

Environment
Effects
Statement

VHM Limited
Goschen Rare Earths and Mineral
Sands Project

Chapter 18 Socio- economics

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18. Socio-economics

This chapter provides an assessment of potential socio-economic impacts associated with the construction, operation, decommissioning and closure of the proposed Goschen Rare Earths and Mineral Sands Project (the Project).

More detailed information is provided in EES Technical Report O: Social impacts and EES Attachment IV: Economic Assessment.

Overview

Social impact assessment (SIA) is a social research process to identify the potential social effects of planned interventions and to assess the likely impact of those effects for individuals and social groups. The SIA presented in Technical Report O: Social Impact Assessment was compiled in accordance with well-established procedural steps of SIA and makes use of data collected using a variety of research methods to establish existing conditions and assess potential effects and impacts of the Project.

The SIA concludes that the Project would generate notable benefits for the Loddon Mallee region, in the form of employment creation and wealth generation and the extraction and utilisation of a productive resource which is in demand. Furthermore, the employment created by the Project would assist in attracting and retaining young adults to the region and in doing so, contribute to the viability of community services such as schools and childcare, and inject energy and enthusiasm into activities such as community sports, the arts and alike.

In addition, the Project would attract a considerable number of new people to the region and this influx has the potential to place strain on existing housing markets, community facilities and services, and social dynamics, particularly in smaller townships. However, implementation of a Workforce Accommodation Strategy for the Project would ensure that the influx of workers into established communities does not exceed each township's capacity to absorb new residents without undue consequences. Notwithstanding, there may be a short-term reduction in the affordability and accessibility of rental accommodation in the region, following the initial influx of permanent Project staff.

The Project would also displace rural land uses and alter the character and amenity of the rural area in proximity to the Mining Areas (within approximately 3.5 kilometres). While all nearby residences would remain habitable, changes to amenity would occur in the context of a quiet and peaceful rural setting. Notwithstanding, the proponent has negotiated land acquisition contracts for the directly affected farm properties and proposes to support, provide assistance or remuneration for nearby residents via Neighbour Agreements. This approach would mitigate perceived inequities between those who benefit financially from the Project and those who must live with its effects.

Across Victoria, the Project is expected to result in a net uplift of approximately \$1.3 billion (in present-value terms, discounted at 7%), in additional Gross State Product (GSP), compared to the base case, where it is assumed the Project never enters development. This equates to an average annual economic impact of \$126 million (undiscounted) in additional GSP to the State. Qualitative benefits also include the upgrade of roads, power lines, and water pipelines in the Project area.

EES evaluation objective

The scoping requirements for the Project Environment Effects Statement ('scoping requirements') by the Minister for Planning, set out the specific environmental matters the Project must address in order to satisfy the Victorian assessment and approval requirements.

The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the Project in accordance with the Ministerial guidelines for assessment of environmental effects under the EE Act.

The following evaluation objective is relevant to the socio-economic assessment:

To minimise potential adverse social and land use effects, including on agriculture and transport infrastructure.

The aspects from the scoping requirements relevant to the evaluation objective are shown in Table 2-1 of Technical Report O: Social Impact Assessment. Section 1.2 (g) of the scoping requirements is also relevant to the socio-economic assessment, requiring the EES to address:

both positive and adverse socio-economic effects, at local and regional scales, potentially generated by the project, including increased traffic movement and indirect effects of the project construction workforce on the capacity of local community infrastructure.

18.1 Methodology

18.1.1 Social impact assessment

The SIA as presented in Technical Report O: Social Impact Assessment was undertaken according to the following steps:

- Review of the scoping requirements and evaluation criteria to define the key technical components of the study.
- Establishment of the study area.
- Review of relevant policy and legislation at Commonwealth, state and local level.
- Desktop review of relevant databases and a review of other technical reports including EES Technical Report D: Landscape and visual impact assessment, EES Technical Report E: Transport impact assessment, EES Technical Report F: Noise Impact Assessment, EES Technical Report G: Air Quality Impact Assessment and EES Technical Report K: Land use Planning.
- Profiling – investigation of the existing social conditions, policy context, key social receptors and community resources.
- Prediction and evaluation – assessment of likely social changes and effects associated with the proposal and an evaluation of the impacts of these predicted changes for relevant social receptors.
- Mitigation – development of mitigation measures in response to identified social impacts.
- Development of mitigation measures in response to identified social impacts.

The methodology is shown in Section 3.0 of EES Technical Report O: Social Impact Assessment. It is noted that at the time of writing EES Technical Report O: Social Impact Assessment, 2016 census data was current. There have been some minor changes to the demographic profile of the relevant communities discussed in this impact assessment between 2016 and 2021, however these are not material.

18.1.2 Economic assessment

The economic impact of the Project was estimated using computable general equilibrium (CGE) modelling. CGE modelling is the best-practice methodology for estimating the economic impact of a project, or policy, across the economy. It is the preferred method for most major Commonwealth and State government agencies. The full methodology is presented in Section 3.0 and Appendix A of EES Attachment IV: Economic Assessment.

18.2 Study area

18.2.1 Social impact assessment

The social effects of the Project would be concentrated in locations proximate to the proposed mine, water pipe and pumping station and haulage route, and in settlements where workers employed by the Project may reside (generally within a one hour driving catchment, see Figure 18-1).

These locations comprise the study area for the SIA and are the focus of the existing conditions as shown in Section 18.3. In some cases, community resources potentially affected by the Project are used by people who live beyond the study area and the impacts for affected individuals and social groups are also assessed as part of the SIA.

18.2.2 Economic assessment

The economic impact of the Project has been estimated for a defined study area around the broader Loddon-Mallee region as defined by an aggregation of several Australian Bureau of Statistics (ABS) Statistical Area 3s (SA3). The following SA3 regions used to define the study area include the regions of Bendigo; Heathcote – Castlemaine – Kyneton; Loddon-Elmore; Macedon Ranges; Mildura; Murray River-Swan Hill; and Campaspe. The study area used for the economic assessment is shown in Figure 18-2.

