# Appendix 0

**Social Assessment** 





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# **Balranald Mineral Sands Project**

Social Assessment

Iluka Trim Reference No: 1305935

Prepared for Iluka Resources Ltd | 5 May 2015

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### **Balranald Mineral Sands Project**

Social Assessment - Final

Report J12011RP1 | Prepared for Iluka Resources Ltd | 5 May 2015

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#### 1 Introduction

#### 1.1 Overview

Iluka Resources Ltd (Iluka) proposes to develop a mineral sands mine in south-western New South Wales (NSW), known as the Balranald Mineral Sands Project (the Balranald Project). The Balranald Project includes construction, mining and rehabilitation of two linear mineral sand deposits, known as West Balranald and Nepean. These mineral sands deposits are located approximately 12 kilometres (km) and 66 km north-west of the town of Balranald (see Figure 1.1 and 1.2).

Iluka is seeking development consent under Part 4, Division 4.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) for the Balranald Project, broadly comprising:

- open cut mining of the West Balranald and Nepean deposits, referred to as the West Balranald and Nepean mines, including progressive rehabilitation;
- processing of extracted ore to produce heavy mineral concentrate (HMC) and ilmenite;
- road transport of HMC and ilmenite to Victoria;
- backfilling of the mine voids with overburden and tailings, including transport of by-products from the processing of HMC in Victoria for backfilling in the mine voids;
- return of hypersaline groundwater extracted prior to mining to its original aquifer by a network of injection borefields;
- an accommodation facility for the construction and operational workforce;
- gravel extraction from local sources for construction requirements; and
- a water supply pipeline from the Murrumbidgee River to provide fresh water during construction and operation.

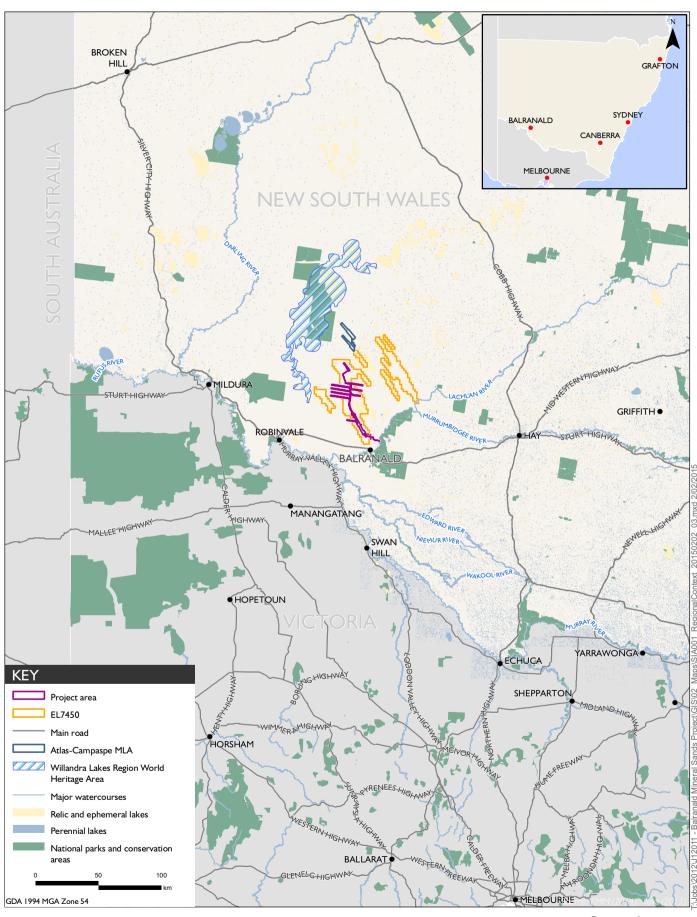
Separate approvals, are being sought for:

- the construction of a transmission line to supply power to the Balranald Project; and
- project components located within Victoria.

#### 1.2 Approval process

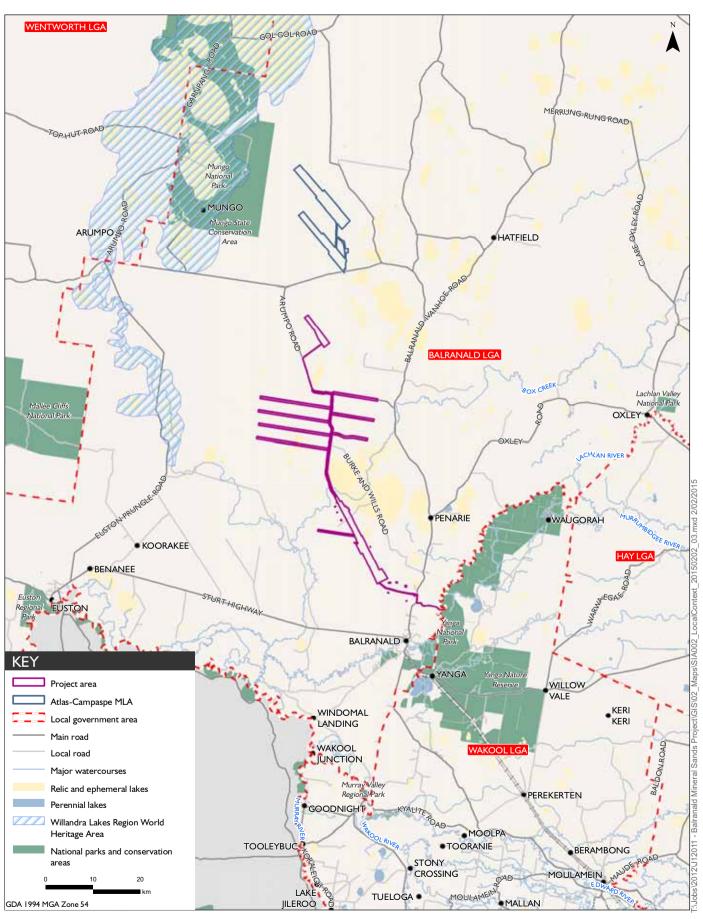
In NSW, the Balranald Project requires development consent under Part 4, Division 4.1 of the EP&A Act. Part 4 of the EP&A Act relates to development assessment. Division 4.1 specifically relates to the assessment of development deemed to be State significant development (SSD). The Balranald Project is a mineral sands mining development which meets the requirements for SSD.

An application for SSD must be accompanied by an environmental impact statement (EIS), prepared in accordance with the NSW *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).













An approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is required for the Balranald Project (with the exception of the transmission line which will be subject to a separate EPBC Act referral process). A separate EIS will be prepared to support an application in accordance with the requirements of Part 8 of the EPBC Act.

#### 1.3 Purpose of this report

EMGA Mitchell McLennan Pty Ltd (EMM) has been commissioned to undertake a social assessment for the SSD application for the Balranald Project. This social assessment has been prepared in accordance with the Secretary's environmental assessment requirements (SEARs) issued on 2 December 2014 and with reference to *Techniques for Effective Social Impact Assessment: A Practical Guide* (Office of Social Policy, NSW Government Social Policy Directorate). It has also been guided by the approach to assessing social impacts that has been advocated in judgements by the NSW Land and Environment Court.

In relation to social aspects, the SEARs require:

an assessment of the likely social impacts of the development (including perceived impacts), paying particular attention to any impacts on Balranald.

This social assessment is based on a substantial body of work undertaken by consultancy Environmental Affairs Pty Ltd for the Balranald Project. This included gathering the majority of the baseline data used in this report; such as documenting the relevant policy context, developing a profile of the Balranald community and documenting the results of engagement with relevant stakeholders.

This social assessment does not consider potential impacts on Aboriginal cultural heritage or potential impacts from the utilisation of shared resources (such as land and water resources). These potential impacts are considered and assessed separately within an Aboriginal cultural heritage assessment and other relevant technical assessments, as prepared by Niche Environment and Heritage and EMM.

#### 1.4 Objectives and tasks

The objectives of the social assessment are:

- to provide an overview of the structure of the Balranald community and establish the types and capacity of existing community infrastructure;
- to identify and document social impacts that are likely to occur in the Balranald community as a result of the construction and operation of the Balranald Project; and
- to identify measures that would appropriately mitigate potential negative social impacts and enhance any positive social impacts of the Balranald Project.

The key tasks undertaken in the preparation of the social assessment include:

- documenting social aspects of the Balranald Project, particularly workforce characteristics and its potential residential distribution at the local level;
- documenting the relevant Commonwealth, State, regional and local policy context;
- development of a Balranald community profile for the assessment areas (see below);

- engagement with stakeholders, including landholders, community groups, local councils, and service providers identified as having an interest in the Balranald Project;
- assessment of potential social impacts on stakeholders at key stages of the Balranald Project;
- development of appropriate mitigation and management measures to address negative social impacts and enhance positive social impacts; and
- identify ongoing monitoring processes to ensure social impacts are responsibly managed and reviewed over time.

#### 1.5 Assessment area

The primary assessment area for this social assessment is Balranald town. The boundary of Balranald town aligns with the Australian Bureau of Statistics (ABS) 2011 Census of Population and Housing (2011 Census) Balranald Urban Centres and Localities (UCLs) boundary (see Figure 1.3). This primary area was determined given its proximity to the project area.

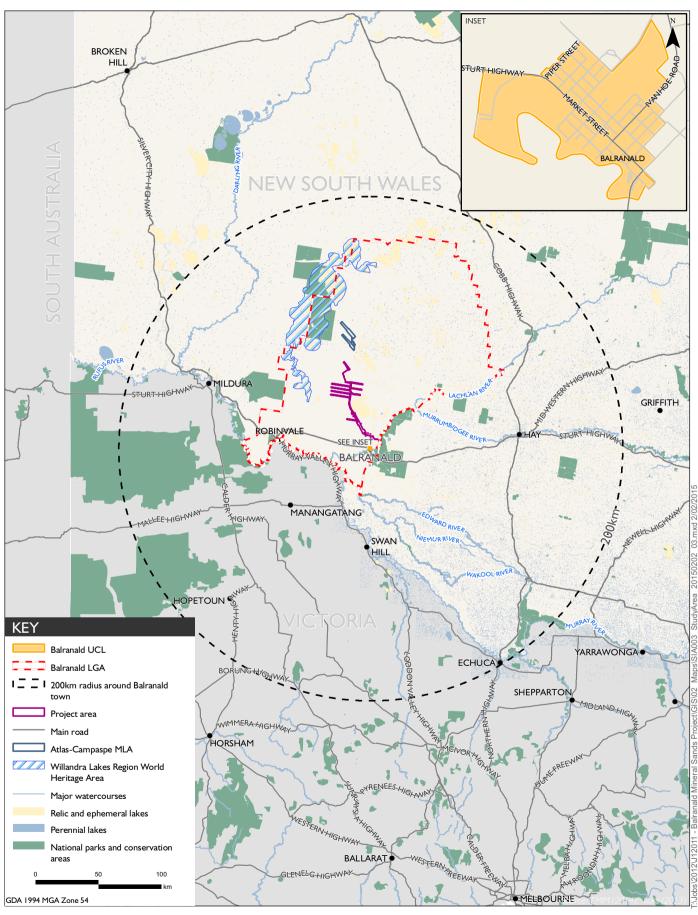
Notwithstanding the above, it should be noted that while Balranald town is the primary assessment area, the Balranald community is generally considered to extend beyond the town of Balranald. The physical extent of the Balranald community varies according to the basis of definition, for example, school catchment areas or source of sporting team participants. As such, statistical assessments are concurrently made (where relevant) within the context of the Balranald local government area (LGA).

Profiles of Balranald town and the Balranald LGA are provided in Chapter 5.

#### 1.6 Structure of this report

This report is structured as follows:

- Chapter 2 presents an overview of the Balranald Project;
- Chapter 3 summarises the relevant policy context for the social assessment of the Balranald Project;
- Chapter 4 describes the results of stakeholder engagement, including the results of a stakeholder interview program;
- Chapter 5 describes the key socio-economic characteristics of the Balranald community and community services;
- Chapter 6 identifies the likely social impacts (positive and negative) of the Balranald Project;
- Chapter 7 nominates proposed mitigation measures to address identified social impacts; and
- Chapter 8 presents the conclusions of the social assessment.







### 2 The Balranald Project

#### 2.1 Project schedule

The Balranald Project would have a life of approximately 15 years, including construction, mining, backfilling of all overburden material, rehabilitation and decommissioning.

Construction of the Balranald Project would commence at the West Balranald mine, and is expected to take about 2.5 years. Operations would commence at the West Balranald mine in Year 1 of the operational phase, which would overlap with approximately the last six months of construction. The operational phase would include mining and associated ore extraction, processing and transport activities, and would be approximately nine years in duration. This would include completion of backfilling overburden into the pits at both the West Balranald and Nepean mines. Construction of infrastructure at the Nepean mine would commence in approximately Year 5 of the operational phase, with mining of ore starting in Year 6, and being complete by approximately Year 8.

Rehabilitation and decommissioning is expected to take a further two to five years following Year 9 of the operational phase.

The Balranald Project construction and operational schedule is depicted in Figure 2.1.

#### 2.2 Project area

All development for the Balranald Project that is the subject of the SSD application is within the project area. The project area is approximately 9,964 ha, and includes the following key project elements, described in subsequent sections:

- West Balranald and Nepean mines;
- West Balranald access road;
- Nepean access road;
- injection borefields;
- gravel extraction;
- water supply pipeline (from the Murrumbidgee River); and
- accommodation facility.

Within the project area, the land directly disturbed for the Balranald Project is referred to as the disturbance area. For some project elements in the project area, a larger area has been surveyed than would actually be disturbed. This enables some flexibility to account for changes that may occur during detailed design and operation. The project area and disturbance area for each project element are in Table 2.1.

