Sydney. There are also a range of bus and coach services available in the key urban areas; however, there are limited public transport options outside of urban centres. - The main hospital in the Lithgow LGA is in Lithgow, and there are medical centres in the key urban areas. Other social services in the Lithgow LGA include primary and secondary schools, libraries, museums, parks and recreation facilities, as well as a range of community and social support services.
Social infrastructure and services in Bathurst LGA	- The Great Western Highway passes through the Bathurst township and is the main connecting road throughout the Blue Mountains and Greater Sydney. - The Blue Mountains Line is a part of the intercity train network and connects Bathurst to Sydney. There are also regional coaches and bus services which connect Bathurst to Sydney, Dubbo, Broken Hill and Oberon. - There is appropriate social infrastructure in the Bathurst township, where there is a hospital, community spaces, areas for sport and recreation, aged and disability care services and a number of education facilities, ranging from preschool to tertiary institutions.
Labour force	- Lithgow LGA had a lower labour force participation rate of 50.4%. Bathurst LGA is characterised by a labour force participation rate of 60.2%, which is similar to NSW (58.7%). - Across the regional area the unemployment rate varied, with higher unemployment in Lithgow LGA (5.5%) and relatively low unemployment in Bathurst (4%). The state had an overall unemployment rate of 4.9%. - Lithgow had a higher Indigenous unemployment rate at 11.8%, whereas Bathurst LGA had a similar rate of Indigenous unemployment as NSW (9.4% compared to 9.8%). - Lithgow LGA had a lower rate of female unemployment, but a higher rate of youth unemployment compared to NSW. Youth and female unemployment were lower in Bathurst LGA when compared to Lithgow LGA and the broader state.
Local business and industry	The top industry of employment for both the Lithgow and Bathurst LGAs was health care and social assistance. In Lithgow, this was followed by public administration and safety. The second most common industry in Bathurst LGA was education and training. In both LGAs, retail trade was the third most common industry of employment. Across both LGAs, 3.6% of the population work in the mining industry.
Community values	- Local and regional elements valued by the community include quiet country living and local visual amenity; access to services in Lithgow and Bathurst; strong sense of community; the environment; the area's rich history and culture, unique landscapes and attractions (Bathurst Regional Council 2022) (Lithgow City Council 2022a). - Key features in the regional area include a range of national parks, conservation areas and state forests which have rich cultural and recreational value, including the Marangaroo National Park, Gardens of Stone State Conservation Area, Ben Bullen State Forest, Sunny Corner State Forest, and the Winburndale Nature Reserve. - The regional area is also host to Lake Lyell and Mount Panorama, which are significant tourist attractions. Lake Lyell draws visitors for water sport, camping and fishing activities, whilst Mount Panorama is a significant motor racing circuit.

Social themes	Trends and characteristics
Vulnerability	• According to the 2021 Socio-Economic Indexes for Areas (SEIFA), Lithgow LGA had an Index of Relative Socio-economic Disadvantage (IRSD) decile ranking of 3, while Bathurst LGA recorded an IRSD decile ranking of 7. These deciles indicate that Lithgow LGA is significantly more disadvantaged than Bathurst LGA, where Bathurst is in the top 30% of least disadvantaged LGAs, Lithgow is in the bottom 30% of disadvantaged LGAs. • The regional area has varying levels of vulnerability, with the Lithgow LGA having a relatively high proportion of residents aged 65+ (elderly) compared to Bathurst LGA and the state. Lithgow also had higher levels of unemployment, and a higher proportion of residents with need for assistance when compared to Bathurst LGA and NSW. • Both Lithgow and Bathurst LGAs had a higher proportion of residents earning less than \$650 per week when compared to NSW (15.3%). Lithgow LGA had the highest proportion at 24.7%, compared to Bathurst LGA at 16.2%. • Arthritis, asthma and mental health were the three most prevalent long-term health conditions reported within the regional area, with a higher proportion of these conditions than reported in the broader state. Lithgow LGA had a higher proportion of arthritis (13.9%) than Bathurst LGA (10.4%), but Bathurst had a higher proportion of asthma (11.1%) compared to Lithgow LGA (9.8%). Both Bathurst and Lithgow LGAs had relatively high rates of mental health conditions. • Lithgow had a lower estimated number of homeless persons with 30 people recorded in 2021, or a rate of 14 persons (per 10,000 people), while Bathurst had an estimated homelessness rate of 36 persons (per 10,000 people) in 2021, or a total of 158.

6 Community and stakeholder engagement

Centennial engages regularly with key stakeholders from government, special interest groups, the Aboriginal community and the wider community. This chapter outlines the key stakeholder and community engagement carried out prior to and during the scoping phase of the project. It provides an overview of the strategic planning and engagement approach, stakeholder identification and engagement activities. A summary of community views expressed about the project is also provided. The responses received will be used to inform stakeholder engagement activities during EIS preparation.

Centennial engages project stakeholders in accordance with the following guidelines:

- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI 2024a)
- *Social Impact Assessment Guideline for State Significant Projects* (DPIE 2023a)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010a).

In accordance with *Undertaking Engagement Guidelines for State Significant Projects* (DPHI 2024a), Centennial are committed to:

- early and ongoing engagement, during project planning, development and impact assessment
- consideration of diverse viewpoints to better understand potential issues and impacts
- being open and transparent when providing information and engaging with stakeholders
- providing readily accessible project information via multiple communication channels and assistance with enquiries
- actively listening and demonstrating how feedback has been considered and addressed as part of developing the project and undertaking the impact assessment.

This chapter provides a summary of stakeholder and community engagement associated with the scoping phase of the project. It provides an overview of the engagement approach and a review of stakeholder identification and engagement activities undertaken to date.

The feedback generated through community and stakeholder engagement, as well as wider sentiment investigation, directly informed preparation of the initial social baseline analysis and the preliminary identification of social impacts and benefits.

The majority of engagement used to inform this SIA Scoping Report was undertaken directly by Centennial Angus Place and has been reviewed as a secondary source. EMM conducted interviews with past and present members of the Western Region Community Consultative Committee (CCC). The CCC was established as a platform for discussion and consultation between Centennial, the local community and key stakeholders and facilitates a single channel of communication regarding Centennial's Western Coalfield operations.