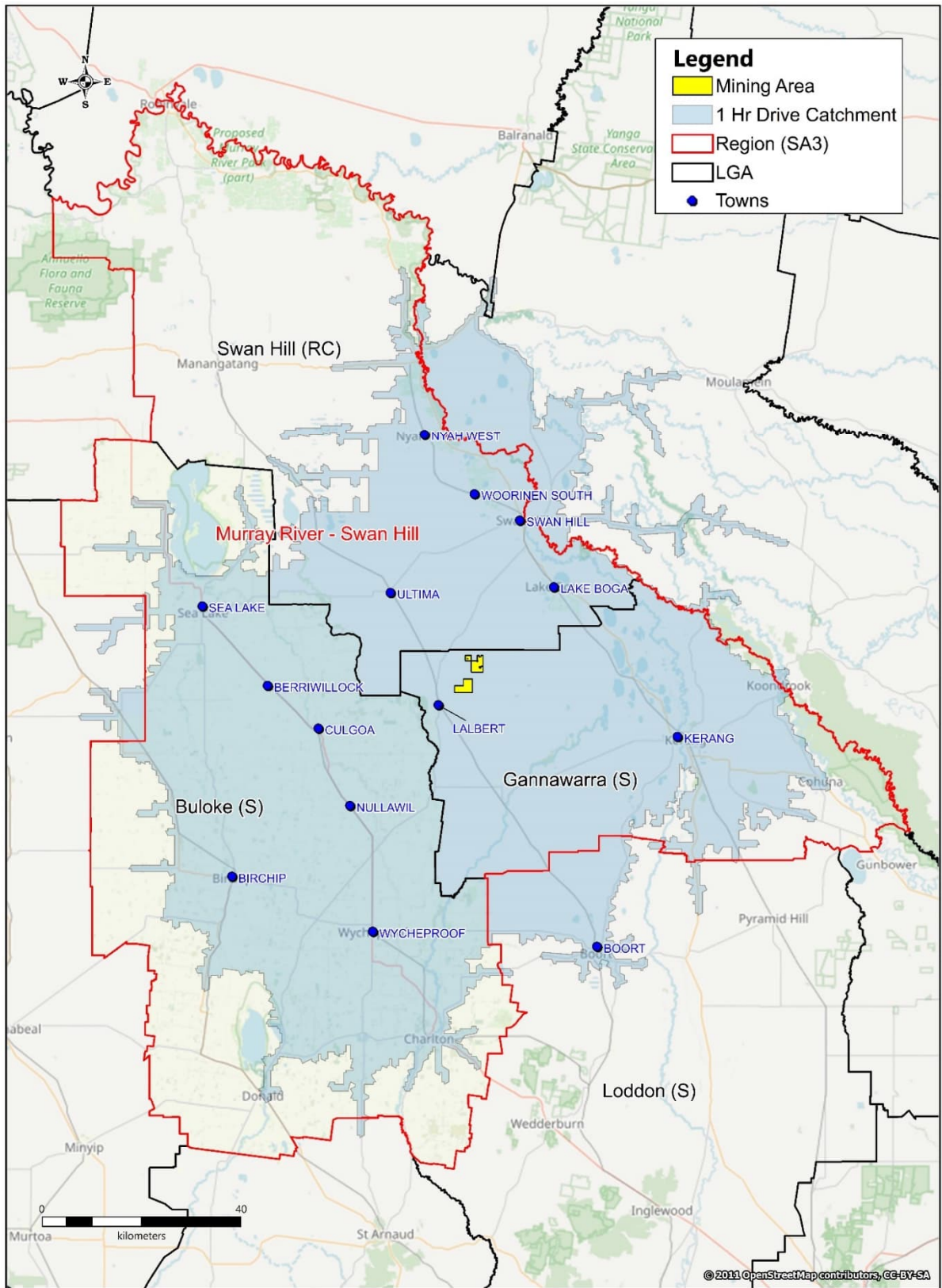


Figure 18-1 Social Impact Assessment Study Area



Figure 18-2 Study area used in CGE model - economic assessment (gold icon represents the Project Area)

18.3 Existing conditions

The Project is located approximately 35 kilometres (km) south west of Swan Hill within the Murray River – Swan SA3 Area¹ (see Figure 18-1).

The largest settlements in proximity to the Project are the regional centres of Swan Hill and Kerang, which are located approximately 35 km north-east and 40 km east of the Project respectively. As of 2021, the population of Swan Hill was 11,225 while Kerang's population was 3,882 (see Table 18-1). Swan Hill and Kerang are significant employment centres within their respective LGAs, with approximately 60% and 35% of LGA residents working within the regional centres. In addition, a large share of rental accommodation in Swan Hill Rural Council (Swan Hill RC) and Gannawarra Shire is located in Swan Hill and Kerang (62% and 48% respectively), along with a number of regional scale community facilities and services, including the Swan Hill Hospital (Swan Hill District Health), Swan Hill TAFE (Suni TAFE), Swan Hill Leisure Centre; and Kerang Hospital (Kerang District Health).

Modest population growth is projected for Swan Hill to 2036 (0.4% per annum). In contrast, incremental population decline is projected across the Murray River – Swan SA3 Area, including in locations such as Kerang, due to factors such as an increasing scale of production in the agricultural sector, the outmigration of young people from the region to access education and/or employment opportunities (see Section 18.3.3) and natural attrition due to ageing.

Table 18-1 Population Trends

Location	2011	2021	2036	Ave Annual Growth % (2021 to 2036)
Goschen area (SA1)	174	223		
Lalbert	81	80		
Lalbert & surrounds (SA1)	225	216		
Ultima	124	118		
Ultima & surrounds (SA1)	333	320		
Lake Boga	718	764		
Sea Lake	612	559		

¹ A geographical unit used by the ABS to report Census Data. SA3 areas cover 'regions' and are comprised of SA2 areas (medium sized areas), which are in turn comprised SA1 Areas, all of which form part of the 'Australian Statistical Geography Standard'.

Location	2011	2021	2036	Ave Annual Growth % (2021 to 2036)
Berriwillock	122	125		
Culgoa	106	71		
Nullawil	58	66		
Birchip	662	673		
Wycheproof	626	564		
Woorinen South	310	300		
Nyah West	491	532		
Kerang (SA2)	3,872	3,882	3,727	-0.3%
Swan Hill (SA2)	10,431	11,225	11,926	0.4%
Swan Hill Region (SA2)	6,550	6,477	5,417	-1.2%
Murray River – Swan (SA3)	37,202	37,242	35,460	-0.3

Other smaller settlements located within commuting distance of the Project include Lake Boga (population 764), which is located 20 km to the north east, and Sea Lake, Berriwillock, Culgoa and Wycheproof, which are located to the west, along the Calder Highway. To the north west of Swan Hill and also within commuting distance of the Project are Woorinen South and Nyah West.

Land uses and businesses surrounding the Project are predominately agricultural and farming properties. Businesses that the Project may have an impact on predominantly relate to agricultural businesses and is covered in EES Chapter 16 Agriculture and soils.

18.3.1 Demographic Profile

Table 18-2 presents demographic data for the farming area within which the Project would be situated, Lake Boga, Swan Hill and Kerang. For the purpose of describing the demographic data, the immediate environs of the Project is a farming area, which supports production of wheat barley, oats, canola and legumes and is sparsely populated. Detailed demographic data are not published for the smaller settlements located in the vicinity of the Project, with the populations of these areas being subsumed in larger ABS reporting areas. The following observations can be made with respect to the data:

- The farming district near the Project is populated by a well-established, relatively affluent and stable farming community which is ageing in place. The median age of this community (47 years) is notably higher than observed for Swan Hill and Regional Victoria, but similar to the other comparison areas. Median household income in the farming area is relatively high and employment in agriculture is very common. Group households, younger singles and couples and single parents comprise only a small proportion of households in the farming area, which is largely populated by families with children and empty nesters.
- The demographic profile of the Ultima and Lalbert Areas is similar, with some minor differences (lower incomes, more single persons, less employment in agriculture, etc.) being attributable to the presence of the urban settlements of Ultima and Lalbert within these areas.
- In contrast, Swan Hill is home to a large and relatively diverse population, with a profile that mirrors Regional Victoria as whole. Swan Hill's population includes people across the age spectrum, living in a range of household types (i.e., group households, lone person and single parents as well as couple families with children). In addition, a relatively large proportion of Swan Hill residents rent their dwelling and/or live in apartments or townhouses compared with the surrounding farming district. Median household income for Swan Hill approximates that observed for Regional Victoria, as does the proportion of households on higher (>\$3,000 per week) and lower (<\$600 per week) incomes. The Swan Hill community has a much higher rate of turnover, with only 59.0% of households indicating they lived at the same address as 5 years ago, compared with 90% for the farming area.
- The population of Kerang is older and less affluent than Swan Hill. However, like Swan Hill, Kerang accommodates a more diverse population than the surrounding farming district, including lone person and groups households, renters, and people from non-English speaking backgrounds.

- Many people living in the townships of Ultima and Lalbert, and to a lesser extent Swan Hill and Kerang were employed in agriculture at the time of the 2016 Census. While minor changes to the demographic profile of the relevant communities occur year on year, these changes since 2016 are not material in the context of the assessment in the SIA.
- Relatively few people were working in mining (less than 1%).

Table 18-2 Selected demographic indicators (Census 2016)

		Farming Area ²	Ultima, Lalbert & Surrounds	Swan Hill	Kerang	Murray River-Swan Region	Regional Victoria
Age	0 to 4	5.0%	6.6%	7.0%	5.0%	5.6%	5.8%
	5 to 11	11.2%	8.7%	8.4%	7.8%	8.6%	8.7%
	12 to 17	5.3%	7.6%	7.3%	6.4%	7.2%	7.3%
	18 to 24	11.7%	6.6%	8.8%	6.7%	7.3%	8.0%
	25 to 34	7.9%	7.5%	13.0%	9.1%	10.3%	10.9%
	35 to 49	17.8%	18.1%	17.5%	15.2%	16.7%	18.1%
	50 to 69	33.7%	31.3%	23.0%	27.6%	28.2%	27.3%
	70+	7.4%	13.7%	15.1%	22.0%	16.2%	13.8%
	Median Age	47	48	39	49	45	43
Households	Household Size	2.8	2.4	2.3	2.2	2.3	2.4
	Lone Person	15.8%	28.2%	31.3%	36.6%	30.8%	29.0%
	Group	0.0%	2.5%	3.9%	2.4%	3.0%	3.1%
	Family	84.2%	69.3%	64.7%	61.1%	66.2%	68.0%
Families	Couple no children	46.2%	30.6%	24.4%	27.1%	28.7%	29.2%
	Couple with children	31.4%	29.6%	23.3%	20.8%	23.9%	26.9%
	One parent family	0.0%	3.5%	5.8%	3.8%	4.4%	11.0%
	Other family	0.0%	0.0%	1.1%	0.7%	0.9%	0.9%
Employment and Training	Unemployment Rate	6.7%	2.0%	4.8%	6.3%	4.8%	6.0%
	In Labour Force	63.9%	63.5%	55.4%	49.5%	0.6%	56.1%
	Completed Year 12	36.2%	34.0%	40.0%	30.3%	34.8%	43.4%
	Bach Degree or Higher	3.6%	7.5%	10.7%	8.3%	8.8%	14.5%
	Ag, Forestry or Fishing	31.5%	52.7%	6.8%	8.8%	21.3%	8.0%
	Mining	0.0%	0.0%	0.4%	1.0%	0.5%	0.8%
Weekly Income	Median H.H Income	\$1,268	\$936	\$1,098	\$886	\$983	\$1,124
	H.H >\$3,000	25.0%	31.1%	18.5%	16.8%	18.5%	20.1%
	H.H <\$650	17.3%	29.1%	27.2%	33.2%	29.5%	25.7%
Dwellings	Separate house	100.0%	100.0%	83.8%	94.8%	92.1%	89.5%
	Townhouse	0.0%	0.0%	6.5%	0.0%	2.3%	6.8%
	Flat/unit/apartment	0.0%	0.0%	9.1%	3.6%	4.2%	2.8%
	Occupied	0.0%	0.0%	0.7%	1.5%	1.4%	0.9%

² SA1 2140506 has been used to estimate the demographic profile of farming areas located near Ultima, Lalbert, Swan Hill and Lake Boga. This SA1 area is the only ABS reporting area in the vicinity of the Project which does not have an urban center located within it.