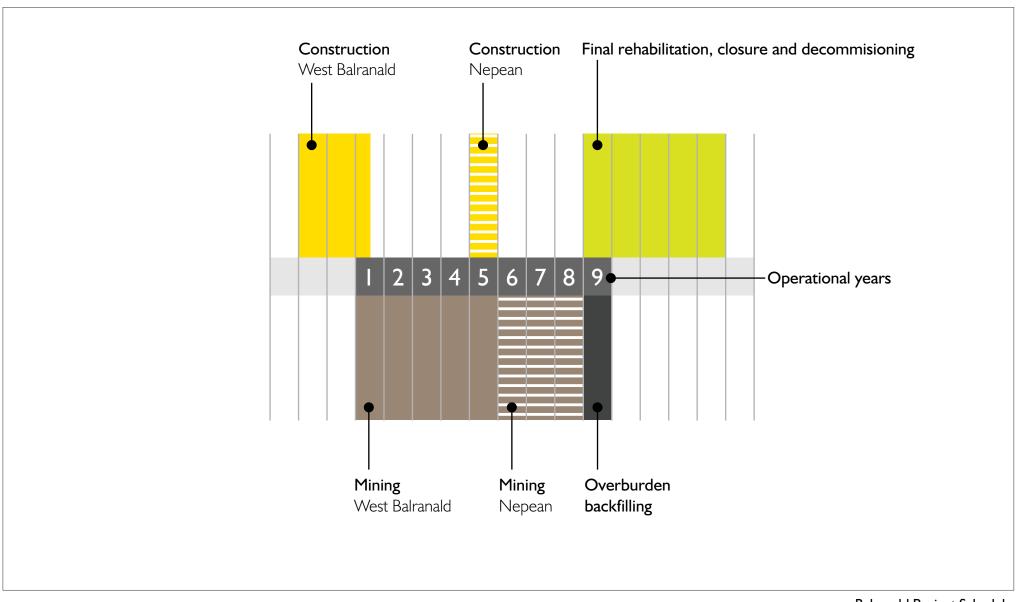






Table 2.1 Project area and disturbance area

Project element	Project area (ha)	Disturbance area (ha)	
West Balranald mine	3,059	3,059	
Nepean mine	805	805	
West Balranald access road	128	52 <sup>1</sup>	
Nepean access road	173	156 <sup>2</sup>	
Injection borefields	5,721	1,214 <sup>3</sup>	
Gravel extraction	42	42	
Water supply pipeline	29	11 <sup>4</sup>	
Accommodation facility	7	7	
Total	9,964	5,346	

Notes:

- 1. 60 m wide corridor within project area.
- 2. 40 m wide corridor within project area.
- 3. 100 m wide corridors within project area.
- 4. 15 m wide corridor within project area.

The Balranald Project, including the project area, can be seen in Figures 1.1 and 1.2.

#### 2.3 West Balranald and Nepean mines

The West Balranald and Nepean mines include:

- open cut mining areas (ie pit/mine void) that would be developed using conventional dry mining methods to extract the ore;
- soil and overburden stockpiles;
- ore stockpiles and mining unit plant (MUP) locations;
- a processing area (at the West Balranald mine), including a mineral processing plant, tailings storage facility (TSF), maintenance areas and workshops, product stockpiles, truck load-out area, administration offices and amenities;
- groundwater management infrastructure, including dewatering, injection and monitoring bores and associated pumps and pipelines;
- surface water management infrastructure;
- services and utilities infrastructure (eg electricity infrastructure);
- haul roads for heavy machinery and service roads for light vehicles; and
- other ancillary equipment and infrastructure.

The location of infrastructure at the West Balranald and Nepean mines would vary over the life of the Balranald Project according to the stage of mining.

### 2.4 Injection borefields

The Balranald Project requires a network of injection borefields in the project area for the return of hypersaline groundwater to the Loxton Parilla Sands aquifer. Within each borefield, infrastructure is generally located in two 50 m wide corridors (approximately 350 m apart) and typically comprises:

- a network of pipelines with a graded windrow on either side;
- access roads for vehicle access during construction and operation;
- rows of injection wells, with wells spaced at approximately 100 m intervals; and
- a series of water storage dams to store water during well development and maintenance activities.

#### 2.5 Access roads

There are two primary access roads within the project area to provide access to the Balranald Project:

- West Balranald access road a private access road to be constructed from the Balranald Ivanhoe Road to the West Balranald mine.
- Nepean access road a route comprising private access roads and existing public roads. A private
  access road would be constructed from the southern end of the West Balranald mine to the Burke
  and Wills Road. The middle section of the route would be two public roads, Burke and Wills Road and
  Arumpo Road. A private access road would be constructed from Arumpo Road to the Nepean mine.

The West Balranald access road would be the primary access point to the project area, and would be used by heavy vehicles transporting HMC and ilmenite. The Nepean access road would primarily be used by heavy vehicles transporting ore mined at the Nepean mine to the processing area at the West Balranald mine.

During the initial construction phase, existing access tracks through the project area from the local road network may also be used temporarily until the West Balranald and Nepean access roads and internal access roads within the project are established.

#### 2.6 Water supply pipeline

A water supply pipeline would be constructed to supply fresh water from the Murrumbidgee River during construction and operation of the Balranald Project.

#### 2.7 Gravel extraction

Gravel would be required during the construction and operational phases of the Balranald Project. Local sources of gravel (borrow pits) have been included in the project area to provide gravel during the construction phase. During the construction phase, gravel would be required for the construction of the West Balranald access road, internal haul roads and service roads, and hardstand areas for infrastructure. Processing operations, such as crushing and screening activities (if required) would also be undertaken at the borrow pits. Gravel for the operational phase would be obtained from external sources.

#### 2.8 Workforce

During the construction phase, the Balranald Project would employ and/or contract a peak construction workforce of approximately 225 people. During the operational phase, a peak workforce of approximately 550 people is anticipated. There would be a short period when there would be an overlap of these workforces as construction is finalised and mining operations commence. During this overlap, it is expected there would be a combined construction and operational workforce of about 450 people.

It is expected that approximately 70% of both the construction and operational workforce would be on site at any point in time with 30% on periods of rostered or other leave periods. Accordingly, the peak construction and operational workforce onsite at anyone point in time is expected to be about 158 people and 385 people respectively. During the overlap of the construction and operational phases, it is expected that there would be approximately 315 people onsite at any one point in time (refer Table 2.2).

Iluka would endeavour to draw the majority of its workforce from the local region, which for the Balranald Project, is defined as the area within a 200 km radius of the town of Balranald (see Figure 1.3) and includes communities such as Moulamein, Mildura, Hay, Swan Hill, Euston, Robinvale etc. Based on data from other Iluka mineral sands operations in the Murray Basin, it is has been assumed that up to 80% of the workforce maybe drawn from this local region, with the remaining workforce requirements being filled from outside this region.

Table 2.2 Peak workforce details

Phase	Total	Locally sourced <sup>1</sup>	Non-locally sourced <sup>2</sup>	On-shift <sup>3</sup>	On-leave⁴	Accommodation facility <sup>5</sup>	Commuting <sup>6</sup>
Construction	225	180	45	158	67	150	8
Operations	550	440	110	385	165	366	19
Overlap construction and operations	450	360	90	315	135	299	16

Notes:

- 1. Peak local workforce sourced from inside a 200 km radius from Balranald town.
- 2. Peak non-local workforce from outside a 200 km radius from Balranald town.
- 3. Peak workforce on-shift at any point in time.
- 4. Peak workforce on-leave at any point in time.
- ${\it 5. Peak work force staying at accommodation facility at any point in time.}\\$
- 6. Peak workforce commuting to site at any point in time.

The nature of the mining and processing activities allows for on-site training and technical education. Where necessary, Iluka would utilise experienced mining engineers, metallurgists and other professionals from its existing operations.

Iluka's approach to employment and business engagement embodies the following principles:

- a preference for local employment wherever possible this approach has been employed across existing Murray Basin operations, with a large proportion of the workforce drawn from the relevant local region;
- local contractors would be encouraged to tender for work, both during the construction and operations phases;
- use of local businesses including hotels, motels, restaurants, hire car and other service businesses over the life of the Balranald Project; and

• support for local businesses may be in the form of assistance in Iluka pre-qualification processes, training in administration of procurement and contracting activities, as well as appropriate publication of business or other service opportunities locally.

#### 2.9 Accommodation facility

An accommodation facility would be constructed to cater for workers required by the Balranald Project. It would operate throughout the construction and operation phases of the project. The accommodation facility would be located adjacent to the West Balranald Mine near the intersection of the West Balranald access road with the Balranald Ivanhoe Road. This site was selected due to a number of factors, including:

- proximity of the site to the West Balranald mine;
- proximity to existing electricity power line and proposed water pipeline;
- a large area of cleared pastoral land available;
- the ability to secure site tenure;
- substantial established vegetation, providing visual screen and noise buffering from Balranald-Ivanhoe Road;
- no identified environmental (flora and fauna) and cultural heritage constraints/impacts; and
- safe site access option off the mine site access road, thus avoiding traffic interaction along Burke and Wills Road.

The facility would provide accommodation for all workers who choose not to commute to the Balranald Project area on a daily basis (see below). It would provide up to about 550 single rooms/quarters to accommodate the construction and operational workforces. The facility itself would be operated by a workforce of about 10 to 20, including administration, cleaning, food preparation, maintenance and security staff.

Based on Iluka's work, health and safety policies which restrict the daily commute time of workers to 60 minutes while 'on-shift', it is anticipated that the vast majority (95%) of the construction and operational workforce would stay at the accommodation facility; therefore, based on Iluka's existing operations experience within the Murray Basin, it has been assumed that only 5% of the construction and operational workforce would commute on a daily basis while on-shift.

As previously stated, it is expected that the peak construction and operational workforce onsite at anyone point in time would be about 158 and 385 people, respectively. During the overlap of the construction and operational phases, it is expected that the combined construction and operational workforce onsite at any one point in time would be about 315 people. Based on the assumption that 95% of this workforce would use the accommodation facility, it is estimated that the facility would cater for a peak of:

- 150 construction employees during the construction phase;
- 366operational employees during the operational phase; and
- 299 construction and operational employees during the overlap of the construction and operation phases.

It should be noted that Iluka is also investigating lodging a separate development application (DA) under Part 4 of the EP&A Act with Balranald Shire Council (BSC) to locate the accommodation facility within Balranald town, at a location on the Balranald-Ivanhoe Road and adjacent to Mungo and River streets. It is recognised that an accommodation facility within Balranald may provide increased benefits for Iluka's workforce (through access to recreational and other services), as well as promoting a higher level of integration with and utilisation of services (ie retail, hospitality, health sectors) provided in Balranald town.

Iluka will progressively develop concepts for a Balranald accommodation facility, including consulting with key stakeholders in a constructive manner, and seek approval under a separate DA to be assessed by BSC. In the event that approval is received for both options, Iluka would only construct an accommodation facility at one of the approved locations.

For the purposes of this social assessment, it is assumed that the accommodation facility will be located adjacent to the West Balranald mine. When the DA for the Balranald town accommodation facility is lodged by Iluka, any changes in social impacts or benefits would be addressed through a subsequent social assessment, as part of the DA process.

### 3 Policy context

#### 3.1 Introduction

The policy context for the social assessment of the Balranald Project is provided at the Commonwealth, state, regional and local levels. Relevant policies are summarised in the following sections.

#### 3.2 Commonwealth context

#### 3.2.1 Strengthening Basin Communities

'Strengthening Basin Communities' is a Commonwealth program that explores a future with less water for the small communities within the Murray-Darling Basin, including the Balranald LGA. Initiated in 2009, the program assisted local governments to assess the impact of less water on their local area and undertake community-wide planning for the future. Some of the local plans generated from this program are discussed in Section 3.5.

#### 3.2.2 Murray-Darling Basin Plan

The Murray-Darling Basin Authority (MDBA) has been preparing a Plan for the Murray-Darling Basin for several years. The final plan, referred to as the 'Basin Plan', was approved by the Federal Environment Minister on 22 November 2012.

The Basin Plan provides a coordinated approach to water use across the Murray-Darling Basin's four states and the Australian Capital Territory. The Basin Plan limits water use at environmentally sustainable levels by determining long-term average Sustainable Diversion Limits (SDLs) for both surface water and groundwater resources.

The MDBA has determined 10,873 gigalitres (GL) per year to be the volume of surface water that reflects an environmentally sustainable level of take as a long term average with different limits for every river valley in the Murray-Darling Basin. For groundwater, this volume is 3,324 GL per year.

The Basin Plan is an adaptive framework and will be rolled out over seven years. It aims to achieve a balance between environmental, economic and social considerations. It allows for further improvements in outcomes through a SDL adjustment mechanism and a constraints management strategy. The Basin Plan is supported by Commonwealth investment in modernising irrigation infrastructure and voluntary water purchasing through the environmental water recovery strategy.

#### The Basin Plan includes:

- an environmental watering plan to optimise environmental outcomes for the Murray-Darling Basin;
- a water quality and salinity management plan;
- requirements for state water resource plans;
- a mechanism to manage critical human water needs; and
- requirements for monitoring and evaluating the effectiveness of the implementation of the Basin Plan.

The Balranald LGA is one of 69 LGAs fully or partly within the Murray-Darling Basin. Balranald town is located on the lower reaches of the Murrumbidgee River; a key tributary of the Murray River. In relation to the Murrumbidgee River, the Basin Plan states that:

The limit is the BDL [baseline diversion limit] minus 320GL per year (local reduction amount) minus the SDL resource unit shared reduction amount.

- Note 1: The Authority estimates the BDL to be 2501GL per year and therefore this limit is estimated to be 2181GL per year minus the SDL resource unit shared reduction amount.
- Note 2: As of 31 March 2012, the reduction achieved is estimated to be 139GL per year and thus the gap remaining is estimated to be 181GL per year in relation to the local reduction amount for this SDL resource unit.

In general, water is to be recovered by water-saving infrastructure and the purchase of water or water licences.

As noted in the socio-economic implications of the proposed Basin Plan:

Agriculture and the communities of the Basin that rely on it have been undergoing significant change for many decades. Particularly since the 1980s, economic reforms and market changes have exerted pressure on agricultural producers. In response, agricultural producers have increased their productivity, farms have grown larger and labour intensity has declined. This has led to significant demographic and social change for Basin communities. More recently the millennium drought had significant impacts on many communities in the Basin. (Murray–Darling Basin Authority 2012b, 8-9).

This comment has particular applicability to the Balranald community given its recent experience of drought conditions in the period from 2002 to 2007 and changes in farming operations and amalgamations of landholdings.

#### 3.3 State context

#### 3.3.1 NSW 2021

The NSW 2021: A Plan to Make NSW Number One (NSW Government 2011) aims to guide policy and budget decisions over the ten year period to 2021. The plan is based around the following strategies:

- rebuild the economy;
- return quality services;
- renovate infrastructure; and
- strengthen the local environment and communities.