6.1 Community and stakeholder engagement strategy

Centennial recognises the importance of early and effective engagement and is committed to implementing a transparent and inclusive approach during planning, development and impact assessment.

A Community and Stakeholder Engagement Strategy (CSES) has been developed to drive comprehensive and meaningful engagement during the scoping and EIS phases of the project. The CSES is a live document, which will be updated as required in response to stakeholder and community feedback.

A key objective of the CSES is to facilitate open and inclusive engagement. The CSES includes a schedule for the provision of timely and relevant project information, across different communication channels, that is tailored to stakeholders' needs. Engagement will include informing, involving and collaborating, with the level of engagement tailored to the stakeholder.

The CSES will be updated to refine the communication and engagement activities during the EIS phase.

6.2 Scoping phase consultation

6.2.1 Community stakeholders

Centennial commenced project engagement with the local community, Western Region Community Consultative Committee and special interest groups in 2021 and this engagement is ongoing.

Centennial has established a dedicated project web page on the Centennial website to provide the local community with an overview of the project, and an email inbox and telephone line for proposed project enquiries has also been established.

Feedback received during scoping phase engagement will be considered as part of identifying project assessment requirements.

Community consultation carried out during the scoping phase is summarised in Table 6.1.

Table 6.1 Summary of community stakeholder engagement activities

Stakeholder	Engagement type	Timing	Key outcome
Community open sessions	Drop-in sessions	February 2026	Community stakeholders were provided an overview of the project, assessment approach and timeframes.
Centennial employees	Toolbox talks Newsletter	February 2026	Employees were provided an overview of the project, assessment approach and timeframes. Employees were interested in the continuation of employment across Centennial's Western Region operations.
Western Region CCC	Meetings	Quarterly (since 2021)	The Western Region CCC is the forum through which Centennial discusses key operational updates, environmental performance, regulatory approvals and community concerns. Since 2021, Western Region CCC meetings have included discussion of the project and regular updates on the project are provided.
Western Region Aboriginal Cultural Heritage Committee	Meetings	Bi-annually (since 2021)	Since 2021, the Western Region Aboriginal Cultural Heritage Committee meetings have included discussion of the project. Committee members are interested in potential impacts on cultural heritage sites and cultural values in general.
Landholders within the proposed mining area and general project area	Meetings Phone calls Emails Briefing letters	February 2021 March 2021 August 2021 March 2022 October 2022 December 2022 January 2023 February 2026 October 2025	Since 2021, Centennial has engaged with landholders in the proposed mining area and general project area in relation to the project. Concerns have been raised around potential impacts on water resources, biodiversity and amenity impacts. A briefing letter was sent to all landholders within the proposed mining area to provide up-to-date project information in February 2026.

Stakeholder	Engagement type	Timing	Key outcome
Special interest groups: - Blue Mountains Conservation Society - Lithgow Environment Group - Nature Conservation Council of NSW 4Nature - Wilderness Australia	Meetings	April 2025 August 2025 October 2025 February 2026	Centennial meet regularly with representatives from these special interest groups. As part of these meetings, representatives have been provided an overview of the project, assessment approach and timeframes. These special interest groups have expressed their strong opposition to the continuation of coal-fired power generation and subsequent demand for coal mining. They've raised concerns around the project's contributions to climate change, as well as impacts on biodiversity and water resources (with a focus on groundwater drawdown and impacts on swamp systems), visual amenity and rehabilitation impacts.
Wallerawang/Lidsdale Progress Association	Email	February 2026	Representatives were provided an overview of the project, assessment approach and timeframes.
Lithgow Business Chamber	Email	February 2026	Representatives were provided an overview of the project, assessment approach and timeframes.

To provide an opportunity for the local community to find out more about the project and engage with the project team, Centennial coordinated community drop-in sessions in Clarence, Wallerawang, Portland and Lithgow across 3 and 4 February 2026. The sessions were well-attended with approximately 60 attendees across four separate sessions. Participants were provided with information about the project, including an overview of key project components, the assessment approach, project schedule and how to provide feedback throughout the assessment process.

The majority of attendees supported the project, with a focus on local employment opportunities and economic benefits from the continuation of mining operations within the Lithgow LGA. The project will provide greater certainty for businesses dependent on coal mining as the energy transition continues. Concerns were raised around the project's contribution to climate change, water management (including discharges) and impacts on water resources. Feedback was also provided on how to advertise and coordinate additional community drop-in sessions in the future.

The majority of attendees were interested in receiving up-to-date project information as the development application process continues. A project-specific web site has been established and will remain active throughout the assessment process and provides an avenue through which the community can share their views, concerns and ideas with the project team.

Additionally, semi-structured interviews with four CCC members were conducted via telephone between 28 October and 11 November 2025. Matters raised by these community representatives included support for ongoing employment and economic opportunity, and discussion of noise, dust, biodiversity and subsidence considerations, as well as location of mining activities with relation any residences or water sources.

The lower impact mining method selected for the project has been chosen in response to community concerns around mining-related impacts on biodiversity and water resources.

Community engagement will continue during the EIS phase and beyond.

6.2.2 Government and regulatory stakeholders

Government and regulatory stakeholder consultation carried out during the scoping phase is summarised in Table 6.2.

Table 6.2 Summary of government and regulatory stakeholder engagement activities

Stakeholder	Engagement type	Timing	Key outcome
NSW Government			
DPHI	Meetings	October 2023 February 2024 June 2024 May 2025 September 2025 February 2026	Centennial meet regularly with DPHI to discuss their Western Region operations, including Angus Place. Since 2023, meetings have included updates on the project. DPHI have raised concerns around the proposed water management strategy, as well as potential subsidence, biodiversity and social impacts.
NPWS	Meetings	Monthly	Representatives from NPWS attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates. Centennial also liaise with NPWS regularly to coordinate land access within Gardens of Stone SCA. A NPWS representative attends the Western Region CCC that provide project updates. NPWS have raised concerns around interactions with Gardens of Stone SCA, subsidence impacts and impacts on biodiversity and water resources.
DCCEEW – Water Group	Meetings	July 2025	An overview of the project and proposed groundwater modelling approach has been provided.
DCCEEW – Energy Security Office	Meetings	Monthly	The Energy Security Office coordinate monthly inter-agency consultation with Centennial and EnergyAustralia for energy security issues with a focus on water management. These meetings include regular project updates.
EPA	Meetings	Monthly	Representatives from EPA attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates. EPA have raised concerns around the proposed water management strategy.
DEECCW - CPHR	Meetings	Monthly	Representatives from DEECCW-CPHR attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates.
WaterNSW	Meetings	Monthly	Representatives from WaterNSW attend monthly inter-agency consultation with Centennial and EnergyAustralia, which include regular project updates.
NSW Resources Regulator NSW Resources	Meeting	August 2025	Representatives from NSW Resources Regulator and NSW Resources were provided an overview of the project. Attendees were interested in potential opportunities to maximise resource extraction within the proposed mining area, as well as employment opportunities generated by the project. In response to feedback from NSW Resources Regulator and NSW Resources, resource estimates will be completed as part of the preparation of the EIS.
Commonwealth Government			
Commonwealth DCCEEW	Meetings Site tour	April 2022 October 2022 November 2022 March 2023	As part of the EPBC Act referral, Commonwealth DCCEEW were provided an overview of the project and potential impacts on MNES (including threatened species and ecological communities, water resources and GBMWA). Representatives from DCCEEW joined DPHI on a site tour in November 2022.