		Farming Area ²	Ultima, Lalbert & Surrounds	Swan Hill	Kerang	Murray River-Swan Region	Regional Victoria
Tenure	Fully owned	42.1%	60.1%	34.4%	47.8%	45.1%	39.0%
	Being purchased	40.4%	24.0%	30.3%	26.4%	28.6%	34.3%
	Rented	17.5%	14.2%	34.6%	24.7%	25.4%	25.9%
	Public/Social Housing	0.0%	0.0%	6.6%	4.0%	4.2%	3.7%
Ethnicity	Born Overseas	0.0%	2.8%	11.6%	6.1%	10.0%	12.0%
	Speaks other language	0.0%	0.6%	10.2%	2.7%	8%	13.1%
	Poor or no English	0.0%	0.0%	2.5%	0.4%	2.0%	1.1%
	Indigenous	2.7%	0.0%	3.4%	3.0%	2.9%	1.6%
Cars	Access to private vehicle	100.0%	98.3%	92.0%	92.5%	91.0%	94.4%
Same Address	As 5 Years Ago	89.1%	79.1%	59.0%	68.1%	57.2%	61.4%

18.3.2 Labour Force Size and Profile

Table 18-3 shows the size and profile of the labour force of the Murray River – Swan (SA3) area. The majority of this area's population live within commuting distance of the Project, although settlements such as Robinvale are located beyond the one hour commuting threshold. As the Table shows, the region's labour force comprised 16,242 people at the time of the 2016 Census.

Relatively few workers in the region were employed in mining as of 2016. However, a notable proportion of the region's workforce worked in occupations such as technicians, machinery operators and drivers, or labourers, and therefore may have relevant skills and experience in the context of the needs of the Project's workforce requirements.

Table 18-3 Workforce Characteristics (Census 2016)

	Male	Female	Persons
Labour Force	8,842	7,400	16,242
Labour Force Aged 15 to 54	6,195	5,425	11,620
Unemployed	456	334	790
Works Mining	74	12	86
Occupation one of: Technicians and Trades; Machinery Operators and Drivers; Labourers	4,030	1,202	5,232
Aged 15 to 54 and Occupation one of: Technicians and Trades; Machinery Operators and Drivers; Labourers	2,989	889	3,878

18.3.3 Ageing and Out-Migration

The populations of Swan Hill RC, as well as Gannawarra and Buloke Shires, is projected to age over the next 15 years. The number of Swan Hill RC residents aged 0 to 19 years of age is projected to decline from 5,081 to 4,154 over the period 2021 to 2036, whereas the number of residents aged 70+ is projected to increase from 2,896 to 4,211 over the period. The trend of ageing in Swan Hill RC and surrounding LGAs is partly explained by an outmigration of younger residents, who may otherwise settle and raise families. A number of Swan Hill RC residents aged 20 to 29 moved from the LGA in the period prior to the 2016 Census. Specifically, 13.8% of those aged 20 to 29 at the time of the 2016 Census moved away from Swan Hill RC in the year prior to the Census, with only a small proportion moving to another LGA within the Mallee Region. While the reasons for out-migration are likely diverse, feedback from the local Councils indicates that a relative lack of attractive education, training and career opportunities in the region is a key driver. More information is shown in Section 4.2.4 of EES Technical Report O: Social Impact Assessment.

18.3.4 Housing Market Activity

Housing market activity in locations in immediate proximity to the Project is relatively limited (in terms of dwelling approvals and new lettings), with there being on only a handful of new lettings in the Goschen, Lalbert and Ultima areas per annum. The majority of housing in the area is concentrated in the larger towns of Swan Hill and Kerang, with approximately 240 and 50 new lettings per annum (respectively). Relatively few new residential dwellings are constructed in these regional centres per annum (approximately 50 and 25 per annum).

The above considered, the Project is located in a sparsely populated farming area with capacity constraints to accommodate a significant influx of new residents. Moreover, while the area's most significant urban centres, Swan Hill and Kerang, are located within commuting distance of the Project, the scale of rental market and development activity in these urban centres is only of modest scale.

Feedback from the local Councils indicates that the local rental market is 'tight' and that increased demand associated with recent commercial projects in the region has exacerbated existing issues relating to supply.

Short-stay accommodation within the Murray River- Swan Region is heavily concentrated in Swan Hill. To illustrate, data on hotels, motels and serviced apartments published by the ABS indicates that as at 2016, there were 19 venues in the region, 13 of which were located in Swan Hill.

Due to the small number of venues within SA2 areas such as Kerang and Gannawarra, data on room numbers and occupancy rates are not released by the ABS due to issues relating to confidentiality. In Swan Hill, data show that the 13 venues provided a total of 348 rooms, which were utilised at a rate of 50.5% to 56.2% throughout the year, with only minimal seasonal fluctuation in demand.

In addition to short-stay accommodation located within hotels, motels and serviced apartments, there are numerous caravan parks located within the commuter catchment of the Project, which may offer a suitable short-stay option for the Project workforce.

18.3.5 Land and settlements near the Project

Land within and near the Project is populated primarily by farming families who live and work on the land. Four agricultural properties comprise the Mining Area, one of which accommodates a residential dwelling (R0009). These properties are owned by four separate landholders, with whom the proponent has negotiated land acquisition contracts for the freehold. Dwellings near the Mining Area are shown in Figure 18-3. The circumstances of members of the local rural community whose land and/or dwellings are within or are in proximity to the Mining Area vary considerably, and as do their views about the Project.

Landowners who have entered into contracts with VHM are supportive of the Project and have agreed to sell their land to VHM to enable access during the mining period.

Views regarding the Project among nearby rural residents are more mixed. In some cases, these landholders have strong emotional ties to their land and/or dwelling and the farming activity which it supports. Moreover, these landholders variously have an intergenerational connection to the land, have invested a considerable proportion of their lives working the land and improving their property and/or have aspirations to pass on their farm and business to the next generation. Others have recently bought into the area or had their land passed to them, and are hoping to build a successful business and career in agriculture, raise a family and enjoy the local rural environment and lifestyle. In this context, some have expressed concerns about the potential effect of the Project on their rural amenity and the productivity of their land, as well as their capacity to expand their farm.

Nearby rural residents also expressed a sense of stewardship in relation to the farming district in which the Project is located. In this context, concerns have been raised about the capacity of the proponent to successfully rehabilitate the land, the potential for additional mining projects to be established throughout the district, and the implications this may have for the health and viability of the local farming community and the farming enterprises on which it depends.