Work has been undertaken to localise NSW 2021 by developing tailored priorities for the various regions of NSW. Following consultation with local communities, a regional action plan for the Murray-Lower Darling, in which Balranald is located, was prepared in December 2012 (the Murray-Lower Darling Regional Action Plan).

The Regional Action Plan was underpinned by community consultation which included holding regional forums to hear directly from communities. These forums were aimed at identifying regional issues and priorities how the State Government could assist in delivering those priorities. The key priorities identified by communities within the Murray-Lower Darling Regional Action Plan include:

**Prosperous and economically diverse** – The Murray-Lower Darling will use its competitive advantages in location, workforce availability, climate, education and training opportunities, agribusiness and infrastructure to grow and diversify the economy. The region will be recognised as a place for new and innovative business concepts, products and services and for nurturing new high-value export-orientated industries in agriculture, manufacturing, mining, transport, arts and culture.

**Providing quality education and training opportunities** – The Murray-Lower Darling region will continue to be home to quality education and research institutions. Industry and educational institutions will partner to promote lifelong learning and provide people with more education, training and employment options.

**Recognised for its strong communities** – The Murray-Lower Darling will be recognised for its resilient communities and effective regional leadership to adapt to the challenges of water management, climate change and the ever changing nature of agriculture production in inland NSW.

**Well-connected** – The Murray-Lower Darling will be well-connected with increased access to transport services within our region and to other regions and major airports. Roads will be upgraded to continue to support the critical transport and logistics industry. Improvements and increased access to new technologies will link the Murray-Lower Darling region to high quality reliable mobile and internet services.

Specifically in relation to growth and diversification of the economy, the Murray-Lower Darling Regional Action Plan states:

The Murray-Lower Darling region has a strong economy based on agriculture, forestry, the services sector, tourism and the training sector. There are further opportunities to grow the economy and increase regional business investment through the expansion of manufacturing, food processing, logistics industries and the new mineral sand mining industry in the west of the region.

Expansion of these industries will increase local employment opportunities, including for young people. Delivery of education and training services to support these industries will be required to ensure local people have the skills required to take advantage of new employment opportunities.

# 3.3.2 State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

The State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP) is a state wide planning policy on mining, petroleum production and extractive industries. The Mining SEPP recognises that mining, petroleum production and extractive industries are important for NSW. The Mining SEPP aims to, among other things:

- provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of NSW;
- facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources;

- promote the development of significant mineral resources; and
- establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources.

NSW government policy supports economic growth and improvement in community services. Explicit policy support is given in the Mining SEPP for the responsible development of mining projects which extract mineral resources which promote the social and economic welfare of NSW.

#### 3.4 Regional context

The Murray Regional Plan NSW 2010-2015 (Regional Development Australia [RDA] Murray 2010) sets out an economic, environmental and social vision for the Murray region<sup>1</sup> to 2020. The Plan was developed through discussions and consultations with various stakeholders across the region and the review of existing planning documents. The Plan includes seven priority sectors for the Murray region which are clustered under four goals, as follows:

Goals	Priority sectors
Economic	Industry and smart futures
	Capacity for growth
Environmental	Maintaining balance
Social	Sustaining communities
	Health and well being
Integration	Linking the region
	Providing leadership

The seven priority sectors provide RDA Murray the structure around which projects and annual business plans are developed. The RDA Murray's focus is on projects of regional significance.

#### 3.5 Local context

To understand baseline or pre-development conditions in the locality, a review of a number of BSC's publicly available management and strategic plans was carried out. Council undertook extensive community consultation in the development of its strategic plans and, as a result, they reflect local community aspirations and values.

#### 3.5.1 Balranald Shire Community Strategic Plan 'Balranald Shire 2022'

The preparation of the *Balranald Shire Community Strategic Plan 'Balranald Shire 2022'* (Balranald Shire 2022) and its companion plans, the community development plans for Balranald and Euston (see below), was undertaken to ensure compliance with relevant requirements of the NSW *Local Government Act 1993*.

<sup>&</sup>lt;sup>1</sup> The Murray Region comprises 13 LGAs (including Balranald LGA) and covers 85,897 km<sup>2</sup> and extends along 1,400 km of the Murray River.

#### As noted in Balranald Shire 2022:

Balranald Shire 2022 is not a Council plan, but a long term planning document tool for all stakeholders with an interest in the future of the Balranald Shire and its communities. It is the overarching planning document for the Shire.

Balranald Shire 2022 is supported by the Balranald Shire Delivery Program 2012-2016 which documents how the community's strategic goals as presented in Balranald Shire 2022 have been translated into actions. The delivery program states that it:

... represents a statement of commitment to the community from the elected council. In preparing the Program, the Council is accounting for its stewardship of the community's long-term objectives, outlining what it intends to do towards achieving these objectives during its term of office and what its priorities will be.

Balranald Shire 2022 is an LGA-wide plan that encapsulates a set of strategic actions that are best implemented across the LGA. The following vision statement is the intended outcome for the Balranald LGA and its communities through the implementation of Balranald Shire 2022:

To create a better, more vibrant, more resilient and more engaged community, by capitalising upon its human, cultural, environmental and business assets and encouraging a strong sense of civic participation and pride.

The community consultation process for Balranald Shire 2022 identified a number of values that were highly appreciated by residents of the Balranald LGA, namely:

• sense of community

rural roots and connection

family connection

• unity

sense of history

positivity

• lifestyle

liveability

• cultural and religious diversity

environment

amenities and aesthetics

opportunity and options

• safety and freedom

partnerships and collaboration

accountability

Balranald Shire 2022 also outlines BSC's role as a service provider to the Balranald community as extending well beyond 'roads, rates and rubbish'.

The 18 community strategic objectives derived from six pillars of wellbeing are presented in Table 3.1. For each of these strategic objectives, Balranald Shire 2022 sets out strategies, priorities and actions, responsibility and BSC's role.

Table 3.1 Balranald Shire 2022 - Pillars of wellbeing and community strategic objectives

Pillars of well being	Community strategic objectives
Our People     A community that is proactive, engaged,	<ul> <li>Create more opportunities for community members to socialise and connect in our community.</li> </ul>
inclusive and connected	<ul> <li>Create and promote opportunities for greater community awareness and participation in the life of our community.</li> </ul>
	<ul> <li>Involve, support and prepare our young people.</li> </ul>
2. Our Place	Promote our community as a lifestyle, work and business destination.
A liveable and thriving community that maintains lifestyle opportunities and addresses levels disadvantages	<ul> <li>Create opportunities to assist community members who are disadvantaged or at risk.</li> </ul>
audi esses ieveis uisauvairtages	<ul> <li>Provide a wide range of passive and active recreation and sports events, clubs, facilities and opportunities.</li> </ul>
3. Our Economy A community that ensures a strong and	<ul> <li>Strengthen the capacity and opportunities for our local business communities.</li> </ul>
resilient economy	<ul> <li>Develop and promote our community as a desirable place to stop, stay and experience the outback and river environments of South Western NSW.</li> </ul>
	<ul> <li>Increase the net number, quality and variety of employment and training opportunities for our community members.</li> </ul>
4. Our Culture A community that respects and celebrates its diverse cultures heritage and arts	<ul> <li>Promote opportunities to acknowledge and celebrate our diverse cultures and faiths.</li> </ul>
5. Our Infrastructure A community that maintains and	<ul> <li>To preserve and enhance our natural environments ensuring they remain sustainable, healthy and clean.</li> </ul>
strengthens its natural and built environment	Promote key communications and infrastructure improvements.
environment	Undertake key transport and energy infrastructure improvements.
6. Our Leadership A community that values and fosters	<ul> <li>Enhance our community capacity through building the local leadership base of the community.</li> </ul>
leadership, lifelong learning innovation and good governance	<ul> <li>Maintain a lifelong learning focus in our Shire by providing an ever growing range of skill development, education and training opportunities and facilities.</li> </ul>
	<ul> <li>Strengthen interagency collaboration and partnerships and facilitate synergistic actions.</li> </ul>
	<ul> <li>Continually identify and service the necessary financial and technical support to achieve our community aspirations.</li> </ul>
	<ul> <li>Operate an effective and efficiently managed Council that provides strong civic leadership, sound governance and facilitates community participation and decision making.</li> </ul>

Source: Balranald Shire Council 2012a.

# 3.5.2 Strengthening Basin Communities - Community Development Plans for Balranald and Euston 2012-16

As a complement to Balranald Shire 2022, two community plans were prepared for the towns of Balranald and Euston (Balranald Shire Council 2012c), the two largest towns within the Balranald LGA.

The context and the framework for the community plans are provided by BSC's vision statement, community pillars of wellbeing, community goals and a set of guiding principles derived largely from Balranald Shire 2022.

The community assets and opportunities for Balranald town were identified as:

- its people assets strong business, community and sporting groups/clubs;
- its infrastructure and services education, health, community and recreation;
- its location proximity to Swan Hill and northern and central Victoria and on the Sturt Highway;
   and
- its tourism assets and potential attractions within Balranald and proximity to Yanga and Mungo national parks.

The community challenges and issues identified for the Balranald town were:

- decline in population, businesses and services;
- ageing population;
- lack of employment diversity;
- lack of secondary industry;
- degree of factionalism and negative attitudes within community;
- limited youth services and programs;
- heavy traffic in main street;
- declining school attendances with an increasing number of students travelling to Swan Hill each day;
- tired appearance of main commercial and retail areas; and
- lack of business associations.

In response, a number of recommended actions were identified in relation to the areas presented in Table 3.2.

Table 3.2 Community Development Plan for Balranald town – Recommended actions, key step and success indicators

Recommended action	Key steps	Success indicators	
Youth programs	<ul> <li>Re-establish the Youth Council</li> <li>Investigate the establishment of a Youth Centre</li> <li>Investigate the appointment of a Youth Worker</li> <li>Construct a skate park</li> <li>Facilitate school holiday programs</li> <li>Expand options at the swimming pool</li> <li>Provision of new youth opportunities</li> </ul>	<ul> <li>Increased range of non-sporting opportunities for young people</li> <li>Enhanced youth participation and empowerment</li> <li>Less unacceptable juvenile social behaviours</li> </ul>	

Table 3.2 Community Development Plan for Balranald town – Recommended actions, key step and success indicators

Recommended action	Key steps	Success indicators
Leisure centre	<ul> <li>Examine options in other similar sized communities and formulate a range of possibilities</li> <li>Consultation with the community, and promotion of opportunities</li> <li>Development of business plan</li> <li>Identification and acquirement of funding</li> <li>Establishment and operation</li> </ul>	<ul> <li>Establishment and functioning of a multipurpose centre</li> <li>Provision of a range of new recreational opportunities</li> <li>Healthy lifestyles for residents</li> <li>Enhanced community participation and social energy</li> </ul>
Signage and town entrance strategy	<ul> <li>Undertaking of an entrances/signage audit</li> <li>Development and implementation of an improvement plan</li> </ul>	<ul> <li>Attractive town entrances</li> <li>Enhanced community pride</li> <li>Increased tourism benefits</li> <li>Clear and easy navigation for tourists</li> <li>Signage reflecting the spirit and key messages the town wants to portray to visitors</li> </ul>
Business association	<ul> <li>Develop a Balranald business association to represent business interests and create opportunities for business collaboration</li> <li>Instigation of a regular business after hours networking event</li> <li>Introduction of an annual business awards program</li> <li>Establishment of a monthly growers/community market to promote local produce/goods and artists</li> </ul>	<ul> <li>Creation of strong business networking group</li> <li>Enhanced business collaboration, capacity and performance</li> </ul>
Business training	<ul> <li>Audit of local training needs</li> <li>Implementation of a calendar of training events</li> </ul>	<ul> <li>Enhanced business capacity and morale</li> <li>Enhanced business profitability</li> <li>Enhanced customer service standards</li> <li>Local employment growth</li> </ul>
Mining taskforce	<ul> <li>Establish a mining liaison committee to maximise positive community outcomes from potential mining activities</li> <li>Linkage of activities with broader population expansion strategies</li> <li>Instigate regular dialogue with mining companies</li> </ul>	<ul> <li>Population growth</li> <li>Enhanced business activity</li> <li>Diversified employment opportunities</li> </ul>

Source: Balranald Shire Council 2012c.

#### 3.5.3 Balranald Shire Economic Development Strategy

The *Balranald Shire Economic Development Strategy (Western Cluster) 2011-16* (Balranald Shire Council 2011b) identified 14 projects aimed at stimulating economic growth within the Balranald LGA.

Some of the key projects relevant to the Balranald Project are:

- retain and attract residents BSC aims to improve the range of education, health, allied health, training, continued improvements to a higher degree of recreation and provision of events and other social activities.
- trade training centre the trade training centre at Balranald Central School provides the
  opportunity to up skill the current workforce in response to the expected future growth from
  mining. Development of a localised workforce will reduce the potential for a drive in/drive out
  mining culture and strengthen the local trade workforce. The trade training centre aims to
  incorporate Indigenous training.
- sand mining [sic] potential mineral sand mining projects will create up to 200 direct jobs. This will provide diversification to the region and see at least \$15 million per annum put into the LGA. The challenge for the LGA will be to cope with rapid expansion and to retain people longer term. Balranald aims to become the centre of the sand mines with headquarters and depots located in the town. This industry sector provides an opportunity for the community to develop industry sector diversification and growth of population. Consideration of improvements to community infrastructure (recreation and children's services) will increase the potential for new residents and in particular families.
- small business, retail and service sector strategies the retail and service sector could expand to
  maximise growth opportunities from mining and tourism. The retail sector expansion program
  needs to include encouraging locals to buy local and enhancing the current service culture of the
  retail industry.
- Indigenous involvement opportunities to employ Indigenous people in forthcoming mining projects should be explored.

#### 3.5.4 Draft Balranald Crime Prevention Plan 2011-15

The *Draft Balranald Crime Prevention Plan 2011-15* (Balranald Shire Council 2011c) identified the following list of crime priority areas affecting the Balranald LGA:

- assault (domestic, family and common);
- property crimes;
- alcohol-related crimes;
- youth at risk; and
- safety through community development.

The plan acknowledges that a major challenge for success will be for agencies to collaborate and form stronger partnerships to take best advantage of scarce resources in the local region.