Stakeholder	Engagement type	Timing	Key outcome
Local Government			
Lithgow City Council (including Lithgow Emerging Economy Project)	Meetings	September 2025 October 2025	Lithgow City Council have been provided an overview of the project, assessment approach and timeframes. They are generally supportive of continued operations at Angus Place as a result of the continuation of mining employment and economic contributions to Lithgow LGA.

6.3 EIS phase consultation

During the preparation of the EIS, Centennial will consult with relevant Commonwealth, State and local government authorities, infrastructure and service providers, community groups, the local Aboriginal community, Native Title claimant groups, neighbours and affected landowners.

Aboriginal stakeholders will be identified and consulted in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DEECCW 2010) and the *First Nations Guidelines* (Office of Energy and Climate Change 2022).

Consultation during the development of the EIS will aim to:

- proactively inform, consult and involve stakeholders using clear and consistent key messages
- continue to collaborate with key stakeholders to identify potential issues, impacts, opportunities and benefits
- communicate the progress of the project and key findings or outcomes of assessments
- enable stakeholders to have input into the preparation of the EIS, project planning and refinement and opportunities for benefits sharing
- implement response and feedback strategies to address stakeholder concerns and use these to inform the evolution of the project.

A range of tools and methods will be used to communicate and engage with the community and other stakeholders during preparation of the EIS, with examples provided in Table 6.3. Issues raised during engagement will be documented by the project team to inform the project design, environmental assessment, and the preparation of the EIS.

Table 6.3 Engagement tools and methods during preparation of the EIS

Engagement methods	Detail
Advertising	Advertising in local media to advise of upcoming consultation opportunities and provide project updates.
Briefings	Formal letters or meetings with key stakeholders including landowners, MPs, Councillors and council staff to provide updates on the project.
Door-knocking	Project representatives go door to door to speak with impacted landowners and neighbours and/or provide them with project briefings and information.
Drop-in sessions	Multi-hour time periods when stakeholders can drop in to speak to the project team, view documents and plans and ask questions.
Feedback form	A dedicated online feedback form for community and stakeholder correspondence via the project website.

Engagement methods	Detail
Letterbox drops or unaddressed mail	General information about the project delivered by the project team or Australia Post.
Letters	Addressed mail containing information, clarification, responses or requests to a particular household, business or individual.
Media releases/statements	Proactive or responsive media statements or announcements provided to the media and other key stakeholders to provide updates, address concerns and clarify information.
Meetings	One-on-one or small group meetings to discuss project issues and concerns in more detail.
Newsletters	Regular project information distributed by email or in hard copy to registered stakeholders.
Presentations	Presentations about the project delivered to a group of interested persons, club or committee on request or by invitation.
Surveys	Online or offline surveys to obtain input and feedback on project decision-making.
Social media	Online social connection platforms used to share project information and interact with stakeholders.
Website	Updates to the existing website including descriptions of the project, company information, frequently asked questions, plans, maps, media releases and contact information.

6.4 Considerations for SIA engagement

As part of the EIS, an SIA will be prepared in accordance with the following guidelines:

- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI 2021)
- SIA Guideline (DPHI 2025a) and SIA Technical Supplement DPHI 2025b)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010).

The SIA will build upon the SIA Scoping Report and engagement undertaken with stakeholders to affirm that stakeholder views have been fairly represented throughout the SIA process. The SIA will include direct engagement with the community and project stakeholders. Engagement specifically to inform the SIA will target a range of potentially affected stakeholders informed by those groups identified during this scoping process.

Engagement opportunities will be provided with flexible time, style and place offerings so that community stakeholders are provided access to project information and opportunities to participate. The detailed engagement methodology for the SIA will be informed by further assessment of primary and secondary data to predict and analyse the potential direct and indirect impacts (positive and negative) of the project.

Engagement options include:

- interviews in person, online or over the phone with:
 - impacted residents, service providers and businesses in the local area
 - key stakeholders (such as Lithgow City Council and Lithgow District Chamber of Commerce)
 - NGOs, environmental and recreational interest groups
 - Aboriginal stakeholders, in a manner aligned with the project's Aboriginal Cultural Heritage Assessment (ACHA) and the project's engagement plan

- online surveys to gather data on broad community values and sentiment towards the project
- online and in-person engagement events offered by the project, or community information presentations at stakeholder forums during the preparation of the EIS.

7 Preliminary social impact identification and evaluation

7.1 Preliminary social impact identification

The identification of potential social impacts and benefits was an iterative process informed by:

- analysis of existing baseline socio-economic conditions across the SIA study area
- the review of project activities and the social effects they could generate
- analysis of feedback from stakeholders.

7.2 Preliminary social impact evaluation

The preliminary social impact evaluation determines the level of assessment required by the SIA. The initial identification and evaluation of social impacts was facilitated through completion of the SIA scoping worksheet (DPHI 2025c).

The key outcomes of the SIA scoping exercise are provided in Table 7.1. Impacts are presented by phase, based on when the impact is expected to commence, though they may continue through multiple stages of the project.

As the project is a recommencement of ongoing underground mining using existing infrastructure it does not require a construction phase. Key project phases are approval, operations and decommissioning, which includes rehabilitation and mine closure.