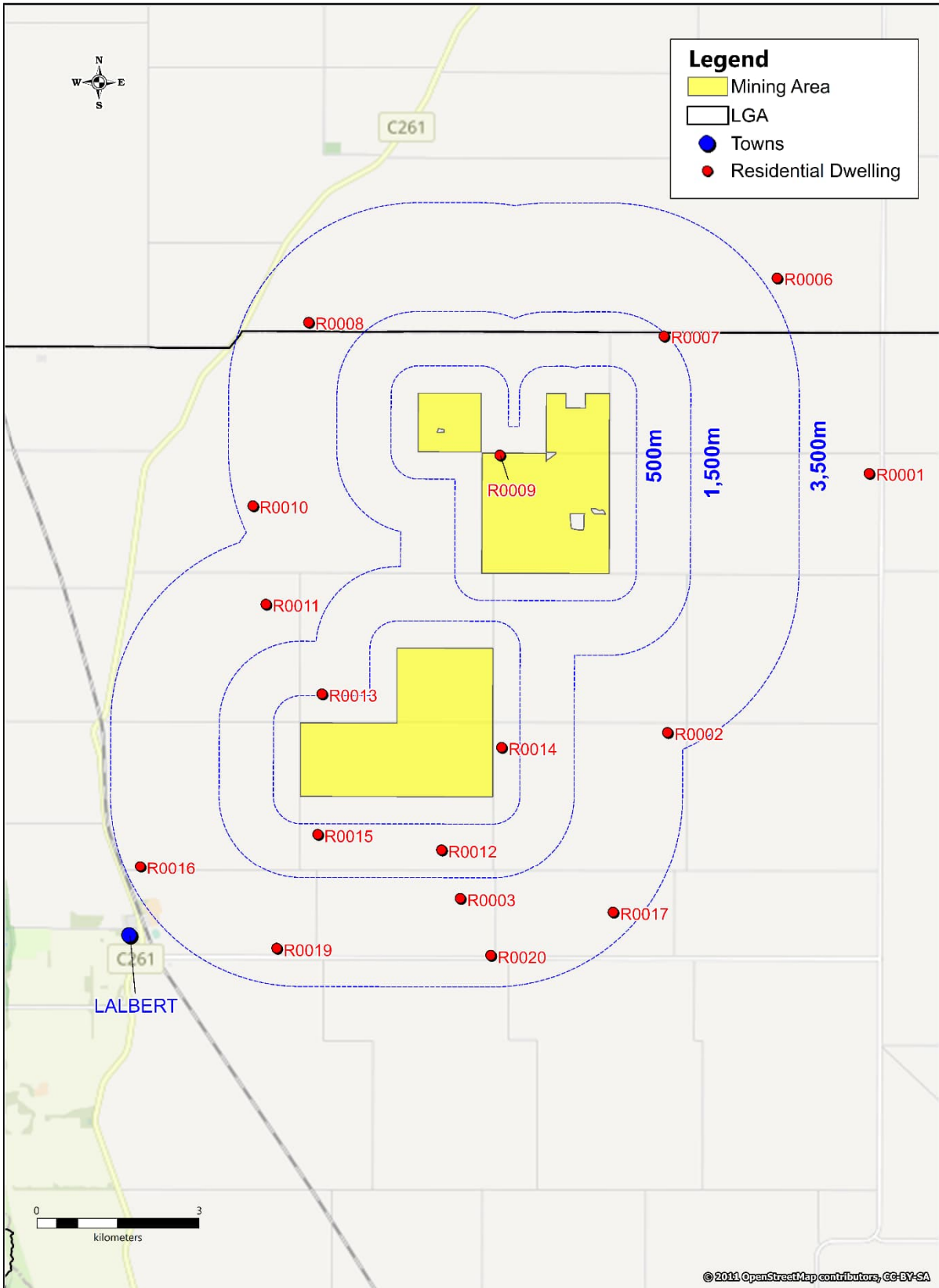


Figure 18-3 Dwellings near the mining area

Lalbert

The closest settlement to the proposed mine is Lalbert, which is located approximately 4 km to the south-west. The township's main community resources include the Lalbert Recreation Reserve (home of the Mallee Eagles Football Club), the Lalbert CFA, General Store and memorial park, all of which located in linear strip along the Donald-Swan Hill Road. There are currently no children's services, school or medical services in Lalbert. About 3.5 km from the Mining Area approaches Lalbert's north-east corner, meaning that that all homes and community resources within the township are beyond the spatial area where mining activity would directly affect amenity.

Ultima

The settlement of Ultima is located approximately 40 km to the north west by road, well beyond the spatial area where mining activity would be directly perceptible. However, Ultima is located adjacent to the termination point of the proposed Haulage Route (the Ultima Intermodal Terminal), and as a result haulage traffic may have implications for the use and enjoyment of housing and other community resources in this location. The township's principle urban area is framed by the Robinvale rail line, Culgoa-Ultima Road and Sea Lake-Swan Hill Road, and has an approximately triangular shape. The majority of the township's community resources are located in this area, including the Ultima General Store, CFA, Skate Park and Primary School (as of 2019, the school has three children enrolled). The Ultima Recreation Reserve is located at the township's western periphery on the western side of Culgoa-Ultima Road. There are currently no children's services or medical services in Ultima.

The proposed Haulage Route enters the Ultima Intermodal Terminal from the east, via Lake Boga Ultima Road and David Street. Haulage Traffic would pass the Ultima Golf Club and four residential dwellings on David Street, between Lake Boga - Ultima Road and Sea Lake-Swan Hill Road (two of which are situated on land zoned for farming and two being on land within the Township Zone). The remainder of the township, including dwellings and community resources are separated from the haulage route by the rail line.

Kangaroo Lake

The Project would draw water from Kangaroo Lake, via a proposed underground pipeline to be constructed in the roadway between the lake and the Project. A pumping station would be situated on the shoreline of Kangaroo Lake, towards the lake's north-west corner. Kangaroo Lake is one of the largest freshwater lakes in the district and is supplied by the Torrumbarry Irrigation System. The lake is located on the western side of the Murray Valley Highway between Swan Hill and Kerang. Kangaroo Lake is a popular location for swimming, fishing, water skiing and other water based recreational activities. Two boat ramps facilitate access to the lake for pleasure boating and fishing, one being located adjacent the Kangaroo Lake Caravan Park, on the lake's north east corner, and the other on the lake's western side, alongside a grassed recreational area. A walking track extends along the lake's western side from the boat ramp to the north for approximately 3 km. Along the lake's western side there are a number of residential dwellings which have uninterpreted views across the lake. The Kangaroo Lake Caravan Park is located on the lake's north eastern corner, and provides camping sites, cabins, a kiosk and BBQ facilities.

Swan Hill and Kerang

Swan Hill and Kerang are the largest settlements located within commuting range of the Project, and the primary access point for community facilities and services for residents living within the Swan Hill and the surrounding region.

Community Services – Supply and Demand

The amenity of Swan Hill and Kerang would not be directly affected by the Project. However, the Project's workforce may generate demand for community facilities and services, retail, etc. within the centres.

Early Years

Existing provision of early years services in Swan Hill and Kerang, such as childcare and kindergarten, is sufficient to meet the needs of the Swan Hill and Kerang populations, and there is notable surplus capacity to accommodate demand generated by surrounding regional communities. Moreover, the number of children aged 0 to five is projected to decline in both Swan Hill and Kerang over the next 15 years, resulting in reductions in demand for early years services.

Schools

There are four primary schools and two secondary schools operating in Swan Hill and three primary schools, one high school and one P-12 school operating in Kerang. As of 2021, there was notable capacity within the network of schools to accommodate additional enrolments. Moreover, the number of primary school aged children is projected to decline in Kerang and Swan Hill, and likewise the number of secondary school children is projected

to decline. In Swan Hill, the number of secondary school children is projected to increase marginally to 2036. In this context the existing network of schools will continue to have notable unused capacity into the future. More information is presented in Table 4-9 of EES Technical Report O: Social Impact Assessment.

Medical Clinics

There are six medical clinics in Swan Hill and Kerang, which provide GP and allied health services. The rate of supply of GPs per head of population Victoria is approximately 110 Full Time Equivalent GPs per 100,000 people, indicating that approximately 11 Fulltime GPs would be required to serve the population of the Swan Hill SA2 area and further 4 GPS would be required to serve the needs of the Kerang population (SA2). Table shows the medical clinics and number of GPs in both Swan Hill and Kerang.

Table 18-4 Medical Clinics and GP numbers

Location	Clinic	GPs
Swan Hill	Swan Hill Primary Health Medical Centre	9
	Swan Hill Medical Group	8
Kerang	Kerang Medical Clinic	3
	Northern District Community Health Medical Clinic	5
Swan Hill and Kerang	Mallee District Aboriginal Services – Swan Hill	4

Reactions

Residents of Swan Hill and Kerang who attended the open houses and/or who were consulted by VHM at one or more of the 'consultation events' were typically very keen to see employment generating projects developed in the region, and in this context expressed support for the project. While generally supportive, the following issues and concerns were raised:

- Workforce accommodation - where will workers live; short stay accommodation is limited and rental markets are tight.
- Processing – keen to see processing of the ore occur locally, to maximise economic and employment benefits for the region.
- Safety – need to make sure that the project does not compromise the health and safety of local residents, for example due to dust emissions.

18.4 Construction, operation, decommissioning and closure impacts

18.4.1 Social impacts - overview

Potential impacts for each phase of the Project were identified to enable the scope of the SIA to be determined, as shown in Table 18-5.