### 3.6 Consistency of the Balranald Project with policy context

There are several recurring themes in the policy context for the Balranald Project, namely, the need to:

- support rural communities experiencing structural and other socio-economic changes;
- support and encourage environmentally responsible economic development that will assist in increasing and diversifying employment opportunities; and
- improve community sustainability and regional linkages particularly in relation to community service provision.

The Balranald Project is considered to be consistent with this collective policy framework and would help to achieve these objectives in Balranald town and LGA. Iluka can stimulate new direct and indirect economic activity within the Balranald region, contributing to community development objectives and supporting regional economic development through the provision of new local employment and training opportunities and increased opportunities for local businesses. The results of other technical assessments that underpin the EIS for the Balranald Project, indicate that it will be developed in an environmentally responsible manner and will contribute to sustaining the local community over the life of the mining activities.

### 4 Stakeholder engagement

#### 4.1 Introduction

Engaging with stakeholders, particularly community stakeholders, is a crucial part of Iluka's corporate objectives, and is particularly relevant for the successful development of its projects and ongoing operations.

Iluka has implemented a comprehensive stakeholder engagement program aimed at providing information on the Balranald Project and responding to enquiries from the general public. Engagement to this point has included meetings and briefings with identified stakeholders, provision of newsletters at a local and regional level and holding community information sessions. In addition, during preparation of this social assessment, a number of interviews were held with a range of community stakeholders including community service providers, businesses, community leaders and landholders.

#### 4.2 Stakeholder interviews

#### 4.2.1 Methodology

Based on desktop research and visits to Balranald town, a list of potential stakeholders to interview was developed.

Generally, interviewees were contacted in advance of the interview to advise of the scope of the social assessment and to arrange an interview time. Interviews were conducted using a structured interview outline to ensure the collection of consistent information from respondents.

An overview of the information gained during the interviews is presented in Table 4.1 and Section 4.2.2 below and also contributes to the description of community services and facilities presented in Section 5.2.

A total of 65 interviews with identified stakeholders was undertaken during the periods of:

- 24 to 26 July 2012;
- 12 and 13 September 2012;
- 30 October and 1 November 2012; and
- 21 to 23 January 2013.

While most interviews were held face-to-face, some interviews were undertaken by telephone.

It should be noted that at the time when all interviews were undertaken, a preferred site for the proposed accommodation facility was not defined but was proposed to be in, or adjacent to, Balranald town. As a result, some of the targeted stakeholder groups reflect this scenario (ie inclusion of Mungo Street residents), as does any commentary provided on the impacts or benefits of an accommodation facility within Balranald town.

All interviews were undertaken by Iluka consultant Environmental Affairs.

Table 4.1 Summary of stakeholder interviews

Community group	Number of groups interviewed	Number of people interviewed
Health	2	2
Education	3	3
Community services	2	6
Emergency services	4	5
Religious dominations	3	3
State and local government representatives	3	7
Business	15	23
Potentially affected landholders	NA	11
Mungo Street residents	NA	5
Total	32	65

Further details on stakeholder interviews are provided in Appendix A.

#### 4.2.2 Results

#### i Overview of responses from interview program

The key responses from the interviews are summarised under the following headings:

- Iluka's workforce arrangements;
- community services and facilities;
- accommodation and housing;
- community attributes and attitudes; and
- attitudes to the Balranald Project.

Each of these matters are addressed below.

#### ii Iluka's workforce arrangements

There was some community interest in the proposed Iluka workforce arrangements, potential employment opportunities for local people and how local people, especially young people, could position themselves to be considered for jobs with Iluka or its contractors. Also, there was interest in transport arrangements to and from the Balranald project area. There was also general interest in the proposed location of the accommodation facility, with a site adjacent to Mungo Street of particular interest.

There was some concern about the cumulative flow-on effects of the Balranald Project and Cristal's Atlas-Campaspe Mineral Sands Project luring local workers away from existing employers who would not be able to compete with (perceived) higher wages, specialised training and prospects of a job in the mining industry. There was also some concern that this potential 'hollowing out' of the local workforce might have a negative impact on development of the nascent tourism sector in Balranald related to the key attractions of Yanga and Mungo national parks. The question was raised about who would assist with training for replacement employees in the hospitality, retail, agriculture and other local employment sectors that might lose employees to the Balranald Project.

Regardless of the Balranald Project, both BSC and Balranald Inc, a local business association, are grappling with how to 'reposition' Balranald in terms of changing economic and technological circumstances and the resulting employment base.

#### iii Community services and facilities

For a town of its size and regional location, Balranald was considered to be currently well served by essential community services and facilities, including hospital and medical services, pre-school/child minding, primary and secondary schools, emergency services, retail sector, recreation and government — most of which have some capacity due to continuing population decline in Balranald town and the LGA.

Some service coverage issues were raised for emergency services such as police, ambulance and rescue service because of limited staffing and delays in response times if crews are attending incidents away from their Balranald bases, given the extensive areas for which all these services are responsible.

Interest was expressed in what on-site occupational health and safety and emergency services and equipment would be located on the Balranald project area and how Iluka's on-site safety resources would interface with existing rescue and emergency services in Balranald.

The retail sector in Balranald is relatively limited due to the small catchment population and the leakage of expenditure to larger centres such as Swan Hill and Mildura. Some community members expressed concern that the opening hours for some local shops were limited, for example, some businesses close at lunchtime during the week and at lunchtime on Saturdays for the weekend and the similar and relatively early closing times of the two supermarkets.

Some people in the service sector (including teachers, police and ambulance) are considered to be more transient as they move to Balranald, spend the required time to get a promotion or relocation to preferred locations, and move away from the area. However, this is balanced by some long serving employees with strong family and other social ties in the district.

# iv Accommodation and housing

Some concern was expressed that mining-related short term accommodation demands would take up a lot of the existing tourist and temporary accommodation (motels and cabins at caravan park) and, as a result, create difficulties for tourism and travellers with the resulting loss of some of this market to other centres along the Sturt Highway. There was however acknowledgement from some motel operators that Iluka's presence in Balranald undertaking exploration, environmental investigations, stakeholder engagement and other project development activities over recent years has been an important component for some motel operators and is resulting in occupancy rates well above industry and town averages.

There is some expectation that the Balranald Project would generate demand for established housing and thus push up prices in this sector in the town. Some people indicated that they are waiting for an increase in housing prices that they perceive would be generated by mining projects in the area. Such an increase would enable home owners to exit the Balranald housing market and buy in higher priced housing markets such as Swan Hill that are currently considered to be out of financial reach. However, some people struggle to buy houses in Balranald town now because of cost, availability and/or suitability.

As noted above, there was interest in the Iluka workforce arrangements in general and the related accommodation arrangements, in particular, the potential location, appearance and other aspects of the accommodation facility and need for other housing throughout the urban area of Balranald. Based on people's observation of other such temporary accommodation facilities associated with mining projects elsewhere, mention was made that should the accommodation facility be constructed in Balranald town, it's appearance would need to fit in with the town, through measures including advanced site landscaping, site layouts which are less regimented, and use of different coloured modular units. These matters will be addressed in the plans to be submitted with the DA to BSC.

## v Community attributes and attitudes

A common theme from the stakeholder interviews was that Balranald town is considered to be a safe, harmonious and socially well-connected community with many multi-generational residents. The positive aspects of life in a small community were repeatedly mentioned about Balranald including the willingness of the community to repeatedly rally around when people have illness or other major troubles, passive surveillance of and support for elderly or vulnerable folk and pride in the appearance of the town – public and private property is generally well maintained and respected.

It was apparent that there is some entrenched and long standing community reaction to changes imposed from 'outside' that do not accord with local values and way of life, for example, the purchase by the NSW Government of the Yanga pastoral property to the east of the town of Balranald and its conversion to a national park and the related closure of the red gum timber industry.

The Balranald community is still dealing with economic restructuring locally as a result of job losses in the agricultural sector (property amalgamations and drought), impacts to sectors of the timber industry, population decline and closures or downsizing such as the closure of the Distance Education Centre at the Central School.

Some business people expressed concern about the real or perceived complacency of existing and/or long standing businesses in Balranald to 'continuously improve' and the community's willingness to accept levels of service that are not 'best practice' or consistent with contemporary standards. This concern seemed more directed to 'local restructuring' and how to embrace opportunities presented by the tourism sector based on both the Sturt Highway's passing trade and leveraging off the opportunities presented by the recently established Yanga National Park.

A recurring theme expressed by stakeholders was for the need for 'new blood' in community organisations and sporting teams that might come with any project-related population increase. As in many small rural towns, it was considered that the burden of keeping clubs and organisations going rested with the same old people.

# vi Attitudes to the Balranald Project

There were generally very positive attitudes to the Balranald Project in the Balranald community. These positive attitudes appeared to extend from the excessively optimistic (the Balranald Project will solve all Balranald's problems) to the more grounded and realistic (the project will be good for the town even if benefits don't turn out to be as great as some people expect, or we recognise that the Balranald Project may be delayed due to market conditions but the deposit won't go away so it is likely to be developed as some future stage).

Some people did not envisage that there would be a large impact on Balranald because of the proposed lluka workforce arrangements where most workers would be on 'drive in/drive out' or 'fly in/fly out' basis. Some scepticism was expressed about the extent of the economic benefits to Balranald town that may flow from the Balranald Project (eg it was thought that bulk buying of food for the accommodation facility would occur elsewhere).

There also appeared to be some confusion among some community members about the location of the Balranald project area, and its location, timing and other aspects relative to Cristal's Atlas-Campaspe Mineral Sands Project located to the north of the Balranald Project.

# 4.3 Community information sessions

Community information sessions on the Balranald Project were held in the township of Balranald on:

- 31 October 2012;
- 11 and 12 October 2013; and
- 10 and 11 October 2014.

The community information sessions were held as part of, or during, the Balranald 5 Rivers Outback Festival, an annual community festival held at the township of Balranald since 2010<sup>2</sup> over the October long-weekend.

The purpose of these community information sessions was to provide information on the Balranald Project to a broad range of the community, including the regional community which is attracted to the festival. The information sessions and displays were advertised in the local newspaper and on radio. Any interested members of the community were able read the displays and talk to representatives from Iluka about the Balranald Project.

Information provided at the most recent community information sessions included details on Iluka and its operations in the Murray Basin, mineral sands and how they are used, the Balranald Project and the approvals required for the project to commence, and methods for obtaining more information about the project.

Copies of the information displays provided at the most recent community information sessions on 10 and 11 October 2014 are provided in Appendix B. The information displays were also distributed as flyers at this event and were made available at Iluka's Balranald town office.

In addition to these broad community information sessions, Iluka has also conducted information sessions and briefings to targeted audiences, providing further opportunities for these groups to receive updated information on the Balranald Project as well as to raise questions or provide advice to Iluka. Since 2013, Iluka has provided briefings on a quarterly basis to BSC, and through 2014 has met periodically with the Homebush Landcare Group, an incorporated body that represents the land management interests of the farmers within the areas north of Balranald town.

<sup>&</sup>lt;sup>2</sup> The Balranald 5 Rivers Outback Festival was not held in 2011. It was been held in 2010, 2012, 2013 and 2014.

On 27 November 2014, Iluka operated a site visit with landholders central to the Balranald Project development. The site visits incorporated a discussion on future mining development with a particular reference to groundwater management.

These targeted information sessions and site visit provided Iluka an opportunity to further discuss and validate issues raised during the initial stakeholder interview process by maintaining dialogue with key community representatives through the project development phase.

# 4.4 Community newsletters

As part of Iluka's community engagement and project consultation activities, newsletters have been periodically distributed within the Balranald locality. The most recent newsletters were distributed in November 2013 and October 2014, with further newsletters proposed every three to six months following.

Copies of the community newsletters are provided in Appendix C.

# 4.5 Other

Additionally, Iluka maintains general project information on its website (<a href="www.iluka.com">www.iluka.com</a>), while contact information has been widely distributed within Balranald to allow community members to directly engage and respond to Iluka through a dedicated community relations advisor by phone, email or a request for a meeting to be held locally.

# 5 Community and services profile

# 5.1 Key socio-economic characteristics

Key socio-economic characteristics from the 2011 Census for the Balranald UCL and Balranald LGA, as well for non-metropolitan NSW and NSW overall are given in Table 5.1 and summarised below.

UCLs are a geographical unit that statistically describe Australian population centres with populations exceeding 200 persons. Centres with a core urban population of 1,000 persons or more are considered to be urban centres, whilst smaller centres with populations of 200 persons or more and a core urban population below 1,000 persons are considered to be localities. Balranald UCL, which had a population of 1,159 as at the date of the 2011 Census, is considered to be an urban centre.

It should be noted that there were changes to ABS collection catchment for localities between the 2006 and 2011 censuses. This resulted in a small increase in the size of the Balranald locality between 2006 and 2011.

The demographic data referenced in this chapter is provided in more detail in Appendix D.

A map showing the boundary of the Balranald UCL and Balranald LGA can be seen in Figure 1.3. The Balranald UCL is essentially the same as Balranald town.

#### 5.1.1 Population size, growth and future change

Balranald UCL had a population of 1,159 in 2011, which is a decrease of 57 people (or -4.7%) from the population in 2006 (1,216 people). Balranald LGA had a population of 2,283 in 2011. Since 2006, the LGA has experienced population decline of -6.5% (from 2,441). This decline was not consistent with the pattern across non-metropolitan NSW and NSW, which experienced population increases of 3.8% between 2006 and 2011.

Based on Department of Planning and Environment (DP&E) forecasts in 2010, Balranald LGA is likely to experience a continued decline in population through to the year 2036 (–0.7% per year). Non-metropolitan NSW is likely to experience low population growth (1%) over this period.

In 2011, 50.8 and 51.5% of the Balranald UCL and LGA respectively were male, and 49.2% and 48.5% of the Balranald UCL and LGA respectively were female. This compares with 49.3% male and 50.7% female for NSW overall.

In 2011, 8.6% and 6.8% of the population of the Balranald UCL and Balranald LGA, respectively, were Aboriginal or Torres Strait Islanders. This is higher than non-metropolitan NSW and NSW overall where 4.6% and 2.5% of the population, respectively, were Aboriginal or Torres Strait Islanders.

# 5.1.2 Population structure

In 2011, Balranald UCL had an older age structure with a high representation of people aged 45 to 54 years (17.4%) and 65 years and over (20.3%). Other than the 60 to 84 year and above 85 years cohorts, the smallest cohorts in the UCL were represented by 25 to 29 year olds and 30 to 34 year olds (3.8% and 3.4% each).