The preliminary social impact evaluation process identified 20 potential social impacts (both positive and negative), of which:

- 14 require a minor level of assessment
- six require a standard level of assessment
- zero require a detailed level of assessment.

Table 7.1 Preliminary social impact evaluation

#	Social impact	Impact category	Project phase ¹	Affected stakeholder groups	Existing and potential mitigation measures	Phase 2 SIA assessment level ²
1	Reduced community cohesion due to divergent opinion on coal projects with regard to climate change impacts	- Community - Decision making systems	A, O	- Existing employees - Local communities - Regional communities - Environmental interest groups	- Development of an adaptive project community engagement plan. - Development and implementation of a community investment plan. - Development and effective implementation of initiatives that contribute to maintaining social cohesion in the local area. - Support for community events which enable interaction between community members. - Provide contact email via Centennial website for communication of any community or stakeholder grievances.	Standard
2	Reduced community cohesion due to perceived inequitable distribution project benefits	- Community - Decision making systems	A, O	- Existing employees - Local communities - Regional communities - Environmental interest groups	- Development of an adaptive project community engagement plan. - Development and implementation of a community investment plan. - Development and effective implementation of initiatives that contribute to maintaining social cohesion in the local area. - Support for community events which enable interaction between community members. - Provide contact email via Centennial website for communication of any community or stakeholder grievances.	Standard
3	Perceived or actual changes to the value of land and properties within the project area and surrounds	- Way of Life - Livelihoods	A, O, D	- Landowners - Local communities	- Neighbour agreements to be considered as a mitigation to anticipated impacts (subject to assessment outcomes). - Commitment to undertake an SIA for mine closure several years ahead of ceasing operations. Engage with host and nearby land/property owners as part of this closure planning SIA.	Minor

¹ A = Approval, O = Operations, D = Decommissioning (including rehabilitation and mine closure)

² Green = expected positive social impact, red = expected negative social impact

#	Social impact	Impact category	Project phase ¹	Affected stakeholder groups	Existing and potential mitigation measures	Phase 2 SIA assessment level ²
4	Diminished enjoyment of landscapes due to operations (including visual amenity).	- Way of life - Surroundings	O	- Local communities - Landowners - Road users/visitors	- Ongoing refinements to project design and layout based on the findings of technical studies and feedback generated through stakeholder engagement. - Education and engagement with broader community and visitors about the need for continued coal production, and its benefits to the whole community. - Provide contact email via Centennial website for communication of any community or stakeholder grievances. - Targeted engagement to identify, notify and understand the values of recreational users, service providers and related businesses.	Standard - unknown
5	Diminished enjoyment of landscapes due to potential risks to biodiversity (via water and subsidence impacts)	- Way of life - Surroundings	O	- Landowners - Local communities - Recreational users - Local businesses - Environmental interest groups	- Ongoing refinements to project design based on the findings of technical studies and feedback generated through stakeholder engagement. - Provide contact email via Centennial website for communication of any community or stakeholder grievances. - Targeted engagement to identify, notify and understand the values of environmental interest groups, recreational users, service providers and related businesses.	Minor
6	Diminished enjoyment of landscapes due to subsidence impacts on natural features	- Way of life - Surroundings	O	- Landowners - Local communities - Recreational users - Local businesses - Environmental interest groups	- Ongoing refinements to project design based on the findings of technical studies and feedback generated through stakeholder engagement. - Provide contact email via Centennial website for communication of any community or stakeholder grievances. - Targeted engagement to identify, notify and understand the values of environmental interest groups, recreational users, service providers and related businesses.	Minor
7	Direct and indirect employment opportunities for local and regional workers, including First Nations peoples and young people	- Way of life - Health and wellbeing - Livelihoods	O	- Local communities - Regional communities - Local economic and industry groups - Traditional Owners	- Advertise employment and training opportunities for the local and regional community including young people and Aboriginal people. - Promote Aboriginal participation via the Western Region Aboriginal Cultural Heritage Committee. - Commitment to worker participation through areas such as traineeships and apprenticeships.	Minor

#	Social impact	Impact category	Project phase ¹	Affected stakeholder groups	Existing and potential mitigation measures	Phase 2 SIA assessment level ²
8	Supply and procurement opportunities for local and regional businesses	- Way of life - Health and wellbeing - Livelihoods	O	- Local communities - Regional communities - Local economic and industry groups - Traditional Owners	Continue to support locally focused procurement.	Minor
9	Mental health (maintained identity) benefit of employment or opportunity in traditional local employment	- Livelihoods - Cultural	O	- Local communities - Regional communities	- Develop a workforce transition plan. - Transition planning for those who will no longer be required to consider retraining schemes developed in consultation with those affected.	Standard
10	Disturbance or displacement of Aboriginal and non-Aboriginal heritage sites and/or items, and changes to cultural landscapes	- Surroundings - Culture	O	Traditional Owners and local Aboriginal communities	- Avoid or minimise impacts to sites through project design. - Effective implementation of management measures recommended by the ACHA.	Minor
11	Diminishment of First Nations cultural values due to disturbance or displacement of Aboriginal heritage sites and/or artefacts and changes to visual landscape	Culture	O	Traditional Owners and local Aboriginal communities	- Avoid or minimise impacts to Aboriginal cultural heritage through project design. - Effective implementation of management measures recommended by the ACHA.	Minor
12	Community safety risks (perceived and actual) associated with operational activity e.g. employee safety, road safety	Health and wellbeing	O	- Local communities - Emergency services - Environmental interest groups	- Ongoing engagement with local community and key stakeholders. - Avoid or minimise impacts to community and worker safety through project design. - Ongoing implementation and management of site mine safety systems.	Minor
13	Livelihood/health Impacts (perceived and actual) associated with impacts to water safety or security	- Surroundings - Health and wellbeing	O	- Local communities - Regional communities - Environmental interest groups	- Ongoing community engagement and education to address concerns relating to drinking water safety and security. - Updates to the existing Water Management Plan, including water quality monitoring.	Minor