Table 18-5 Potential Impacts

Category	Social Effect	Receptors	Phase
Workforce and Social Profile	Influx of workers creates additional demand for community facilities and services in settlements within commuting range of the Project.	<ul style="list-style-type: none"> • Users of community facilities and services. 	Construction, Operation and Decommissioning / closure
	Influx of workers creates additional demand for housing within commuting range of the Project	<ul style="list-style-type: none"> • Housing market participants. 	
	Influx of workers influences the social profile of communities within commuting range of the Project.	<ul style="list-style-type: none"> • Residents of established communities. 	

Category	Social Effect	Receptors	Phase
Displacement	Occupation of land disrupts current land use.	<ul style="list-style-type: none"> Owners and occupiers of directly affected land. Members of the broader rural community. 	
Access and Amenity	Alterations to the amenity and character of rural areas in proximity to the mining areas (within approximately 3.5 km) and the water supply pipeline.	<ul style="list-style-type: none"> Occupants of nearby dwellings. Members of the broader rural community. 	
	Alterations to the amenity and character of Kangaroo Lake	<ul style="list-style-type: none"> Residents living adjacent the lake. Recreational users. 	
	Altered access and amenity due to project induced traffic interferes with the enjoyment of valued community resources.	<ul style="list-style-type: none"> Residents of dwellings and settlements along the transport route. 	

In assessing impacts, the following elements of the Project's design, which have been developed to mitigate potential social impacts, have been taken into account:

- VHM has a Local Employment Policy, under which preference would be given to applicants for positions at the proposed mine who live within commuting range of the Project.
- VHM has prepared a Code of Conduct, which sets out VHM's expectations of short-stay and permanent staff when interacting with members of the local community.
- VHM has in place a Memorandum of Understanding (MOU) with the Swan Hill RC and Gannawarra Shire, which include elements relating to information sharing, and planning for the future housing needs of the community.
- In addition to mitigation embedded within the Project's design, through the SIA process the following additional mitigation has been developed:
- A Workforce Accommodation Strategy has been developed by VHM and would be refined in consultation with relevant stakeholders, including local councils, prior to commencement of construction. The draft strategy does not include measures to manage the influx of permanent employees, but rather focuses on accommodating the construction workforce. In this context the strategy should be amended to include a commitment to agree with local authorities on a maximum influx of permanent workers who would be able to seek accommodation in the local housing market (rental and/or for purchase) in Years 1 to 3, by location. If the number of permanent employees seeking accommodation in the local housing market exceeds local housing capacity, then the positions would be identified as Fly In Fly Out / Drive In Drive Out and the employees working in these roles would be accommodated in short stay accommodation developed for the Project, for up to three years, after which the positions would convert to 'residential' positions.
- Neighbour Agreement: rural residents living within 3.5 km of the Mining Area would be given the option to enter into a neighbour agreement with VHM for the duration of the Project. The agreement would recognise that the rural amenity within this area would be altered by the project, and that this may affect residential satisfaction among those affected. Residents living with Zone A (up to 1 km from the Mining Area), Zone B (1 km to 2 km from the Mining Area), Zone C (2 km to 3.5 km from the Mining Area) would be offered support, assistance or remuneration, to offset the altered amenity. Specifically, owners of existing dwellings in Zone A would be offered \$25K per annum for the life of the Project, whereas dwelling owners in Zone B and C would be offered \$10K per annum and \$5K per annum respectively. The location of each zone and the associated recompense would be disclosed to all participants, to ensure transparency. Payment would commence when works (construction) start and continue until operations cease (projected to be between 20 to 25 years). If any dwelling owners chooses to sign a neighbour agreement, this would not preclude them from making a submission to the EES or making a claim for compensation for any unacceptable impacts that occur as a result of the Project. Dwellings owners would be able to sign on to the neighbour agreement at any time during the life of the Project.

18.4.2 Workforce

The Project would employ short-stay (contactors performing construction work) and permanent staff (operational positions) across the Project life cycle. Short-stay employment associated with construction is estimated to peak at 275 workers early in the Project life cycle (for a period of around one month) and after a break in construction between Quarter 3 of Year 1 and Quarter 2 of Year 2, would grow to around 200 workers in a second and third round of construction. Permanent employment number is estimated to reach 325 in Quarter 3 of Year 1, grow to 375 in Quarter 1 of Year 4 and grow to 400 in Quarter 1 of year 5, remaining constant thereafter for a period of approximately 20 years. Table 18-6 provides the estimated project workforce over the life of the Project.

Table 18-6 Indicative project workforce numbers

Year		Construction/Short-stay Role	Permanent Positions	Total
0	Q1	-	-	-
	Q2	-		-
	Q3	150		150
	Q4	275		275
1	Q1	250	325	250
	Q2	100		100
	Q3	-		325
	Q4	-		325
2	Q1	-	325	325
	Q2	-		325
	Q3	100		425
	Q4	200		525
3	Q1	200	375	525
	Q2	75		400
	Q3	100		425
	Q4	200		525
4	Q1	200	375	575
	Q2	75		450
	Q3	-		375
	Q4	-		375
5-25		-	400	400

Source: VHM 2022

For the SIA, three scenarios were explored; a worst-case scenario (Max) under which all mine workers are imported to the region, an 'Assessment Scenario', under which 75% of the workforce is imported to the region and an aspirational scenario (Min) under which 50% of the workforce is imported to the region. Workers already living in region, would travel to work from their existing address, while imported workers would generate new demand for accommodation in the region. The Assessment Scenario represents an achievable outcome given the size of the local labour force and the success of other mining operations in regional Victoria in attracting workers from within local communities.

Imported construction workers would work on shifts, with extended breaks, and likely travel into the region to work and return home to their permanent place of residence while on breaks. As a result, the majority of imported construction workers would likely make use of short-stay accommodation, such as hotels and motels, caravan parks, etc.

The Workforce Accommodation Strategy identifies 28 properties providing short-stay accommodation, within a practical driving distance of the Project, which provide a total 559 rooms (323 being located in Swan Hill and Kerang). While somewhat dated, the latest publicly available data on occupancy rates indicates that approximately 45% of these rooms would be vacant at any one time. The Draft Accommodation Strategy also

indicates that the Project is in the process of establishing agreements with local accommodation providers which would stimulate the supply of additional short accommodation in the region (164 new rooms).

Figure 18-4 below compares demand for short-stay rooms generated by the construction workforce with that available in the existing market ('unused existing') and accounting for the additional short-stay accommodation identified in the Workforce Accommodation Strategy. As the figure shows, if the Assessment Scenario is achieved, then there would be sufficient existing unused short-stay accommodation in the Project's driving catchment to accommodate the construction workforce, although a large proportion of this unused capacity would be required. If a greater proportion of workers were imported than assumed for the Assessment Scenario, it is possible that demand would approach and exceed existing unused capacity at times in the construction period. Furthermore, imported construction workers would likely prefer to live in Swan Hill or Kerang as these settlements provide a full range of commercial, retail and community services and opportunities and unused existing short-stay accommodation in these locations could not accommodate the entire construction workforce.

However, once the additional accommodation identified the Workforce Accommodation Strategy is accounted for, there would be sufficient short-stay accommodation to accommodate the construction workforce, even under a scenario where 100% of construction workers are imported to the region ('Max').

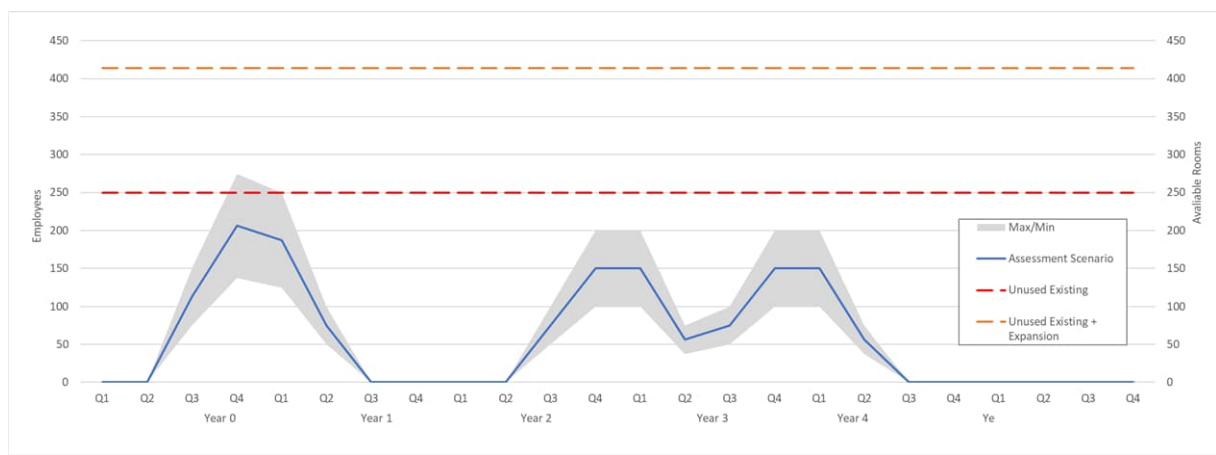


Figure 18-4 Supply of and Demand for Short-stay Accommodation within Driving Distance of the Project

Imported permanent employees would likely prefer to work and live in the region, with the majority making use of conventional rental accommodation when first migrating to the region (some may choose to purchase a home, overtime). As with imported construction workers, the majority of imported permanent workers would likely prefer to live in Swan Hill or Kerang.