In 2011, compared to non-metropolitan NSW, the Balranald LGA had a higher representation of people aged 45 to 54 years (15.9% to 14.1%) and 35 to 44 years (13.3% to 12.6%), with a higher proportion of children aged 0 to 4 years (7.3% to 6.3%) and 5 to 11 years (9.7% to 9.0%). There was also a high proportion of people aged 65 years and over (15.6%). However, this was lower than non-metropolitan NSW (18.0%). The smallest cohorts in the Balranald LGA were younger (teenagers) and early working age groups - 12 to 17 year olds (7.6%) and 18 to 24 year olds (6.8%).

In 2011, Balranald UCL had a median age of 44 years and, and Balranald LGA and non-metropolitan NSW had a median age of 41 years. This was above the NSW average (38 years).

 Table 5.1
 Key socio-economic characteristics

Characteristic	Balranald UCL <sup>1</sup>	Balranald LGA	Non-metropolitan NSW	NSW
Population 2011 (persons)	1,159	2,283	2,512,949	6,917,660
Population 2006 (persons)	1,216	2,441	2,419,815	6,549,178
Population growth (2006-2011) (%)	-4.7	-6.5	3.8	5.6
Annual rate of population 2006-2011 (%)	-1%	-1.3	0.8	1.1
Forecast population growth <sup>2</sup> 2011-2036 (%)	N/A	-0.7	1.0	1.6
Male population 2011 (persons and %)	589 (50.8%)	1,175 (51.5%)		3,408,878 (49.3%)
Female population 2011 (persons and %)	570 (49.2%)	1,108 (48.5%)		3,508,780 (50.7%)
Indigenous population 2011 (persons and %)	100 (8.6%)	155 (6.8%)	115,596 (4.6%)	172,621 (2.5%)
Younger age 0 to 4 years 2011 (%)	6.4	7.3	6.3	6.6
Working age <sup>3</sup> 15 to 64 years 2011 (%)	61.5	63.9	62.5	66.0
People aged 65+ years 2011 (%)	20.3	15.6	18.0	14.7
Median age 2011 (years)	44	41	41	38
Unemployment September 2014 <sup>4</sup> (%)	Not available at the UCL level	5.%	-	5.7%
Industry structure 2011 (largest categories)	Health care and social assistance, agriculture/ forestry/fishing, retail trade	Agriculture/ forestry/fishing, health care and social assistance, accommodation and food services	Health care/ social assistance, retail trade, education and training and manufacturing	Health care/ social assistance, retail trade, manufacturing, and professional scientific and technical services
Occupational structure 2011 (largest categories)	Labourers, machinery operators and drivers, managers, and community personal services	Managers, labourers, technicians/ trade workers and clerical/ administrative workers	Professionals, technicians/ trades, managers, and clerical/ administrative workers	Professionals, clerical/ administrative workers, and technicians/ trades

**Table 5.1 Key socio-economic characteristics** 

Characteristic	Balranald UCL <sup>1</sup>	Balranald LGA	Non-metropolitan NSW	NSW
Average household size 2011 (persons)	2.3	2.4	2.4	2.6
Average weekly household income 2011 (\$)	838	894	961	1,237

Source: ABS 2006 and 2012.

Notes: 1. Changes to ABS collection catchment for Gazetted Localities occurred for 2011 Census data.

- 2. DP&E, 2010. NSW Statistical Local Area Population Projections.

  2. The ABS defines the working are for labour force) as usually resident Australian similar population and 15 and average.
- 3. The ABS defines the working age (or labour force) as usually resident Australian civilian population aged 15 and over (noting that the retirement age is currently 65).
- 4. Department of Education, Employment and workplace Relations. Small Area Labour Markets Australia September Quarter 2014.

#### 5.1.3 Household structure

In 2011, the Balranald UCL and LGA had a higher percentage of couples with no children (44.3% and 42.2% respectively) that non-metropolitan NSW and NSW overall. Conversely, they also had a lower percentage of couples with children, particularly in the Balranald UCL. The Balranald UCL and LGA had a much lower proportion of lone person households (15.9% and 12.7% respectively) compared to non-metropolitan NSW and NSW (26.9% and 24.2% respectively).

In 2011, the Balranald UCL, Balranald LGA and non-metropolitan NSW generally had the same average household size of 2.3 or 2.4 persons. This was slightly below the NSW average of 2.6 persons.

### 5.1.4 Economic structure

In 2011, primary industries (agriculture, forestry and fishing) dominated in the Balranald LGA with 31.2% employed in this industry category with the next largest category being health care and social assistance (9.9%). While agriculture dominated those people employed in the Balranald UCL (a total of 9.2% made up of sheep, beef cattle and grain farming 6.1% and fruit and tree nut growing 3.1%), 7.1% worked in local government administration and 5.9% in school education, reflecting the towns role as a service centre. Employment in the health care and social assistance as well as in the retail trade dominated the rest of NSW and NSW overall.

#### 5.1.5 Workforce and occupation structure

In 2011, the most common occupations in the Balranald UCL included labourers (18.5%), machinery operators and drivers (13.8%), managers (13.2%), community and personal service workers (13.2%), and technicians and trades workers (12.2%). In 2011, the most common occupations in the Balranald LGA included managers (28.6%), labourers (17.9%), technicians and trades workers (10.1%), community and personal service workers (9.7%), and clerical and administrative workers (9.7%). Managers also include farmers. This is reflective of the primary industry dominated employment base of the area and indicative of the low population and the labour intensive industries in the area as compared to NSW overall.

The median weekly household income for the Balranald UCL and LGA (\$838 and \$894 respectively) is below non-metropolitan NSW (\$961) and NSW overall (\$1,237).

# 5.1.6 Unemployment

Estimates of unemployment are provided by the Commonwealth Department of Employment generally on a quarterly basis for statistical local areas (SLAs), as well as on a state and metropolitan/non-metropolitan basis. The data is disaggregated. SLAs aggregate directly to form the larger spatial units, including LGAs. For Balranald, the Balranald SLA is the same as the Balranald LGA.

The most recently available data is presented in Table 5.2 for Balranald LGA and NSW overall. The latest data available is for the first three quarters of 2014.

The data indicates that the unemployment rate in the Balranald LGA increased by 1.2% in the first three quarters of 2014 from 3.8% in the March quarter to 5.0% in the September quarter. These quarterly rates were lower than those recorded for NSW. NSWs rate of unemployment stayed at 5.7% for all quarters.

Table 5.2 Number of unemployed and unemployment rate, 20134

Area	Une	mployment	(no.)	Unemployment rate (%)			Labour force	
	Mar	Jun	Sep	Mar	Jun	Sep	Sep 2014	
Balranald LGA	42	48	52	3.8	4.5	5.0	1,042	
NSW	215,88	217,000	218,400	5.7	5.7	5.7	3,821,900	

Source: Department of Employment, 2014. Small Area Labour Markets Australia – September Quarter 2014.

# 5.1.7 Relative disadvantage

Socio Economic Indexes for Areas (SEIFA) is a suite of four summary measures<sup>3</sup> that were created from 2011 Census information. The ABS broadly defines relative socio-economic advantage and disadvantage in terms of people's access to material and social resources, and their ability to participate in society.

For each measure (or index), every geographic area in Australia was given a SEIFA score which shows how disadvantaged that area is compared with other areas in Australia. Scores for the Balranald LGA relative to all Australian and NSW LGAs are presented in Table 5.3.

<sup>&</sup>lt;sup>3</sup> The four indexes in SEIFA 2011 are:

<sup>•</sup> Index of Relative Socio-economic Advantage and Disadvantage: is a continuum of advantage (high values) to disadvantage (low values) and is derived from Census variables related to both advantage and disadvantage.

<sup>•</sup> Index of Relative Socio-economic Disadvantage: focuses primarily on disadvantage and is derived from Census variables like low income, low educational attainment, unemployment, and dwellings without motor vehicles.

<sup>•</sup> Index of Economic Resources: focuses on financial aspects of advantage and disadvantage, using Census variables relating to residents' incomes, housing expenditure and assets.

<sup>•</sup> Index of Education and Occupation: includes Census variables relating to educational attainment, employment and vocational skills.

Table 5.3 SEIFA scores, 2011

Index	Balranald LGA		Austra	lia		NSW	
	Score	Rank	Decile	Percentile	Rank	Decile	Percentile
Relative socio-economic advantage and disadvantage	929	133	3	24	33	3	22
Relative socio-economic disadvantage	946	298	3	22	59	3	30
Economic resources	969	208	4	37	61	4	40
Education and occupation	930	161	3	29	39	3	26

Source: ABS Cat no. 2033.0.55.001 - Socio-economic Indexes for Areas (SEIFA), Data Cube only, 2011.

These data indicate that the Balranald LGA was considered to be relatively disadvantaged in both national and state terms in 2011 as determined by the four indexes. A lower score indicates a higher degree of disadvantage. This relative disadvantage was more pronounced in relation to the overall index (Balranald LGA ranked 133) and the education and occupation index (Balranald LGA ranked 161) than in relation to the economic resources (Balranald LGA ranked 208) and the relative socio-economic disadvantage (Balranald LGA ranked 298) indexes.

# 5.1.8 Conclusions about key socio-economic characteristics

Based on the 2011 Census, unemployment material and SEIFA presented above, the following conclusions can be drawn about Balranald key socio-economic characteristics:

- Balranald UCL and LGA has an ageing and declining population;
- the LGA has a higher representation of people aged 35 to 54 years and single person households (ie working age people) most of whom live in detached dwellings;
- unemployment rates are growing within the Balranald LGA, however these rates are lower than the NSW average;
- the major employment sector is in the primary industry sector (principally agriculture) with the workforce characterised by either managers or labourers; and
- household income is below the State average.

Overall, Balranald LGA exhibited a relative level of socio-economic disadvantage in 2011 compared with both state and national levels. This disadvantage was less pronounced in the employment area than in education and other general measures.

# 5.2 Community services and facilities

Based on published information and interviews with stakeholders (see Chapter 4), community services and facilities located in the town of Balranald are listed in Table 5.7. The following sections provide a discussion of the current features of those facilities and services.

#### 5.2.1 Education

The Balranald LGA and surrounding community is served by a number of education facilities, including a preschool, primary schools and a secondary school.

#### i Pre-school

The Balranald Early Learning Centre, a community based not-for-profit centre, is located in a BSC owned building on a large site in Harben Street. A management committee, comprising parents, employ the centre's staff. The centre provides childcare for children from eight weeks to five years old. It also provides after school care and school holiday programs for primary school children.

The centre is licensed for up to 66 children. It is operated by five permanent part time staff and a cleaner. On average over the last few years, the centre has catered for 25 children (30% of whom are solely preschool and 70% day care). Staff is employed relative to the number of children enrolled.

As the centre is licensed for 66 children, there is capacity available to accommodate further enrolments, but this would require a commensurate increase in staff.

# ii Primary schools

# a. St Joseph's Primary School

St Joseph's Primary School is located in Church Street and has operated continuously since the 1880s. It had an enrolment from Kindergarten to Year 6 of 49 pupils in 2014 with five teaching staff and five non-teaching staff. The current enrolment is the lowest for some years; enrolments have been up to 80 pupils historically. The school had 69 students in 2008. The decline in enrolment is attributed to a combination of the effects of the prolonged Millennium Drought (2002-2007), impacts to the river red gum timber industry as a result of the protection of river red gum forests around Balranald town and a general lack of replacement or new local employment opportunities.

The school is part of the Catholic education system run by the Diocese of Wilcannia-Forbes. The school collaborates with the Balranald Central School on specific events, for example, where a minimum number of pupils are needed to attract particular events. There are programs operating at St Joseph's for students with learning difficulties and special needs - Count Me In Too and Counting On for numeracy - and a buddy support system between Kindergarten and Year 6 students.

The data for 2014 (the latest available at the time of preparation of this social assessment) recorded on the Commonwealth Government's My School website for St Joseph's Primary School is presented in Table 5.4.

Table 5.4 My School data for St Joseph's Primary School, 2014

Total enrolments	49
- Girls	21
- Boys	28
Indigenous students	10%
Language background other than English	N/A
Student attendance rate	N/A
Teaching staff	5
Non-teaching staff	5
School ICSEA value	953
Average ICSEA value	1,000

Source http://www.myschool.edu.au/SchoolProfile/Index/74773/StJosephsPrimarySchool/43581/2014

St Joseph's Primary School's Index of Community Socio-Educational Advantage (ICSEA) rating in 2014 was 953. The ICSEA is a scale that enables comparisons to be made across schools in relation to socio-educational advantage. The variables used in calculating a value on the ICSEA scale include student-level data on the occupation and education level of parents/carers, and/or socio-economic characteristics of the areas where students live, whether a school is in a metropolitan, regional or remote area, proportion of students from a language background other than English, as well as the proportion of Indigenous students enrolled at the school. The value for St Joseph's School represents some slight disadvantage relative to the national average.

# b. Balranald Central School (primary component)

The Balranald Central School (primary component), located on a site fronting Wee Street, had 63 pupils in 2014 spread between Kindergarten to Year 6.

Most of these pupils are drawn from the town of Balranald with a minority drawn from the surrounding areas including Euston to the west, about halfway to Tooleybuc to the south, halfway to Hay to the east and about 40 km to the north of Balranald. According to the School principal, there has been a steady decline in enrolments since 2007.

My School data on the Balranald Central School is provided in the following section.

#### iii Secondary school

The secondary component of the Balranald Central School is co-located on the same site with the primary component. The 2014 secondary enrolment in Years 7 to 12 was 77 pupils. As with the primary component, there has been a steady decline in enrolments since 2007 and it is anticipated that this decline will continue. There was a noticeable decrease about seven years ago when, according to the Principal, the Distance Education facility that was located in Balranald was closed down and about 20 staff and associate families shifted from Balranald. In 2008 there were 177 students enrolled at the school (Kindergarten to Year 12), compared to 140 in 2014, a decrease of 37 students or (–20.1%).

The school (Kindergarten to 12) currently has a teaching establishment of 15 with a total of 23 staff employed (including several permanent part time). In 2012, the school gained an additional teaching resource through the National Partnerships for Low Socio-economic Status School Communities funded by the Australian and State Governments. According to the Balranald Central School Plan 2012 – 2014, the priority areas for the school are literacy, numeracy, Aboriginal education, retention, engagement and quality leadership.