#	Social impact	Impact category	Project phase ¹	Affected stakeholder groups	Existing and potential mitigation measures	Phase 2 SIA assessment level ²
14	Enhanced community wellbeing and cohesion due to project-provided community investment supporting community initiatives and improvements to social services	- Community - Health and wellbeing - Decision making systems	O	- Local communities - Regional communities - Local government - Social infrastructure providers and community services	Development and implementation of a community investment plan.	Standard
15	Deterioration of local amenity due to the generation of light from pit top operations (inc. haulage)	- Surroundings - Health and wellbeing	O	- Landowners - Local communities	- Ongoing engagement with local community and key stakeholders. - Ongoing monitoring of impacts as required. - Provide contact email via Centennial website for communication of any community or stakeholder grievances	Minor
16	Deterioration of local amenity due to the generation of noise from pit-top operations and the decommissioning of infrastructure	- Surroundings - Health and wellbeing	O	- Landowners - Local communities	- Ongoing engagement with local community and key stakeholders. - Ongoing monitoring of impacts as required. - Provide contact email via Centennial website for communication of any community or stakeholder grievances	Minor
17	Deterioration of local amenity due to the generation of dust from pit top operations and the decommissioning of infrastructure	- Surroundings - Health and wellbeing	O	- Landowners - Local communities	- Ongoing engagement with local community and key stakeholders. - Ongoing monitoring of impacts as required. - Provide contact email via Centennial website for communication of any community or stakeholder grievances	Minor
18	Temporary disruption to access and connectivity on local and regional road network from heavy vehicle traffic	Accessibility	O, D	- Local communities - Regional communities	- Route selection/heavy vehicle timing to avoid vulnerable stakeholders, such as schools, where feasible. - Ongoing engagement with local community and key stakeholders. - Notice advising of any project-related road closures or traffic disruptions, using locally preferred communication channels.	Minor
19	Community concerns and opportunities regarding planning for decommissioning	- Decision making - Community	D	- Local community - Regional community - Local government	- Commitment to responsibly decommission project infrastructure at the end of project life. - Ongoing engagement with government and regulatory bodies. - Commitment to undertake a mine closure SIA three years in advance of closure. - Consultation with community/stakeholders on closure planning.	Minor

#	Social impact	Impact category	Project phase ¹	Affected stakeholder groups	Existing and potential mitigation measures	Phase 2 SIA assessment level ²
20	Loss of employment, business and community investment from company upon cessation of operations	• Accessibility • Health and Wellbeing • Surroundings	D	• Local community • Regional communities • Local government	• Commitment to undertake a mine closure SIA three years in advance of closure.	Minor

7.3 Cumulative impacts

The SIA would carry out a cumulative assessment in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE 2021).

As outlined in Section 1.6, there are several operating, approved and proposed developments in the vicinity of the project. Potential cumulative social impacts may include competition for labour and skills and compounded loss of landscape and environmental amenity due to parallel operations.

Some of the other operations and proposed developments in the area are owned by Centennial and its entities. Impacts across these developments will be managed cohesively.

Nearby projects which may contribute to cumulative social impacts are set out in Table 1.3.

7.4 Project refinement and preliminary mitigation and enhancement measures

As per the SIA Guideline (DPHI 2025a), SIA is an iterative and adaptive process throughout a project's lifecycle. An important consideration at the scoping phase of project development is how initial assessment and feedback from stakeholders influences refinement of the project. Centennial Angus Place is committed to engaging with affected community stakeholders to understand their concerns and avoid and minimise impacts through refining project design. The lower impact mining method selected for the project has been chosen with consideration of community concerns around mining-related impacts on biodiversity and water resources.

In addition to ongoing project refinement processes, Centennial and its entities are already committed to a wide range of measures to ensure social impacts are avoided or mitigated to the extent possible. Existing and proposed measures to mitigate potential impacts and enhance potential benefits are set out in Table 7.2. The list of measures will be further refined through the SIA process and preparation of the EIS.

Table 7.2 Existing and potential mitigation and enhancement measures

Existing mitigation and enhancement measures	Potential additional mitigation and enhancement measures
• Ongoing refinements to project design and layout based on the findings of technical studies and feedback generated through stakeholder engagement. • Commitment to responsibly decommission project infrastructure at the end of project life, including an SIA for mine closure three years ahead of ceasing operations. • Development and implementation of a robust and adaptive project community engagement plan. • Provide contact for any community grievance. • Commitment to community support via community investment programmes. • Effective implementation of management measures recommended by the ACHA. • Commitment to worker participation through areas such as traineeships and apprenticeships. • Employment and training opportunities for the local and regional community including young people and Aboriginal people. • Robust employee safety planning and implementation. • Ongoing support for locally focused procurement. • Ongoing Aboriginal participation via the via the Western Region Aboriginal Cultural Heritage Committee. • Ongoing review of monitoring and management strategies for environmental impacts.	• Development and implementation of a community investment plan. • Support for community events which enable interaction between community members. • Develop and implement a workforce transition plan. • Staff the project with workers currently employed within Centennial's Western Coalfields workforce where possible. • Develop and implement ongoing review of monitoring and management strategies for social impacts. • Neighbour agreements to be considered as a mitigation to anticipated impacts (subject to assessment outcomes).

8 Conclusion

8.1 Findings

This SIA Scoping Report has documented the SIA scoping process for the project, for inclusion in the Scoping Report that will inform the request for SEARs. This report has provided an initial social baseline analysis including community profiles for the SIA study area, a summary of engagement, and preliminary social impact identification, evaluation and mitigation.

The SIA scoping process identified 20 potential social impacts (both positive and negative). As summarised in Table 8.1, five require a standard level of assessment and 15 require a minor level of assessment. No impacts were identified requiring a detailed level of assessment based on current understanding of project design and mitigations, and preliminary analysis of impacts.