Table 18-7 compares the number of new households who would be seeking accommodation as a result of the Project in Year 1, Quarter 3 with the scale of the rental market in locations within a practical commuting distance of the Project (as identified in the Workforce Accommodation Strategy) and the level of development activity in these areas. At this time, an influx of approximately 244 households is expected, and for illustrative purposes, Table 18-7 assumes these households would be distributed across Swan Hill, Kerang and surrounding areas in proportion to the scale these existing communities. In Year 4 Quarter 1 and Year 5, Quarter 1, further influxes of permanent staff are expected, although the increases would be much lower (38 and 19 households respectively). As Table 18-7 shows, the influx of permanent workers seeking accommodation would be large in the context of the scale of the existing housing markets.

Table 18-7 Accommodation Demand – Year 1 Quarter 3 (Assessment Scenario)

	Max	Assessment Scenario	Min	Estimated Rental Lettings Per Annum	Estimated Dwelling Approvals per Annum
Swan Hill	236	177	118	242	50
Kerang	50	37	25	51	26
Other	39	29	20	40	16
Total	325	244	163	333	92

Source: Public Place 2022

Estimates of additional demand for community facilities and services associated with imported workers (short-stay and permanent) are outlined Table 18-8 of Technical Report O: Social impacts for the Assessment Scenario.

- In relation to short-stay workers, it has been assumed that:
 - Temporary/Construction workers would not relocate families to the region, due to the short-stay nature of the work, long shifts and the demographic profile of construction workers (includes a high proportion of younger males).
 - The temporary/construction workforce would generate demand for medical services, but not other community facility types such as children's services, schools etc.
 - Temporary/construction workers use medical services at a rate equivalent to the state average.
- In relation to imported permanent employees it has been assumed that:
 - Imported permanent employees would relocate partners and dependent children to the region, where relevant, and as such would contribute to demand for a wider range of facilities and services, including schools.
 - The household and age profile of imported permanent employees (inclusive of partners and dependents) is equivalent to that of the working age population of Swan Hill RC.
 - Permanent employees and their families use community facilities and services at a rate equivalent to the state average.

Table 18-8 Estimated Increase in Demand for Community Services (Assessment Scenario)

Year	Imported Population		GP	Dentist	MCH Office	Preschool Licensed Place	Childcare Licensed Place	Primary School Enrolment	Secondary School Enrolment	Community Centre	
	Temp/Construction	Operations									
0	Q3	150	0	0.1	0.1	0	0	0	0	0	0
	Q4	275	0	0.2	0.1	0	0	0	0	0	0
1.0	Q1	250	790	0.1	0.1	0	0	0	0	0	0
	Q2	100	790	0.1	0.1	0	0	0	0	0	0
	Q3	0	790	0.4	0.4	0.1	4.7	15.4	65.5	56.7	0.1
	Q4	0	790	0.4	0.4	0.1	4.7	15.4	65.5	56.7	0.1
2.0	Q1	0	790	0.4	0.4	0.1	4.7	15.4	65.5	56.7	0.1
	Q2	0	790	0.4	0.4	0.14	4.7	15.4	65.5	56.7	0.1
	Q3	100	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
	Q4	200	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
3.0	Q1	200	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
	Q2	75	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
	Q3	100	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
	Q4	200	790	0.5	0.5	0.1	4.7	15.4	65.5	56.7	0.1
4.0	Q1	200	911	0.6	0.6	0.1	5.4	17.7	75.5	65.4	0.1
	Q2	75	911	0.5	0.5	0.1	5.4	17.7	75.5	65.4	0.1
	Q3	0	911	0.5	0.5	0.1	5.4	17.7	75.5	65.4	0.1
	Q4	0	911	0.5	0.5	0.1	5.4	17.7	75.5	65.4	0.1
5 to 25		0	972	0.5	0.5	0.1	5.8	18.9	80.6	69.8	0.1

18.4.3 Displacement

The proposed Mining Area covers approximately 1,500 hectares (ha) of farming land comprising four properties, one of which accommodates a dwelling (R009). These properties are owned by four separate landholders, with whom the proponent has negotiated land acquisition contracts for the freehold. The Project would displace the existing land use on each property during construction and mining, with the duration of displacement being in the order of 20 years. At the completion of mining, the land would be rehabilitated and returned to agricultural use.

The residential dwelling denoted 'R014' (see Figure 18-3), which is located outside the Mining Area, would be vacated during the mining of Area 1, on terms agreed between the proponent and the owner-occupier. During this period, the dwelling would be not available for residential use by the current owner-occupier, or any other person.

18.4.4 Access and amenity

Rural dwellings near the mining area

With the exception of R009 and R014, which would be vacated, construction and operation of the Project would have only modest implications for residential amenity at nearby dwellings. A summary of the amenity impacts at nearby dwellings are as follows:

- Noise generated during construction and operation would not exceed project noise limits at the majority of nearby dwellings, the exception being R013, where the night-time limit would be exceeded by 2dBA when Area 1 is being mined. However, even in this case, mitigation measures are suggested in the EES Chapter 11 Noise and EES Technical Report F Noise which would allow for compliance to be achieved.
- Jobling Road would be temporarily closed during construction works of: 1) water pipeline from Kangaroo Lake (three to six months), and 2) installation of mining services (power/pipelines) connecting Area 1 and Area 3 (< 1 month).
- The main access roads during construction as identified in the Traffic Impact Assessment (TIA) would be Bennett Road, to access Area 1 and Mystic Park Meatian Road (and Bish Road) to access Area 3.
- Jobling Road is identified as an alternate access point to the mine (access southern point of Area 3) and may be upgraded to facilitate site establishment of Area 3 in approximately 2031.
- During operation, the Project would generate traffic, including heavy vehicle traffic, on local roads. However, vehicles transporting mining products would access the Donald-Swan Hill Road via Bennett Road, minimising exposure of residences to traffic noise and the number of heavy vehicle movements transporting product, excluding deliveries, would be relatively small (12 heavy vehicle loads per day). Further, there will be no trucking of the product leaving the site via Bennett Road at night.
- The section of Thompson Road within the Mining Area would be closed to the public for the majority of mining in Area 3, whereas Bennett Road would be closed for the majority of mining in Area 1. The TIA acknowledges that closure of Bennett Road and Thompson Road may have implications for local residents which will need to be managed through a traffic management plan in consultation with the affected landowners.
- Most dwellings in the immediate environs of the Mining Area would not have clear views of the processing facility or mining operations due to screening vegetation and local topography. However, filtered views would be available from some dwellings and from adjacent roads. Also, light glow from lighting within the Mining Area at night would be noticeable in the surrounding landscape including at a number of the nearby dwellings.

Notwithstanding the predicted changes to amenity and character of the local area would occur in the context of a quiet and peaceful rural setting.

Water supply pipeline route

The proposed pipeline would extend from the Mining Area to Kangaroo Lake, a distance of 38 km. The pipeline would take 8 to 12 months to construct, with construction activity moving along the linear alignment at a rate of approximately 120 to 150 metres per day. Associated construction noise would be significant and would have to the potential to affect the residential amenity of dwellings located in close proximity to the alignment for a period of two to four days. However, the majority of the area traversed by the alignment is sparsely populated, and as a result there is only a small number of dwellings located near the alignment, in the Mystic Park area.

Kangaroo Lake

The Project would draw water from Kangaroo Lake during the operational phase. However, the volume of water extracted would be insufficient to affect the lake's recreational values. Specifically, the proposed draw represents a 9% increase on the current daily demand. This assumes the draw peak of 4.5 GL/year at start up, and up to 3.1 GL/year at steady state.

A pumping station would be installed on the shoreline of Kangaroo Lake within a modified visual setting which includes roads and houses, and adjacent an existing weir. The proposed site for the pumping station is not located in close proximity to the lake's main recreational focal points area, such as the caravan park, boat ramps and walking trail. However, distant views of the pumping station would be available from these areas. The pumping station would be housed in a shed, which has a similar appearance to adjacent buildings.