The school's curriculum is tailored to local needs with a range of academic and vocational programs designed to promote excellence and overcome disadvantages resulting from isolation. The school has excellent Trade Training facilities including hospitality facilities upgraded to full TAFE registered standard and woodwork and metalwork facilities. The school is considering ways to provide TAFE classes as, historically, students have had to travel to Sunraysia TAFE at Swan Hill.

The following data for 2014 for the Balranald Central School is presented in Table 5.5.

Table 5.5 My School data for Balranald Central School, 2014

Total enrolments	140
- Girls	67
- Boys	73
Indigenous students	16%
Language background other than English	6%
Student attendance rate	N/A
Teaching staff	15
Non-teaching staff	8
School ICSEA value	939
Average ICSEA value	1,000

Source http://www.myschool.edu.au/SchoolProfile/Index/73729/BalranaldCentralSchool/42535/2014

Balranald Central School's ICSEA rating in 2014 was 939 which represents some slight disadvantage relative to the national average.

In 2013, Balranald Central School had 16 students enrolled in vocational education and training (VET) and two students studying school-based apprenticeships and traineeships.

#### iv Other secondary education choices

Secondary school students in Balranald have several other schooling options, namely, access by daily bus services to several secondary schools located some 100 km away in Swan Hill - either Swan Hill College or McKillop College. There is also the option to attend boarding schools in country Victoria or metropolitan Melbourne.

#### 5.2.2 Health

#### i Balranald Health Service

Balranald Health Service (BHS) provides acute and allied health services to the Balranald community on behalf of the NSW Department of Health under the supervision of the Far West Local Health District based in Broken Hill. BHS provides services from the modern, campus-like facilities located at the eastern end of Market Street.

With primary health staff, the BHS operates:

- the Balranald Hospital which has eight acute beds and an emergency department;
- high level residential aged care with 15 beds; and
- allied health services including physiotherapy, occupational therapy, speech therapy, dietetics, mental health, psychology and radiography are available on a visiting basis at varying frequencies.

According to the Commonwealth Government's My Hospitals website, in 2010/11 (the latest comprehensive data available at the time of preparation of this social assessment), Balranald Hospital had a total of 304 overnight admissions, including 245 emergency admissions and 59 other admissions. For the same period, there were 20 same-day emergency admissions.

A full time general practitioner and a visiting dentist (0.7 full time equivalent) from Dareton operate from consulting rooms adjacent to the hospital. The School Dental Services provides dental services to the schools in Balranald.

Higher order specialist health services such as cardiology or paediatrics are available for patients via ground transfer at either Swan Hill or Mildura hospitals and other specialist services by air ambulance retrieval to large hospitals in Melbourne or Adelaide. A pharmacy is located on Market Street among other shops.

Stakeholders consider that, for its size and location, the Balranald community is fairly well served at present without major gaps in the provision of or delays in access to primary and acute health services.

#### ii Balranald Aboriginal Health Service

The Balranald Aboriginal Health Service Incorporated (BAHS) provides specialist Aboriginal health services and outreach services. The service is managed under an auspice arrangement with the Mildura Aboriginal Corporation and cooperation with Swan Hill Aboriginal Health Service.

BAHS is located in new purpose-designed facilities on the corner of Mayall and Court Streets, completed in early 2011. The BAHS has three full time employees – a chief executive officer, an Aboriginal health worker and a receptionist. General practitioner services are conducted on a weekly basis by doctors from Mildura. A nurse provides health checks and services such as immunisation on a weekly basis.

Allied health services are provided at the BAHS premises on a regular visiting basis. These services include dietician, podiatry, speech therapist, nutritionist and drug and alcohol outreach. The BAHS is gradually building up the range of services available to the Aboriginal community in Balranald particularly in relation to mental health services and maternal health. The BAHS works in a complementary manner to the BHS and is working on a Memorandum of Understanding with BHS in relation to dealing with patient discharge and provision of continuing care.

# iii Community support

Community support is provided through a range of services provided wholly or partly by BSC – local Home and Community Care, Meals on Wheels and the operation of Bidgee Haven aged care facility, the Mandola Place units for people with disabilities and an emergency accommodation unit.

In addition or in conjunction with BSC and State government agencies, other community support services are provided by organisations including Mallee Family Care (MFC) and St Vincent de Paul.

MFC offers family services such as counselling, play groups, and foster care to both the Aboriginal and non-indigenous communities as well as providing other agency services such as Centrelink 20 hours a week from its office (same operating hours). MFC officers considered that a gap in services in Balranald is the lack of presence by the NSW Department of Family and Community Services (FACS) (the closest offices are in Dareton or Broken Hill) which has statutory responsibilities for intervention in relation to families at risk.

The MFC's client numbers vary depending on transience through the local community. If client numbers were to increase, MFC would grow its presence in Balranald town through strategies such as opening longer hours or seeking an increase in staffing numbers. MFC is funded through FACS and the NSW Attorney-General's Department on a three year cycle and works with other organisations such as St Vincent de Paul to deliver crisis services.

St Vincent de Paul runs a 'Vinnies' retail outlet in Market Street for fund raising as well as providing charitable and emergency services (such as food assistance and emergency accommodation) for local residents and travellers – all on a voluntary basis. On the welfare side, trained volunteers provide counselling, advice and referrals to other agencies such as MFC in Balranald or FACS in either Dareton or Broken Hill.

#### 5.2.3 Retail and commercial services

Most local retail and commercial services in the town of Balranald are located on Market Street or nearby intersecting streets. Shops include two licensed supermarkets, butcher, baker, newsagency, hardware (including electrical and furniture), pharmacy and several clothing and gift shops. Professional and other services include a solicitor, accountant, post office, employment agencies, stock and station agent, real estate agent and IT services.

Many Balranald residents regularly travel to either Swan Hill or Mildura for wider range of shops and services.

# 5.2.4 Recreation and sporting facilities

The majority of the sporting facilities in the town of Balranald are located within the BSC managed Greenham Park located just to the north-west of the town centre and adjacent to the two schools. Facilities located in Greenham Park include:

- swimming pool complex which includes a 33 m outdoor pool, a medium pool, a wading and a hydrotherapy pool;
- sporting ovals (football and cricket) and multi-purpose clubroom/facility;
- tennis courts three lawn and two hard courts;
- netball courts and club facilities (hall with commercial kitchen);
- nine hole golf course with grass greens maintained by golf club members;
- race course and stables (including the pony club) two horse race meetings are held each year; and
- BMX circuit.

Sporting clubs and schools use these facilities on a regular basis.

Gaps identified by BSC officers in the provision of sporting and recreation facilities are an indoor fitness centre/gym and facilities for youth such as a skate park or casual drop-in centre.

#### 5.2.5 Cultural facilities

Cultural facilities provided in the town of Balranald include:

- Theatre Royal, Market Street multi-purpose hall facility which is a venue for community functions and is available for hire:
- The Gallery, located in the historic Masonic Lodge building at 51 Mayall Street which is owned and
  operated by Balranald Arts & Craft Inc. It is the venue for a range of arts and crafts activities as well
  as for temporary exhibitions; and
- Balranald Ex-Servicemens Club, Market Street which hosts regular visiting performers.

In addition, BSC provides the following indoor facilities that are available for hire for community activities:

- Greenham Park Multi-purpose facility;
- Greenham Park Pavilion; and
- Senior Citizens Centre in Market Street.

# 5.2.6 Religion

Balranald LGA is served by three religious denominations – Anglican, Catholic and Presbyterian – the latter two served by full time clergy. All have churches in Balranald town.

All three congregations are long established, but the congregations are small and ageing. In addition to conduct of church services in Balranald town and some nearby townships, the clergy provide various ministry services throughout the community such as outreach to the hospital and aged care facility.

## 5.2.7 Children and youth services

In addition to the services and facilities provided for the general community, the following services are provided specifically for children and youth in Balranald town.

# i Children

Child and maternal health services are provided on a visiting basis at the Balranald Hospital. Various playgrounds are located throughout the town.

#### ii Youth

As noted in the community development plans for Balranald town and Euston, one of the community challenges and issues identified are:

Limited youth services and programs in both communities. There is no youth worker. There are no public, safe and comfortable meeting places for young people to gather. There are also limited after-school or holiday activities for young people – particularly for those that do not play team sports (e.g. no music or drama). (Balranald Shire Council 2012c, 12).

These issues were confirmed in discussion with officers from BSC who identified the need for an indoor fitness centre/gym facility as a priority to respond to these youth-related needs in particular as well as a skate park or casual drop-in centre.

# 5.2.8 Emergency services

#### i Police

NSW Police have a police station located on Market Street, which is staffed by five general duties officers and two highway patrol officers. The station is staffed every day between the hours of 8.00 am to midnight from Sunday to Thursday and on Friday and Saturday from 8.00 am to 3.30 am. The area policed from the station extends approximately 35 km towards Euston to the west, 40 km towards Kyalite to the south, 80 km towards Hay to the east and 45 km towards Clare to the north.

The major policing issues in and around Balranald are considered to be offences related to intoxication, domestic violence, malicious damage and traffic matters. However, crime is not considered by the police officers consulted to be a serious issue in the local community and the town is considered to be relatively safe. Data from the NSW Bureau of Crime Statistics and Research confirms that crime rates are relatively low compared to non-metropolitan NSW where the predominant major offences in Balranald LGA in 2011, 2012 and 2013 were in the categories of assault and property-related theft and damage. There was only one recorded robbery with a weapon in 2013 (see Table 5.6).

Table 5.6 Recorded criminal incidents for major offences, Balranald LGA, 2011-2013

Major offence	2011	2012	2013
Murder	0	0	0
Assault – domestic violence related	22	20	11
Assault – non-domestic violence related	20	11	21
Sexual assault	1	2	8
Indecent assault, act of indecency and other sexual offences	4	2	5
Robbery without a weapon	0	0	0
Robbery with a firearm	0	0	0
Robbery with a weapon not a firearm	0	0	1
Break and enter dwelling	25	15	17
Break and enter non-dwelling	24	7	27
Motor vehicle theft	6	3	3
Steal from motor vehicle	12	3	14
Steal from retail store	0	4	0
Steal from dwelling	12	8	14
Steal from person	0	0	0
Fraud	10	13	9
Malicious damage to property	32	22	29
Total – recorded major offences	168	110	159

Source: NSW Bureau of Crime Statistics and Research 2013.

#### ii Ambulance

The Ambulance Service of NSW maintains an ambulance station in Balranald with 24 hour operation. The three-vehicle ambulance station is located in Court Street adjacent to the hospital. Four officers attend the station from 8.00 am to 4.00 pm daily and two officers are on-call between 4.00 pm and 8.00 am daily.

The area served by the Balranald station extends generally 80 km towards Hay to the east, 35 km towards Euston to the west, to the Victorian border (75 km) to the south and up to 155 km north to the locality of Clare.

The pattern of call outs for the Balranald staff varies from periods when there are no calls over a couple of days to very busy periods. In quiet periods, the staff undertakes community relations activities with schools and other groups. The Balranald staff work closely with the hospital and other health services in Balranald and assist Ambulance Victoria with call outs along the Murray River.

According to the Ambulance officers consulted, the current staff and resources could handle more call outs but if there were to be a large increase in demands, additional staff and/or resources would be requested.

#### iii Fire

Balranald township is served by the NSW Fire Brigade with a station located at 123 Market Street with four employees. The NSW Rural Fire Service has a station located in Market Street adjacent to the Voluntary Rescue Association (VRA). It forms part of the Lower Western Region South. According to personnel consulted, the NSW Rural Fire Service could handle more call outs but if there were to be a large increase in demands, additional staff and/or resources would be requested.

#### iv Volunteer Rescue Association

The VRA – Balranald Rescue Squad is the primary rescue service for the Balranald LGA and those parts of surrounding LGAs that are closer to Balranald town than other towns – an area of 38,000 km<sup>2</sup>.

The VRA has a membership of 15 volunteers and is largely self-funded with some support from BSC and the NSW VRA. Its base in Market Street, Balranald is equipped with:

- primary rescue truck;
- back up truck;
- troop carrier for personnel transport; and
- spare truck.

The Balranald VRA records an average of 18 call outs annually – mainly motor vehicle crashes on the Sturt Highway, as well as river rescues, farm and industrial accidents and motor vehicle crashes on minor roads. A room is set up at BSC's offices as an Emergency Operations Centre and is available for use if an incident is considered to be beyond the local services capability.

Table 5.7 Summary of community services and facilities located in Balranald

Facility or service	Location
Education	
Balranald Central School (Kindergarten to Year 12)	Wee Street
St Joseph's Catholic Primary School (Kindergarten to Year 6)	106 Church Street
Balranald Early Learning Centre	132 Harben Street
Trade Training facility	At Central School
Health	
BHS (hospital - 15 long term and eight acute beds)	Market Street
BAHS	Mayall Street
General practitioner	Market Street
Pharmacy	107 Market Street
Dentist	Market Street
Community support	
BSC	70 Market Street
Local home and community care service	
Bidgee Haven - 15 bed age care facility including three independent units (Balranald Manor).	24 Mayall Street
Mandola Place - six units for people with disabilities	Ballandella Street
St Vincent de Paul	Market Street
Mallee Family Care	92A Market Street
Meals on Wheels	
Retail and commercial services	
Commercial and retail businesses concentrated in town centre or industrial estate	Town centre centred on Market Street (Sturt Highway) Industrial estate centred on Bank Street and McCabe Street bypass
Recreation/sporting	
Sporting infrastructure – including race course, swimming pool, sporting ovals, lawn tennis courts, netball courts and club facilities, and golf course	Greenham Park
Parks and gardens	Includes Murrumbidgee River Heritage Walk
Nature reserves	Balranald Common Bird Trail and Yanga National Park
Culture/recreation	
Royal Theatre - multipurpose hall facility.	Market Street
Art Gallery	Mayall Street
Balranald Ex-Servicemen's Memorial Club	116 Market Street
Churches	
Anglican	Corner Ballandella and Mayall Streets
Catholic	Corner Mayall and Church Streets
Presbyterian	47 Bank Street
Emergency services	
Police	Market Street
Ambulance	Court Street
Fire	Market Street
VRS	Market Street

# 5.2.9 Public and community transport services

Intra and interstate public bus services serve the town of Balranald on a regular basis. CountryLink operates a daily service from Cootamundra to Mildura which stops in Balranald in the evening about 9.30 pm and the return service from Mildura to Cootamundra which stops in Balranald at 5.40 am.