Table 8.1 Social impacts for assessment in SIA

For standard assessment	For minor assessment
• Reduced community cohesion due to divergent opinion on coal projects with regard to climate change impacts. • Reduced community cohesion due to perceived inequitable distribution project benefits (e.g. those who get jobs vs those who don't / beneficiaries vs non beneficiaries of community investment activities). • Diminished enjoyment of landscapes due to operations (including visual amenity). • Mental health (maintained identity) benefit of employment or opportunity in traditional local industry. • Enhanced community wellbeing and cohesion due to project-provided community investment supporting community initiatives and improvements to social services.	• Perceived or actual changes to the value of land and properties within the project area and surrounds. • Diminished enjoyment of landscapes due to potential risks to biodiversity (via water and subsidence impacts). • Diminished enjoyment of landscapes due to subsidence impacts on natural features. • Direct and indirect employment opportunities for local and regional workers, including First Nations peoples and young people. • Supply and procurement opportunities for local and regional businesses. • Disturbance or displacement of Aboriginal and non-Aboriginal heritage sites and/or items, and changes to cultural landscapes. • Diminishment of First Nations cultural values due to disturbance or displacement of Aboriginal heritage sites and/or artefacts and changes to visual landscape. • Community safety risks (perceived and actual) associated with operational activity (e.g. employee safety and road safety). • Livelihood/health Impacts (real or perceived) associated with impacts to water safety or security. • Deterioration of local amenity due to the generation of light from pit top operations. • Deterioration of local amenity due to the generation of noise from pit top operations and the decommissioning of infrastructure. • Deterioration of local amenity due to the generation of dust from pit top operations and the decommissioning of infrastructure. • Temporary disruption to access and connectivity on local and regional road network from ongoing heavy vehicle traffic. • Community concerns and opportunities regarding planning for decommissioning. • Loss of employment, business and community investment upon cessation of operations.

8.2 Next steps

A full SIA (i.e. documenting Phase 1, 2 and 3) will be prepared in accordance with the requirements outlined in the SIA Guideline (DPHI 2025a) and SIA Technical Supplement (DPHI 2025b) and will involve the following key activities:

- Identification of, and consultation with, affected communities and stakeholders including any vulnerable groups identified.
- A robust evidence-based assessment of social impacts and benefits against existing baseline conditions, including consideration of the social consequences resulting from the findings of other technical investigations (such as noise, biodiversity, water and Aboriginal heritage).
- Development of project enhancement and mitigation measures.
- Consideration/assessment of cumulative impacts in the context of projects within the region.

The SIA will be informed by SIA specific engagement activities, together with input drawn from the outcomes of the project's broader community and stakeholder engagement program. All engagement activities informing project planning will be approached in an integrated way to ensure consistency of information provision, and to manage consultation fatigue.

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Acronyms and abbreviations

Acronym/abbreviation	Meaning
ABS	Australian Bureau of Statistics
ACHA	Aboriginal Cultural Heritage Assessment
ASGS	Australian Statistical Geography Standard
CCC	Community Consultative Committee
Centennial	Centennial Coal – parent company of Centennial Angus Place, owner of several mines in the Western Coalfield area
CSES	Community and Stakeholder Engagement Strategy
DCCEEW	Department of Climate Change, Energy, the Environment and Water (DCCEEW)
DPHI	Department of Planning, Housing and Infrastructure
EIS	Environmental Impact Statement
EMM	EMM Consulting Pty Ltd (The Author)
FTE	Full time equivalent
GBMWHa	United Nations Educational, Scientific and Cultural Organization (UNESCO) Greater Blue Mountains World Heritage Area
IRSD	Index of Relative Socio-Economic Disadvantage
km	kilometre
LGA	Local Government Area
mm	millimetre
MPPS	Mt Piper Power Station
Mtpa	Million tonnes per annum
NSW	New South Wales
NSWMC	New South Wales Mineral Council
NPWS	National Parks and Wildlife Services
ROM	Run of Mine- ROM coal is raw coal directly from the mine before any processing like crushing, screening, or washing.
SAL	Suburbs and Localities, categorisation within the Australian Statistical Geography Standard
SCA	State Conservation Area
SCSS	Springvale Coal Services Site
SEARs	Secretary's Environmental Assessment Requirements
SEIFA	Socio-Economic Indexes for Areas
SIA	Social Impact Assessment
SIA Guideline	Social Impact Assessment Guideline for State Significant Projects (updated July 2025)
SIA Technical Supplement	Technical Supplement: Social Impact Assessment Guideline for State Significant Projects

Acronym/abbreviation	Meaning
SSD	State Significant Development
UCL	Urban Centres and Localities, categorisation within the Australian Statistical Geography Standard

Study qualifications

This report has been prepared by a suitably qualified and experienced lead author and co-author and reviewed and approved by a suitably qualified and experienced reviewer. All contributors hold appropriate qualifications and have the relevant experience to carry out the SIA for this project, as required by the SIA Guideline. An overview of the relevant skills and experience for each author is provided below:

Chris Allder (Author)

Chris Allder is a specialist social performance practitioner with over 17 years' experience delivering social risk management and assessment services across major infrastructure projects in Australia and internationally.

Chris's areas of practice include SIA, social impact management planning, stakeholder engagement, and community investment. He has led and contributed to the preparation of a wide range of social assessments to support planning approvals and/or project delivery and is a trusted auditor of social performance. Chris is experienced in designing and implementing qualitative and mixed-methods research programs, including stakeholder interviews, focus groups, and community surveys, to assess impacts and inform evidence-based social performance strategies.

Sam McCrea (Reviewer)

Sam McCrea is an Associate Director within EMM's Social Assessment & Performance team, and has over 20 years' social performance experience working collaboratively with clients and communities in Australia, New Zealand, Europe, Africa, and Asia Pacific. She has acted as a trusted advisor and reviewer to multiple organisations within the transport, infrastructure, natural resources and energy sector acting directly for developers as well as on behalf of lenders. She has led the development of numerous State, National and International social impact assessments (SIAs) and social impact management plans (SIMPs) and has acted as an independent advisor overseeing SIMP implementation during construction and operation of projects.

Annexure A

Detailed baseline data

A.1 Baseline indicators

Table A.1 Population, dwelling and labour force indicators – local area

Indicator	Year and data source	Local area (Lidsdale, Wallerawang, Marrangaroo, Blackmans Flat, Newnes Plateau and Wolgan Valley SALs)	Bathurst LGA	Lithgow LGA	NSW
Population and socio-cultural indicators					
Population (#)	2021, ABS	3,666	43,567	20,842	8,072,163
Identify as Aboriginal and/or Torres Strait Islander (#)	2021, ABS	363	3,153	1,621	278,043
Identify as Aboriginal and/or Torres Strait Islander (%)	2021, ABS	10.8%	7.2%	7.8%	3.4%
Males (%)	2021, ABS	54.7%	50.2%	50.5%	49.4%
Females (%)	2021, ABS	45.2%	49.8%	49.5%	50.6%
Median age (#)	2021, ABS	38	38	46	39
Aged 14 years or younger (children) (%)	2021, ABS	18.3%	18.8%	16.4%	18.2%
Aged 15 to 24 years (youth) (%)	2021, ABS	12.6%	13.3%	10.1%	11.8%
Aged 25 to 64 years (adults) (%)	2021, ABS	52.5%	42.7%	43.3%	45.1%
Aged 65 years or older (elderly) (%)	2021, ABS	17.1%	18.5%	24.5%	17.6%
Number of families (#)	2021, ABS	831	11,242	5,397	2,135,964
Has a need for assistance (%)	2021, ABS	5.6%	6.4%	7.6%	5.8%
Has a health condition (%)	2021, ABS	29.3%	32.9%	35.5%	27.0%
Engaged in voluntary work (%)	2021, ABS	12.7%	14.9%	14.5%	13.0%
Median weekly household income (\$)	2021, ABS	\$13,039	\$1,585	\$1,196	\$1,829