Noise emissions from the pumping station at Kangaroo Lake are predicted to comply with Project noise limits at all receptors for all time periods, provided suitably designed acoustic enclosure and silencer selection for the generator. Noise from the station may be audible in locations in close proximity. However, no recreational focal points would be affected.

Ultima

There are a small number of dwellings Lake Boga-Ultima Road and David Street in Ultima. The proposed transport route passes these dwellings as it approaches the Ultima Intermodal Terminal. The Project would generate heavy vehicle movements during daylight hours. The remainder of the township, including dwellings and community resources, is separated from the transport route by the rail line.

18.4.5 Economic – Output impacts

The estimated economic impact is a measure of net economic benefit to the region as it accounts for 'crowding out' associated with the reallocation of productive inputs (such as capital and labour) from other industries and regions to support the economic activity associated with construction and operation of the Project.

For the mining sector located in the Loddon-Mallee region, the Project represents an increase of over 20 percent in output. The structure of the local economy is such that many inputs required by the Project (such as capital or labour) must be drawn from the surrounding regions, including the broader Victorian and Australian economies. This reflects a transfer of skilled labour from the broader Victorian economy to the Loddon-Mallee region to support the Project's development and operations, as well as a flow of capital from Victoria into the Loddon-Mallee region to support the additional economic activity associated with the Project. This phenomenon is reflected in the results of the economic impact analysis presented in this report.

Study area

The Project is estimated to increase economic activity in the study area by \$2.0 billion (present value terms, discounted at 7%) relative to the base case. This equates to an average annual economic impact of \$206 million (undiscounted) in additional output in the study area or a 0.5% increase in Gross Regional Product (GRP) relative to the base case.

Victoria

Over the evaluation period, the development and operation of the Project is estimated to generate a net uplift of \$1.3 billion (present value terms, discounted at 7 per cent) to the Victorian economy. This equates to an average annual impact of \$126 million (undiscounted) in additional GSP to the State.

There is a gradual increase in the positive economic impact generated by the Project across Victoria corresponding to the uplift in operational and sustaining capital expenditure from FY 2024 onwards. However, the net economic impact of the Project to Victoria is lower than that of the study area. This reflects the large-scale nature of the Project and the associated capital and labour requirements needed to establish and sustain ongoing operations in the Project Area, which are expected to result in some subsequent crowding out effects throughout broader Victoria.

18.4.6 Economic - Employment impacts

The Project is also expected to create new jobs in the study area and across Victoria. These employment impacts, as measured by additional full-time equivalent (FTE) jobs, represent both the direct employment associated with the development and operations of the Project, but also the indirect employment opportunities generated in other

sectors. The employment impacts calculated in the modelling reflect net job creation, which account for job losses across industries that experience crowding out in the labour market as a result of the Project.

Over the evaluation period, the Project is estimated to sustain net employment gains in the Study Area of around 480 FTE jobs per annum on average. This estimate represents the average net number of jobs sustained each year as opposed to new, annual job creation. Peak employment is expected to be generated at the end of the evaluation period, with 640 additional FTE jobs in the study area. This is relative to an estimated total workforce size in the Project area of 160,283.

The net jobs created due to the Project are a combination of direct and indirect employment across sectors of the economy. The modelling as outlined Attachment IV: Economic Assessment, indicates that outside of mining, additional jobs are expected to emerge in a range of industries but are concentrated in adjacent sectors such as construction, services, and trade. Across the evaluation period, positive net employment impacts are also expected for the broader Victorian economy (including the study area). The Project is estimated to sustain an additional 230 FTE jobs per annum on average across the State, relative to the base case. Job creation in Victoria also peaks at the end of the evaluation period, reflecting the cumulative activity of the Project, with an additional 280 FTE jobs estimated in the final year.

These lower employment impacts to the State reflect both the labour requirements of the Project itself as well as crowding out across various industries that experience positive spillovers in the study area as a result of the Project.

18.4.7 Economic – Sectoral impacts

As shown in EES Attachment IV: Economic Assessment, the Project is expected to generate both positive economic spillovers and some crowding out effects across industries. While positive economic spillovers are concentrated in the study area, crowding out occurs in other parts of Victoria. The economic impact on adjacent sectors reflects the additional economic activity associated with the Project, including increases in real incomes and associated rises in consumption of local services.

Figure 18-5 shows the flow-on economic impact (measured by value-add) of the Project to various sectors both within the study area and the broader Victorian economy. The mining sector within the study area is the largest beneficiary of the development and represents an increase of over 20 per cent in output.

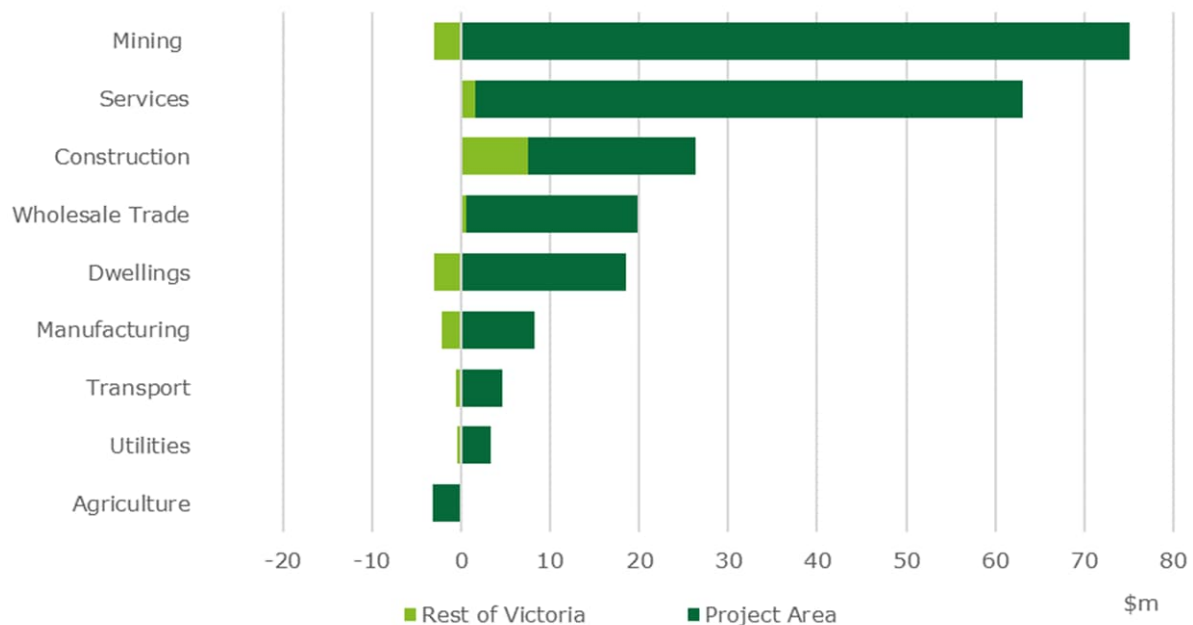


Figure 18-5 Sectoral Impacts in the Project Area (Study Area) and the rest of Victoria in annual average value added terms

The services sector within the study area is estimated to experience positive spillovers worth \$61 million in terms of an average annual net increase in sector output. This is followed by wholesale trade, and construction, which experience \$19 million in additional average annual output, respectively. The dwellings sector experiences positive economic spillovers within the study area as well, with an estimated additional \$18 million per annum in economic output relative to the base case.

The Project is also expected to crowd out some economic activity across the rest of the Victorian economy. This crowding out would be observed across the manufacturing, mining and dwellings sectors in Victoria (of approximately \$2-\$3 million per annum each, undiscounted, on average) while crowding out would also be observed in the agricultural sector within the study area (of approximately \$3 million per annum, undiscounted, on average).

These net negative outcomes reflect the resource demands of the Project and the redistribution of capital and labour inputs from the broader Victorian region to support the additional economic activity occurring in the study area (refer Figure 18-5). The crowding out in these three sectors also reflects the capital intensive and specialist nature of labour associated with a mining project of this scale. Overall however, while crowding out effects are expected, these are small in scale relative to larger spillover benefits projected for other sectors as a result of the development of the Project.

18.4.8 Economic – Qualitative benefits

The majority of the local area is rural agricultural farmland, dedicated to broadacre farming applications. The existing local traffic is minimal, and generally comprises of local farming-related light vehicles, trucks, and mobile farming equipment. However, there are seasonal transportation peaks during harvesting and crop transport to rail loading centres.

VHM is developing a road upgrade and maintenance strategy in conjunction with the Department of Transport and Gannawarra and Swan Hill councils. Improved roads would create benefits for users through greater connectivity and agglomeration benefits. For example, the agricultural industry may realise cost savings through wider roads enabling the transit of larger vehicles, which in turn enable the transport of products in bulk during the harvest season. There would also be improved safety benefits from capacity improvements, and clearer and enhanced road markings.