Long distance bus services between Adelaide and Sydney are provided on weekdays by Greyhound Australia with westbound services to Adelaide stopping in Balranald at 7.00 am and the eastbound services stopping in Balranald at about 8.00 pm.

Balranald Community Transport Services (operated by the Far West Health Service) operates two return bus services; on the first Friday of each month from Balranald to Swan Hill and on alternate Wednesdays from Balranald to Mildura.

There are no scheduled air services to or from Balranald Airport located just to the north of the town.

# 5.3 Housing and accommodation

#### i Housing market

Housing in the Balranald LGA is characterised by a high proportion of detached dwellings with lower than state or rest of NSW averages of higher density dwellings (semi-detached, townhouses and/or units). In 2011, there were 1,094 dwellings within the Balranald LGA, approximately two thirds were owner occupied, with one third comprising the rental market. 2011 Census data indicated that 15.5% of the private dwellings were recorded as being unoccupied – a higher proportion than for the rest of NSW (see Appendix B).

In 2010/11, 24 dwellings were approved in the Balranald LGA (which was down by four on the previous year) and 14 subdivisions were approved (an increase of three from the previous year) (Riverina and Murray Regional Organisation of Councils 2011, 7.1).

Balranald is served by one local real estate agency as well as one based in Swan Hill. After very quiet market conditions during the Millennium Drought from at least 2002 to 2007, local real estate agents suggest that activity in the housing market in Balranald has improved from 2011 onwards.

In terms of the housing market, consultation with local real estate agents indicates that it is relatively easy to sell existing dwellings with asking prices under \$100,000 while it is hard to sell existing houses over \$130,000 to \$140,000. At this latter price level, the alternative of buying a residential lot for under \$50,000 and building a project house becomes more attractive. There is a reasonable supply of vacant residential lots, including half acre lots.

Discussions with relevant local stakeholders (real estate agents and Mallee Family Care in particular) indicated that there is generally a shortage of affordable rental housing (considered to be \$170 - \$180 per week) in Balranald<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Due to the small number of housing sales and new bonds reported in Balranald LGA, data for this LGA is generally not reported in the NSW Government's quarterly *Rent and Sales Report*.

Homes Out West (HOW) is a not-for-profit community housing provider that assists in the provision of affordable rental accommodation for people experiencing difficulty with their housing needs. HOW has offices in Albury and Deniliquin. In Balranald, HOW provides tenancy management to six independent living units for intellectually disabled people in partnership with Mackillop Rural Community Services as well as for NSW Aboriginal Housing Office's properties in the town.

#### ii Tourist and temporary accommodation

As Balranald town is located on the Sturt Highway, the main road route linking Sydney and Adelaide, and with developing tourism and mining sectors, there is continued but varying demand for tourist and temporary accommodation in the town. Tourist and temporary accommodation is provided by motels and the caravan park. Table 5.8 presents the available motel accommodation.

Table 5.8 Available motel accommodation in Balranald town

Motel	Location	Number of rooms	Star rating <sup>1</sup>
Balranald Club Motel	112 Market Street	15	4
Balranald Colony Inn Motel	140 Market Street	8	3
Balranald Motor Inn	154 Market Street	23	3
Capri Motel	207 Market Street	12	NA
Shamrock Motel	96 Market Street	23	NA
Sturt Motel	32 River Street	14	3
Total rooms		95	

Note: 1. Based on rating by the RACV.

The Balranald Caravan Park is accessed from Court Street close to the Sturt Highway. It has river frontage. The caravan park is located on Crown Land managed by BSC and is operated by on-site managers. The caravan park provides 17 cabins as well as 33 powered and 33 unpowered sites.

BSC also provide 'RV' parking and waste disposal facilities for self-contained travellers.

For short periods during the year, depending variously on school holidays, local events such as race meetings, fishing competitions, the Balranald 5 Rivers Outback Festival and business demands, all this tourist accommodation may be taken up. At other times there is usually some availability of tourist and temporary accommodation.

Euston, Kyalite and Homebush offer accommodation services, as does bed and breakfast operations at Lake Paika and Mungo.

# 5.4 Overview of Balranald community

Based on the research undertaken, stakeholder engagement and interviews, and attendance at the community information sessions held in 2012, 2013 and 2014, the following overview of the existing Balranald community has been prepared.

# 5.4.1 The population

The population of Balranald is ageing and declining – a process that has been compounded by a series of recent local and wider events – the Millennium Drought, restructuring of the farming sector, impacts to the river red gum industry and reductions in employee numbers in the private and public sectors.

There are few residents from non-English speaking backgrounds, which may be attributed to Balranald's relatively isolated location and narrow economic base focussed on agriculture and service industries.

The town has a relatively high proportion of indigenous residents compared with State averages but a small number in absolute terms.

# 5.4.2 The community

Most stakeholders consulted considered Balranald to be a nice, friendly country town and those who live there like the local community and environment.

As with many rural towns, sport plays a big role in community life – particularly football, tennis, netball, bowls and golf. As well, there are a number of cultural clubs or activities in the town – pottery, art or choir (Sing Australia).

There appeared to be a strong sense of identification with Balranald and satisfaction with living there. Either those consulted chose not to voice negative views about the town to an 'outsider' or many residents genuinely like living in the town. From casual observation, the assertion that Balranald is a friendly town is borne out by the number of people who greet each other on the main street (and also strangers).

People are very supportive and the community tends to rally around when people need help on an individual basis or related to causes such as Pink Day at the football.

The values the Balranald community highly appreciate were articulated in the preparation of the Community Strategy Plan (see Section 3.4). These values related to social connectivity, lifestyle, safety and diversity.

For all intents and purposes, Balranald could be considered to be a traditional Australian country town where such a description is deemed to be very positive.

# 5.4.3 Housing and accommodation

Housing in the Balranald LGA is characterised by a high proportion of detached dwellings. In 2011, there were 1,094 dwellings within the Balranald LGA, approximately two thirds were owner occupied, with one third comprising the rental market. 2011 Census data indicated that 15.5% of the private dwellings were recorded as being unoccupied – a higher proportion than for the rest of NSW.

It is relatively easy to sell existing dwellings with asking prices under \$100,000 while it is hard to sell existing houses over \$130,000 to \$140,000. At this latter price level, the alternative of buying a residential lot for under \$50,000 and building a project house becomes more attractive.

There is a reasonable supply of vacant residential lots, including half acre lots.

Given Balranald town's location on the Sturt Highway, the town is generally well serviced by tourist and temporary accommodation in the form of motels and the caravan park. There are six hotels providing up to 95 rooms. The caravan park provides 17 cabins as well as 33 powered and 33 unpowered sites.

For short periods during the year, depending variously on school holidays, local events such as race meetings, fishing competitions, the Balranald 5 Rivers Outback Festival and business demands, all tourist accommodation may be utilised. At other times there is usually some availability of tourist and temporary accommodation.

#### 5.4.4 Conclusions

The following conclusions can be drawn about the availability and capacity of community services and facilities and housing in and around the town of Balranald:

- for a regional town of its size and population, Balranald is well served by essential community services in the education, health, emergency services and sporting facilities in particular;
- in most community service sectors, there is a degree of spare capacity because of the recent and continuing population decline but some services such as pupil/teacher ratios are being progressively scaled back in response to population decline;
- there is a particular need for more facilities and services that cater for youth in Balranald;
- the availability of rental accommodation is limited and affordability constraints have been noted;
- the housing market in the Balranald urban area is relatively small with more sales in the lower price range than in higher price brackets.

# 6 Social impacts

# 6.1 Types of social impacts

Based on research into social impacts that have been associated with other mining projects in regional and remote areas of NSW (see Appendix E) and consultation with local stakeholders, a summary of the potential social impacts (positive and negative) that may occur during various phases of the Balranald Project is presented in Table 6.1.

Table 6.1 Summary of potential social impacts during phases of Balranald Project

Potential social impacts by project phase	Duration	Significance	Extent	Potential to mitigate
Planning, feasibility and approvals				
Potential impacts on directly affected property owners	Until negotiations with Iluka completed	High	Directly affected property owners	Yes
Community concerns about the potential development of the Balranald Project	Until project approval	Low	Balranald town and regional community	Yes
Construction and operations				
Workforce issues related to the limited number and availability of suitably skilled local workforce, requiring much of both workforces to be drawn from the wider regional area	Construction and operational phases (about 10 years)	High (positive)	Balranald LGA and regional area within 200 km	Yes
Increased demand for	As above	Low for housing	Balranald LGA	Yes
accommodation and housing (in addition to proposed accommodation village)		High (positive) for accommodation		
Increased demand for community, retail, and business facilities or	As above	Low for community facilities	Balranald town	Yes
services		High (positive) for retail and business facilities		
Changes in social amenity	As above	Medium	Project area and Balranald town	Yes
Construction and operational traffic impacts	As above	Low	Public roads	Yes
Cumulative impacts of the Balranald Project with other mineral sands projects in the LGA (ie Atlas- Campaspe Mineral Sands Project)	As above	Low	Balranald LGA	Yes
Rehabilitation and decommissioning				
Loss of most Balranald Project jobs	Immediate post completion of mining operations	Low <sup>1</sup>	Balranald LGA and regional area within 200 km	Yes
Related impacts on community services and organisations	As above	Low <sup>1</sup>	Balranald town	Yes

Notes: 1. Assumes that another Iluka project would replace the Balranald Project in the Murray Basin.

The impacts are summarised in relation to the following parameters:

- duration related generally to the length of, for example, the construction and operations phases;
- significance whether the impact is considered to be of 'high', 'medium' or low' significance;
- extent the area, people, facilities and/or services potentially affected;
- potential to mitigate the impact availability of measures which can reduce or mitigate negative impacts; and
- other considerations whether the impact is direct or indirect, positive or negative, or cumulative with impacts from other projects in the Balranald LGA.

The potential impacts of the Balranald Project are discussed in the following sections. Mitigation and management measures are available to address potential impacts and these are presented in Chapter 7.

# 6.2 Planning, feasibility and approvals phase

#### 6.2.1 Context

Exploration and other investigations related to the Balranald Project have been undertaken by Iluka since at least the mid-1990s. More recently, there has been a heightened level of activity in and around Balranald associated with the investigations supporting the preparation of feasibility studies, engineering studies and the EIS. These activities have generated an increased awareness in the Balranald community of the potential for mining of the mineral sands resource.

Based on the results of stakeholder engagement and communications activities undertaken by Iluka, Environmental Affairs and EMM, the awareness of the Balranald Project by the local and regional community is very high. The level of interest that the community have about whether the Balranald Project would proceed in the short term and any resulting impacts on the community appears to be related to:

- whether landholders may be directly or indirectly affected;
- the life stage of community members, for example, whether they might seek employment with the Balranald Project, and
- the business or employment activities of other community members.

Based on engagement with stakeholders for the preparation of this social assessment, there is a generally a positive and supportive attitude in the local and regional community to the prospect of the Balranald Project.

# 6.2.2 Affected property owners

#### i Scope of impact

At this planning, feasibility and approvals phase, there appears to be a range of attitudes to the Balranald Project for the small number of property owners whose land would be directly and indirectly affected by the Balranald Project.

Many of the properties where there may be some direct or indirect effect of the mining activities are large (many tens of thousands of hectares), commensurate with broad-scale agricultural activities in this part of western NSW. The project area where direct impacts would occur (see Figure 2), has, to some extent, been de-populated over the last twenty years as a result of factors including property amalgamations, reduction in the employment of permanent on-farm staff and landholders choosing to live elsewhere.

Where land would be directly impacted by mining operations, Iluka is in the process of, or has, negotiated compensation agreements with landholders. Potential indirect impacts of mining operations on surrounding properties, such as noise or dust generation, would be appropriately mitigated or managed (refer to mitigation measures in the EIS).

Where directly impacted land is remote or isolated from the majority of a property's productive area, the relevant property owners have stated that they are not too concerned about the direct impact of the Balranald Project, provided that appropriate commercial and functional arrangements have been negotiated and mitigation measures are put in place to appropriately manage environmental impacts (eg air quality). Most of these property owners have stated that they are seeking a definitive decision about whether and when the Balranald Project would proceed, but are not otherwise unduly concerned on a day-to-day basis about the prospect of the Project. However, while generally supportive of the Balranald Project, there appears to be some tendency for property owners to defer investment in the development or maintenance of farm infrastructure which may be subsumed by mining activities until there is a definite commitment to the Balranald Project.

For some other property owners, there is a level of concern regarding a range of potential functional impacts (either directly or indirectly) of the Balranald Project on agricultural activities and productivity, principally related to truck movements, dust generation, noise and the ability to arrive at appropriate compensation agreements with Iluka given individual landholders' circumstances. In this latter group, some property owners are experiencing a degree of concern and anxiety on a day-to-day basis because a decision about the timing of the Balranald Project and related negotiations has greater implications for the next stages of their lives.

Most property owners who would only be affected by the development of lineal infrastructure such as the water supply pipeline are relatively unconcerned at this stage provided appropriate compensation and functional arrangements (ie land access) are negotiated with Iluka.

# ii Duration of impact

The duration of the impact of uncertainty and concerns by directly affected property owners cannot be quantified. It would continue until negotiations are completed between individual property owners and Iluka to address all relevant issues.

# iii Significance of impact

For directly affected property owners, potential impacts on agricultural activities are generally of high significance, but the ability to resolve these impacts is also high through direct negotiations with Iluka.

#### iv Extent of impact

The extent of this impact is limited to directly affected property owners.

#### v Potential to mitigate

The matters that may be causing concern or uncertainty to directly affected property owners can be mitigated through the negotiation of appropriate compensation agreements with Iluka, as well as regular communication on the development of the project and key milestones that impact land access negotiations. Furthermore, demonstration of the amelioration or minimisation of indirect impacts would also assist in reducing potential concern. Significant progress on land access negotiations has been achieved for many of the relevant properties with further access requirements being identified and confirmed. It is forecasted that the land access negotiations will be finalised in 2015 in readiness for future project development.