Indicator	Year and data source	Local area (Lidsdale, Wallerawang, Marrangaroo, Blackmans Flat, Newnes Plateau and Wolgan Valley SALs)	Bathurst LGA	Lithgow LGA	NSW
Completed Year 12 or equivalent (%)	2021, ABS	33.4%	52.9%	38.8%	63.3%
Households earning less than \$650 per week (%)	2021, ABS	17.1%	16.2%	24.7%	12.9%
Lone person households (%)	2021, ABS	23.0%	27.6%	34.0%	25.0%
Speaks other language at home (%)	2021, ABS	2.9%	5.0%	4.1%	22.4%
Housing indicators					
Number of private dwellings (#)	2021, ABS	1,183	17,518	9,585	3,199,988
Unoccupied dwellings (%)	2021, ABS	8.5%	9.0%	13.2%	9.4%
Separate house (%)	2021, ABS	95.8%	84.8%	89.6%	65.6%
Owned outright or with a mortgage (%)	2021, ABS	78.5%	66.8%	71.4	58.0%
Rented (%)	2021, ABS	20.5%	30.3%	24.1%	32.6%
Median rent (\$)	2021, ABS	\$1,301	\$320	\$270	\$420
Social housing (%)	2021, ABS	26.0%	12.8%	21.8%	12.8%
Labour force indicators					
Participates in labour force (#)	2021, ABS	1,487	21,317	8,790	3,874,012
Labour force participation rate (%)	2021, ABS	54.2%	60.2%	50.4%	58.7%
Unemployed persons (#)	2021, ABS	62	863	483	189,852
Unemployment rate (%)	2021, ABS	4.2%	4.0%	5.5%	4.9%
Youth unemployment rate (%)	2021, ABS	6.9%	8.5%	10.1%	9.8%

Table A.2 **Population, dwelling and labour force indicators – key urban areas**

Indicator	Year and data source	Portland UCL	Wallerawang UCL	Lithgow UCL	Marrangaroo UCL	Cullen Bullen UCL
Population (#)	2021, ABS	1,841	2,079	11,197	297	117
	2016, ABS	4,541	2,059	11,530	271	311
Population change over 5 years to 2021 (%)	2016 and 2021, ABS	-59.5%	1.0%	-2.9%	9.6%	-62.4%
Identify as Aboriginal and/or Torres Strait Islander (#)	2021, ABS	170	197	884	25	12
Identify as Aboriginal and/or Torres Strait Islander (%)	2021, ABS	9.2%	9.5%	7.9%	8.4%	10.3%
Males (%)	2021, ABS	51.1%	50.6%	49.0%	50.2%	47.0%
Females (%)	2021, ABS	49.1%	49.4%	51.0%	48.1%	52.1%
Median age (#)	2021, ABS	48	38	47	47	54
	2016, ABS	36	39	44	59	44
Aged 14 years or younger (children) (%)	2021, ABS	16.3%	22.0%	16.4%	13.8%	10.3%
Aged 15 to 24 years (youth) (%)	2021, ABS	9.8%	10.8%	10.0%	15.8%	12.8%
Aged 25 to 64 years (adults) (%)	2021, ABS	46.9%	42.9%	41.7%	52.2%	50.4%
Aged 65 years or older (elderly) (%)	2021, ABS	27.0%	18.2%	26.4%	16.5%	25.6%
Number of families (#)	2021, ABS	482	561	2,836	88	36
Has a need for assistance (%)	2021, ABS	9.0%	7.3%	9.1%	6.4%	4.3%
Has a long-term health condition (%)	2021, ABS	38.3%	34.6%	38.8%	29.0%	42.7%

Indicator	Year and data source	Portland UCL	Wallerawang UCL	Lithgow UCL	Marrangaroo UCL	Cullen Bullen UCL
Engaged in voluntary work (%)	2021, ABS	12.6%	12.3%	13.4%	19.4%	25.5%
Median weekly household income (\$)	2021, ABS	\$992	\$1,441	\$1,043	\$2,349	\$971
Completed Year 12 or equivalent (%)	2021, ABS	30.2%	32.7%	37.6%	45.1%	23.7%
Households earning less than \$650 per week (%)	2021, ABS	26.3%	19.7%	27.9%	9.2%	14.0%
Lone person households (%)	2021, ABS	35.5%	26.6%	39.5%	17.3%	37.2%
Speaks other language at home (%)	2021, ABS	3.2%	2.8%	4.9%	1.0%	2.6%
Number of private dwellings (#)	2021, ABS	864	856	5,450	104	43
Unoccupied dwellings (%)	2021, ABS	12.6%	9.5%	11.0%	8.7%	9.3%
Separate house (%)	2021, ABS	97.7%	94.0%	84.5%	100.0%	100.0%
Owned outright or with a mortgage (%)	2021, ABS	78.9%	72.1%	63.4%	92.8%	69.8%
Rented (%)	2021, ABS	17.1%	25.0%	31.3%	0.0%	7.0%
Median rent (\$)	2021, ABS	\$250	\$275	\$270	\$460	\$171
Social housing (%)	2021, ABS	10.9%	29.4%	23.9%	0.0%	0.0%
Participates in labour force (#)	2021, ABS	693	943	4,495	157	45
Labour force participation rate (%)	2021, ABS	45.1%	58.1%	48.0%	62.1%	44.1%
Unemployed persons (#)	2021, ABS	60	52	306	5	3
Unemployment rate (%)	2021, ABS	8.7%	5.5%	6.8%	3.2%	6.7%
Youth unemployment rate (%)	2021, ABS	19.2%	11.6%	11.7%	4.1%	0.0%

A.2 Baseline indicators for key social trends

Table A.3 Population projections, 2021 to 2041

Locality	2021	2041	Change (#)	Change (%)
Regional area				
Lithgow LGA	20,855	21,603	+748	+0.2%
Bathurst LGA	43,674	57,072	+8,398	+0.9%
State				
NSW	8,097,062	10,070,467	+1,973,405	+1.1%

Source: DPHI (2024).