18.5 Residual impacts

Residual impacts are those that remain once mitigation and management measures have been implemented. This section describes potential residual impacts of the Project once mitigation and management measures have been considered and applied. The potential residual impacts associated with the Project workforce's effect on the social profile of the region are summarised as follows:

- Attracting and retaining working age residents – by creating employment, the Project would assist in attracting and retaining young adults in the region, contributing to the viability of community services such as schools and childcare, and injecting energy and enthusiasm into activities such as community sports, the arts and alike.
- Community cohesion – the Workforce Accommodation Strategy and Code of Conduct would limit exposure of small communities to disproportionate influxes of mine workers and establish high behavioural standards for workers when interacting with members of existing communities. As a result, perceived public order and safety would not be materially affected. A managed influx of workers would contribute to economic and social vibrancy in the region.
- Housing market participants – the uplift in demand for housing associated with the Project would be significant in the context of the scale of local rental and short-stay accommodation markets. However, the implementation of the Workforce Accommodation Strategy (including the proposed additions, see Section 6.1 of Technical Report O: Social Impacts) would ameliorate potential negative impacts for users of short-stay accommodation and enable the Project's effect on the local rental market to be minimised. A managed increase in demand would contribute to the viability of the short-stay accommodation sector and incentivise the development of new housing.
- Community Facilities and Services – the uplift in demand for community facilities and services associated with imported workers would be relatively small, and geographically dispersed. The Project would not place an unmanageable burden on existing facilities and services but rather would contribute to the ongoing viability of services in the region, including in Swan Hill, Kerang and smaller towns near the Project. However, in the case of GP services, the additional demand would arise in the context of a supply network that is operating at or near capacity.

The potential residual social impacts associated with displacement of rural and residential land uses by the Project are summarised below:

- The Project would directly displace rural uses and one dwelling, and arrangements have been made to facilitate the vacating of one further dwelling. Owners of the land within the Mining Area have reached mutually agreeable terms with the proponent. As a result, while displacement of rural and residential uses may place a minor impost on the personal time and resources of those affected, it would have no material implications for their well-being.
- The proposed Neighbour Agreement model constitutes an explicit recognition that residents living near the Project would be living and working within a modified environment. The proposed approach may not fully satisfy all neighbours, but would mitigate perceived inequities between those who benefit financially from the Project via the sale of their land and those who must live with the Project's effects, dampening potential conflict between neighbours and consequent reductions in social cohesion. Notwithstanding, the Project may place a strain on inter-personal relationships among members of the local farming community.

The potential social impacts associated with access and amenity by the Project are summarised below:

- Local residents may consider the Project's effect on the character and liveability of the local area to be incompatible with their current lifestyle and consequently view the Project as an unwelcome intrusion. Notwithstanding, neighbour amenity would remain within acceptable limits. Moreover, the proposed Neighbour Agreement model would reduce perceived imbalances between the benefits of the Project for the broader community and negative effects for immediate neighbours.
- A small number of residents living in proximity to the proposed water pipeline route would experience a short burst (a few days) of construction activity, including substantial construction noise. The construction process may cause some irritation for residents, however, given the short exposure duration, material social impacts would not arise.
- The Project's effects would have no material implications for the use and enjoyment of Kangaroo Lake by residents and visitors.
- Heavy vehicle traffic generated by the Project may affect the perceived amenity of small number of homes located on Lake Boga-Ultima Road and David Street in Ultima. However, the total volume of heavy vehicle traffic generated by the Project is relatively small and amenity expectations of residents would be moderated by the reality that their homes are located on a route which provides access to the Ultima Intermodal Terminal.

18.6 Summary of mitigation measures

18.6.1 Mitigation measures

The mitigation measures that are proposed to avoid, mitigate or manage social impacts associated with the project are summarised in Table 18-9.

Table 18-9 Mitigation measures relevant to social impacts

Measure ID	Mitigation measure	Phase
MM-SC01	<p>Workforce Accommodation Strategy:</p> <p>A draft strategy has been developed and will be refined in consultation with relevant stakeholders, including Gannawarra Shire Council and Swan Hill Rural City Council, prior to commencement of construction.</p> <p>The Draft Workforce Accommodation Strategy does not focus on measures to manage the influx of permanent employees, but rather on accommodating the temporary construction workforce. In this context: the strategy will be updated to include:</p> <p>A commitment to agree with local authorities on a maximum influx of permanent workers who would be able to seek to accommodation in the local housing market (rental and/or for purchase) in Years 1 to 3, by location, with any residual housing demands being met through the use of short stay accommodation developed and enhanced as part of the Workforce Accommodation Strategy.</p>	All Phases

Measure ID	Mitigation measure	Phase
MM-SC02	<p>Neighbour Agreement:</p> <p>Rural residents living within 3.5 km of the proposed MIN will be given the option to enter into a Neighbour Agreement with VHM for the duration of the Project. The agreement will recognise that the rural amenity within this area would be altered by the Project, and that this may affect residential satisfaction among those affected.</p> <p>The location of each zone and the associated financial offer will be publicly available and thus disclosed to all participants, to ensure transparency.</p>	All Phases

18.6.2 Monitoring and contingency measures

A comprehensive environmental monitoring regime and complaints process would be established for the Project. The complaints management process for the Project would be established in-line with that required by the Earth Resources Regulation (ERR). The complaints management process, would include the following:

- Provision of a visible and user-friendly system for providing feedback.
- Information on how and where to provide feedback would be published on the VHM website and discussed during community engagement activities.
- Detailed feedback register.
- Clear accountabilities and procedures for staff to investigate and respond to community feedback.
- Commitment to respond promptly, fairly and confidentially to feedback received. VHM will target a response timeframe of less than 48 hours.
- An internal monitoring and auditing system to ensure effectiveness of the complaint management process, and to identify recurrent themes and appropriate management responses.
- VHM undertakes direct contact with the complainant to determine the nature and extent of any impact. All complaints are to be recorded in the company communication database and reported to the appropriate regulators. Community will be provided quarterly summaries of any reportable incidents. VHM will continue to liaise with the complainant to assist in alleviating any concerns or potential ongoing issues.

In addition, the proposed Workforce Accommodation Strategy would include monitoring and contingency measures. As such, no further monitoring and contingency measures are recommended.

18.7 Conclusion

An assessment was undertaken to evaluate potential social impacts associated with the Project, considering the existing environment within the study area and associated construction, operational, and decommissioning and closure activities. The assessment has shown that the construction, operation, decommissioning and closure phases of the Project can be managed such that the objective of minimising adverse social effects can be met. An economic assessment was also undertaken which demonstrates the net economic benefits of the Project to the study area and across Victoria.

The Project would generate notable benefits for the region, in the form of employment creation and wealth generation and the extraction and utilisation of a productive resource which is in demand. Furthermore, the employment created by the Project would assist in attracting and retaining young adults to the region and in doing so, contribute to the viability of community services such as schools and childcare, and inject energy and enthusiasm into activities such as community sports, the arts and alike.

The Project would attract a considerable number of new people to the region and this influx has the potential to place strain on existing housing markets, community facilities and services, and social dynamics, particularly in smaller townships. However, implementation of the proposed Workforce Accommodation Strategy would ensure that the influx of workers into established communities does not exceed each township's capacity to absorb new residents without undue consequences. Notwithstanding, there may a short-term reduction in the affordability and accessibility of rental accommodation in the region, following the initial influx of permanent Project Staff.

The Project would also displace rural land uses and alter the character and amenity of the rural area in proximity to the Mining Areas (within approximately 3.5 km). While all nearby residences would remain habitable, changes to amenity would occur in the context of a quiet and peaceful rural setting. Such changes have the potential to result in a sense of powerlessness among those who are displaced, and perceived inequities between those who benefit financially from the Project and those who are negatively affected by the Project. Notwithstanding, the proponent has negotiated land acquisition contracts for the directly affected farm properties and proposes to

support nearby residents via a Neighbour Agreement. This approach would mitigate negative impacts for displaced rural landholders and nearby residents. The Project would have significant positive economic impact in the study area, and more broadly across the state of Victoria. Across Victoria, the Project is expected to result in a net uplift of approximately \$1.3 billion (in present-value terms, discounted at 7%), in additional GSP, compared to the base case, where it is assumed the Project never enters development. This equates to an average annual economic impact of \$126 million (undiscounted) in additional GSP to the State. Qualitative benefits also include the upgrade of roads, power lines, and water pipelines in the Project area.

In response to the EES evaluation objective described at the beginning of this chapter, impacts of the Project on the socio-economic environment have been assessed, and mitigation and measurement measures have been identified to avoid, minimise and manage adverse social effects.