Table A.4 Housing affordability, 2016 and 2021

LGA	Median weekly rent			Renter households with rent payments greater than 30% of household income (%)		Owner with mortgage households with mortgage repayments greater than 30% of household income (%)	
	2016	2021	Change, 2016 to 2021	2016	2021	2016	2021
Regional area							
Lithgow LGA	\$230	\$270	\$40	-	35.4%	-	12.4%
Bathurst LGA	\$280	\$320	\$40	-	30%	-	10.7%
State							
NSW	\$380	\$420	\$40	12.9%	35.5%	7.4%	17.3%

Source: ABS (2016); ABS (2021b).

Table A.5 **Top three industries of employment, 2021**

Area	First	%	Second	%	Third	%
Local area						
Local area	Mining	15.5%	Healthcare and social assistance	12.4%	Public administration and safety	9.4%
Key urban areas						
Portland UCL	Health care and social assistance	12.2%	Public administration and safety	10.3%	Retail trade	9.6%
Wallerawang UCL	Health care and social assistance	13.4%	Public administration and safety	10.6%	Retail trade	9.8%
Lithgow UCL	Health care and social assistance	13.8%	Public administration and safety	10.7%	Retail trade	10.4%
Regional area						
Bathurst LGA	Health care and social assistance	16.5%	Education and training	11.3%	Retail trade	9.5%
Lithgow LGA	Health care and social assistance	12.7%	Public administration and safety	10.2%	Retail trade	9%

Notes: 1. The multiple industries include professional, scientific and technical services, public administration and safety, and health care and social assistance

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Appendix C

Cumulative impact scoping

C.1 Cumulative impact assessment scoping summary table

Project	Approximate distance to pit top	Project status	Indicative timing/overlap	Potential cumulative impacts
Western Coal Services Project	4 km	Operating	Operational until 2039.	Water resources – detailed assessment. Social – detailed assessment. Air quality – standard assessment. Greenhouse gas – standard assessment. Traffic – standard assessment. Noise and vibration – standard assessment. Economic – standard assessment.
Pine Dale Coal Mine	4 km	Care and maintenance	N/A	Given the status of Pine Dale Coal Mine, cumulative impacts are unlikely to occur.
Springvale Mine	5 km	Operating	Operational until 2028. Springvale West to extend operations to 31 December 2042.	Water resources – detailed assessment. Social – detailed assessment. Biodiversity – detailed assessment. Air quality – standard assessment. Greenhouse gas – standard assessment. Heritage – standard assessment. Traffic – standard assessment. Noise and vibration – standard assessment. Economic – standard assessment.
Pinecrest BESS	5 km	Preparing EIS	Construction 2026 to 2028. Operational until 2053.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Traffic – standard assessment. Economic – standard assessment.

Project	Approximate distance to pit top	Project status	Indicative timing/overlap	Potential cumulative impacts
Mt Piper Power Station	6 km	Operating	Operational until 2040.	Water resources – detailed assessment. Social – detailed assessment. Air quality – detailed assessment. Greenhouse gas – detailed assessment. Traffic – standard assessment. Noise – standard assessment. Economic – standard assessment.
Springvale Water Treatment Project	6 km	Operating	No limit on operational timeframe.	Water resources – detailed assessment. Social – detailed assessment. Traffic – standard assessment. Economic – standard assessment.
Lidsdale Siding	6 km	Operating	Operational until 2042.	Social – detailed assessment. Air quality – standard assessment. Noise – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Wallerawang Power Station	6 km	Closure and rehabilitation	N/A	Given the status of Wallerawang Power Station, cumulative impacts are unlikely to occur.
Wallerawang BESS	6 km	Approved	Construction 2025 to 2027. Operational until 2057.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Noise – standard assessment. Traffic – standard assessment. Economic – standard assessment.

Project	Approximate distance to pit top	Project status	Indicative timing/overlap	Potential cumulative impacts
Great Western BESS	6 km	Approved	Construction timing unknown.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Noise – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Invincible Colliery	6 km	Operating	Operational until 2026.	Water resources – detailed assessment. Social – detailed assessment. Greenhouse gas – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Clarence Colliery	6 km	Operating	Operational until 2026. Clarence Consolidation Project to extend operations to 31 December 2040.	Water resources – detailed assessment. Social – detailed assessment. Biodiversity – detailed assessment. Heritage – standard assessment. Greenhouse gas – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Mt Piper BESS	7 km	Approved	Construction 2026 to 2028. Operational until 2063.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Noise – standard assessment. Traffic – standard assessment. Economic – standard assessment.

Project	Approximate distance to pit top	Project status	Indicative timing/overlap	Potential cumulative impacts
Cullen Valley Mine	9 km	Operating	Operational until 2030.	Water resources – standard assessment. Social – detailed assessment. Air quality – standard assessment. Greenhouse gas – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Ben Bullen Wind Farm	10 km	Preparing EIS	Construction 2028 to 2030. Operational until 2041.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Sunny Corner Wind Farm	13 km	Preparing EIS	Construction 2032 to 2038. Operational until 2068.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Mount Lambie Wind Farm	16 km	Preparing EIS	Construction 2027 to 2029. Operational until 2063.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Traffic – standard assessment. Economic – standard assessment.
Lake Lyell Pumped Hydro Energy Storage Project	17 km	Preparing EIS	Construction 2027 to 2031. Operational from 2031.	Water resources – standard assessment. Social – detailed assessment. Biodiversity – standard assessment. Traffic – standard assessment. Economic – standard assessment.

Project	Approximate distance to pit top	Project status	Indicative timing/overlap	Potential cumulative impacts
Airly Coal Mine	27 km	Operating	Operational until 2037.	Social – detailed assessment. Air quality – standard assessment. Greenhouse gas – standard assessment. Traffic – standard assessment. Economic – standard assessment.