# 6.2.3 Community concerns

#### i Scope of impact

Based on the results of stakeholder engagement, it is apparent that there is general positive attitude to the prospect of the Balranald Project proceeding within the local and regional community, particularly in relation to the employment and economic benefits that might result, particularly in Balranald town. The view that the Balranald Project would be good for the local and regional area is expressed in the context of the recent and continued employment and population losses resulting from the Millennium Drought, impacts on the river red gum timber industry and the reduction in some private and public sector employment. As a result, the resilience of the local community has been tested and may have some fragility relative to further 'knocks' or undelivered promises and prospects.

However, while there is general anticipation that the Balranald Project would proceed, the Balranald community appears to understand, in general terms, the factors that can affect corporate decision-making about whether a project proceeds, including local constraints, need to obtain regulatory approvals and market factors.

Many community members are realistic enough to know that if the Balranald Project does proceed, it may not result in a large permanent population increase for the town, but are hopeful that some economic and social stimulus to the town can be harnessed for the community's benefit.

The main interest in the Balranald Project at the planning, feasibility and approvals phase appears to be from residents who have family members who might seek employment at the mine or from business people who hope to benefit from increased economic activity in and around the town derived from project activities.

When the EIS is made available for public review and more information is provided to the community about the Balranald Project and impacts addressed in the EIS, there could be some concern by community members about aspects of the Balranald Project, such as potential environmental impacts. However, once the Balranald Project completes the regulatory approval process and internal approvals in relation to its commencement, any prevailing air of uncertainty about the Balranald Project in the Balranald community could potentially be partly replaced with a sense of certainty and security.

It is likely that there would be an increased level of activity in and around the town immediately prior to the commencement of construction. During this time it is anticipated there may be some increased demand for temporary accommodation, particularly until the accommodation facility is constructed, and increased trade for some businesses such as the hotel and other service providers.

BSC may also be involved in related planning activities to assist the smooth commencement of the construction phase. In conjunction with local providers, Iluka may commence some training programs to assist the availability of local workers and to increase the administrative capacity of local businesses.

# ii Duration of impact

The duration of impact of concerns by members of the Balranald community is likely to manifest until all regulatory approvals are obtained and there is a decision by Iluka to process with the Balranald Project.

#### iii Significance of impact

Given the generally supportive attitude of the local community, the scale of any concern about the Balranald Project is considered to be low (ie low significance).

#### iv Extent of impact

This impact is limited to some members of the Balranald community.

# v Potential to mitigate

The matters that may be causing concern or uncertainty to Balranald residents can be mitigated through continued stakeholder engagement and communications.

# 6.3 Construction and operational phases

# 6.3.1 Context

Apart from the differing duration of these two phases, the likely social impacts would be similar as they are largely related to workforce issues and related increased demands on certain community, retail and hospitality services and facilities in Balranald town, as well as potential increased demand for housing and temporary accommodation.

#### 6.3.2 Workforce issues

# i Scope of impact

Peak workforce details were provided in Section 2.8. This indicates that:

- the Balranald Project would employ a peak construction and operational workforce of 225 and 550 workers, respectively;
- during the overlap of the construction and operational phases, the peak workforce totals about 450 workers;
- given leave, including leave between shift rosters, there would be a peak of 158 construction workers and 385 operational workers on-shift at any one point in time;
- during the overlap of the construction and operational phases, there would be a peak of 315 workers on-shift at any one point in time; and
- due to Iluka's work, health and safety policies, it is expected the vast majority of the construction and operational workforce (95%) would stay at the accommodation facility while on-shift, with a minority (5%) commuting to the project area.

Given the workforce requirements of the Balranald Project and the size and skill set of the existing workforce in the Balranald district, it is likely that the majority of both the construction and operational workforces would be sourced from the Balranald regional area (within 200 km) with a proportion drawn from further away. Such an approach is consistent with the labour management on other mineral sands mines in regional areas of Australia.

Given that the operational phase of the Balranald Project (see Figure 2.1) would last about nine years, it has been assumed that there would be a small proportion (5%) of the operational workforce who may choose to relocate with their families to the Balranald LGA, or who may already reside in Balranald. Based on a peak operational workforce of 550 workers, up to 28 workers could relocate with their families to the Balranald LGA. Based on average household size of 2.6 persons<sup>5</sup>, this could lead to a potential population increase of up to 73 people within the Balranald LGA during the life of the Balranald project.

In addition, the Balranald Project would generate indirect or flow-on jobs within the region during both the construction and operational phases. The economic assessment (Gillespie 2014) estimates that during the construction and operational phases, the Balranald Project would generate 1.0 and 1.3 flow-on jobs respectively in the region for every direct job generated by the project. These flow-on jobs are generally located within the residing area of the worker.

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<sup>&</sup>lt;sup>5</sup> While the average household size in the Balranald LGA is 2.4 persons (ABS 2012), the average household size of NSW overall of 2.6 persons (ABS 2012). The higher household size has been used to estimate the population increase generated by the Balranald Project.

Based on the assumption that 5% of the operational workforce (28 workers) would relocate to the Balranald LGA, approximately 36 additional indirect jobs may be generated within the Balranald LGA during the operational phase. As with direct jobs, some of these indirect jobs could potentially be taken up by the unemployed. As stated in Section 5.1.6, unemployment rates in the Balranald LGA have been increasing for some years. As of September 2014, there were 52 unemployed people within the Balranald LGA (5% of the population). It could be reasonably assumed that about 50% (or 18) of the indirect jobs generated by the Balranald Project could be taken up by these unemployed. On this assumption, the remaining 18 indirect jobs could be filled by those that currently reside elsewhere and migrate to the Balranald LGA to take up the indirect jobs. Based on an average household size of 2.6 persons, the population increase in the Balranald LGA generated by indirect jobs could be about 47 people.

With a population increase of up to 73 people associated with the relocation of 5% of the operational workforce to the Balranald LGA, and a population increase of 47 people associated with people moving to the Balranald LGA to take up indirect jobs generated by the project, the Balranald Project could increase the population of the LGA by about 120 people.

As stated in Section 5.1.1, the population of both the Balranald LGA and Balranald UCL (or town) has been declining for some years with the population of the LGA and locality decreasing by 272 and 58 people respectively between 2006 and 2011. According to population forecasts by DP&E in 2010, Balranald LGA is anticipated to experience a continued decline in both its population growth rate and its total population through to 2036 based on a reduction in the birth rate and net migration. The predicted decline is -0.7% per year. Based on 2011 population numbers, this would mean that the Balranald LGA could lose about 16 people per year. Accordingly, any population increase associated with the Balranald Project would help offset past and forecast population decline.

Similarly, given the relatively small supply of temporary accommodation in Balranald town (motels and caravan park cabins), any substantive increase in project-related demands for temporary accommodation could have impacts on the project workforces themselves and related service providers. Other demand sectors, such as tourists, travellers, business travellers and social visitors to events in Balranald town, may also be affected by any potential supply constraint.

Based on experience on other projects in the Murray Basin, there would be opportunities through Iluka's proposed development of a local employment and business policy for local people and businesses to seek employment on or provide additional services to the Balranald Project (refer mitigation measures in Section 7.2).

In turn, any movement of the existing local workforce to the Balranald Project may put pressure on the available labour pool for existing employers within the town. However, there may be a degree of 'under employment' in and around Balranald due to the limited size and range of the labour market so some people may choose to move to full time work if suitable jobs become available either on the Balranald Project or as a result of local jobs being vacated in preference to project jobs.

Based on discussions with local community support services, Balranald town's location on the Sturt Highway, the main road link between Adelaide and Sydney, already results in some transient people stopping in the town on a speculative basis to see if work or housing is available. The prospect of enhanced employment availability in and around Balranald may also attract people from elsewhere to come to the district seeking a speculative employment opportunity. If such people are unsuccessful in gaining employment and have limited personal resources, they may create increased demands on the local community services sector for emergency support.

The size and presence of a large non-local workforce would have several potential impacts for Balranald town, namely:

- an increase in the use of local community, retail and hospitality services and facilities which may result in some positive and some negative impacts depending on demands generated by the incoming workforce (see Section 6.3.4); and
- an increase in the presence of 'non locals' around town with potential for both positive and negative impacts on social amenity (see Section 6.3.5).

# ii Duration of impact

The impact of workforce issues is likely to be primarily experienced in Balranald LGA in the early stages of the Balranald Project, particularly during the period when construction and operations at the West Balranald mine are being undertaken concurrently. After these initial periods, employment patterns are likely to stabilise for the duration of operations.

# iii Significance of impact

This impact is considered to be of 'high' positive significance because of the extent of work opportunities generated by the Balranald Project, particularly for the unemployed in the Balranald LGA, and the potential for offsetting of population decline. The Balranald Project would also provide the opportunity for further training/upskilling of parts of the local workforce.

#### iv Extent of impact

The extent of this impact is likely to be experienced in both Balranald town and the wider regional area from where the majority of the workforce is likely to be drawn from.

#### v Potential to mitigate

Workforce issues can be mitigated by implementation of Iluka's workforce recruitment and training policies and consultation with local training and employment agencies (see Section 7.2).

#### 6.3.3 Increased demand for accommodation

## i Scope of impact

Given the scale and length of the initial construction period of the Balranald Project, it is likely that there would be some indirect impacts on the wider accommodation market in Balranald, namely temporary and tourist accommodation provided by motels and the caravan park, rental accommodation and the permanent housing and land market, particularly, for example, prior to or during the construction of the accommodation facility.

As indicated in Section 5.3, there is some capacity in the temporary and tourist accommodation sector in Balranald. However, considering the relatively small level of supply, this accommodation could be fully utilised from time to time during the construction and operational periods by project-related visitors or other workers who are not able to be or who choose not to be accommodated in the accommodation village. Several operators have indicated to Iluka opportunities to increase accommodation services should a demand be identified.

During the construction and operational phases of the Balranald Project, as well as the overlap of both phases, the project workforce would be accommodated in the accommodation facility. While Iluka plans to house its construction and operational workforce in the accommodation facility, it is possible that some of the workforce would use other accommodation in Balranald and elsewhere on a short term basis. This demand would increase the overall occupancy rates for tourist and temporary accommodation, including travellers. Short term stresses may be experienced during periods when there are long standing sporting or community events held in Balranald town such as race meetings, fishing competitions or the Balranald 5 Rivers Outback Festival that attract large numbers of visitors.

The maximum population increase potentially generated by the Balranald Project (through new direct and indirect employment) would generate demand for about 46 dwellings in the Balranald LGA. Given the limited existing availability of housing and temporary accommodation in Balranald (as noted in Section 5.3), this increased demand may put some short term stress on the availability and price for the wider community (both for properties for sale and rental properties).

It is possible that some people may take actions in anticipation of a perceived increased demand for housing and accommodation in Balranald by speculating on the development of land or housing to meet such perceived demands.

## ii Duration of impact

The impact of any increased accommodation demand is likely to be primarily experienced in Balranald town in the early stages of both the construction and operational periods until the workforce accommodation requirements are met and any flow-on small scale population increase occurs. After these initial periods, accommodation patterns are likely to stabilise for the duration of both the construction or operations periods.

# iii Significance of impact

Given Iluka's commitment to develop an accommodation facility that would cater for virtually all of the direct workforce during the construction and operations periods, any impacts on wider accommodation resources in Balranald is considered to be of 'low' significance. Conversely 'high' positive impacts are expected for private accommodation providers due to increased demand during the early stages of both the construction and operational periods.

#### iv Extent of impact

The extent of this impact is likely to be focussed on Balranald town where the majority of permanent and temporary accommodation is provided within the LGA.

## v Potential to mitigate

The provision of the accommodation facility would mitigate most of the potential impacts on accommodation within Balranald LGA and Balranald town. Potential stresses on accommodation during the early stages of both the construction and operational periods can be mitigated by Iluka in consultation with BSC and housing agencies (see Chapter 7).

# 6.3.4 Demands on community, retail and business services

# i Scope of impact

There is unlikely to be any substantive demands during either the construction or operational phase on existing community facilities and services that cater principally for children and families as it is anticipated that there would only be a relatively small in-migration of new families to the Balranald LGA as a result of the Balranald Project (direct and indirect). This in-migration would partially offset population declines experienced in both the Balranald LGA and Balranald town. As discussed in Chapter 5, there is generally sufficient capacity in most elements of the community infrastructure in Balranald to readily meet any reasonable demands from new permanent residents.

Generally, any increased demands on or use of community services and facilities in Balranald town as a result of the Balranald Project would only slightly reduce the likelihood of further reductions in these services given the projected population decline for Balranald LGA and town. For example, any increases in school enrolments would be welcomed as this would assist in justifying current and possibly increasing staff levels which, in turn, may enable broadening of curriculum offerings.

However, there is likely to be some increased demand in the following sectors of Balranald's community infrastructure from the Balranald Project workforce that would reside in the accommodation facility:

- Use of local retail and hospitality facilities. Although the proposed accommodation facility will
  provide full catering, there may be some increase in trade for these facilities. Given that the retail
  and hospitality sectors in Balranald town already cater for 'peak' demands generated by special
  sporting and community events, any project-related increases for these sectors would be beneficial
  and easily accommodated.
- Use of business facilities. It is expected that there could be some increased demand for business services and facilities within Balranald town, such as accounting and legal services.
- Emergency visits to the local doctor, dentist and hospital resulting from 'normal' health issues or small scale accidents. It is assumed that in the situation of any of the workforce that sustains a serious injury or other serious health issues would be transported, in the first instance to higher order regional or capital city medical facilities. As there is some capacity in the acute health facilities in Balranald town (see Section 5.2.2), it is anticipated that any increased demands could be accommodated by the existing health and emergency resources in Balranald town without negative impacts on levels of services for the wider community.
- Use of local recreation facilities, particularly those related to outdoor activities such as swimming, golf and fishing. Given the extent and capacity of existing recreational resources, it is not anticipated that there would be any negative impacts of increased use of these areas.
- Demand for an indoor sports/fitness centre. Such a centre is not available in Balranald town and the need for one has been identified by BSC (see Section 3.5). The demand generated by the Balranald Project for an indoor fitness centre/gym, would be, in the most part, met by the provision of recreation facilities at the accommodation facility. The proposal is to construct the accommodation facility on the project area. However as previously stated, Iluka is investigating the option of locating the accommodation facility in, or adjacent to, Balranald town.

There would not be any increased demands on community infrastructure from existing local residents who take up employment as a result of the Balranald Project (directly and indirectly).

Increased use of retail and business facilities and services could provide opportunities for the expansion of retail and business capabilities (diversification) or capacities (scale).

# ii Duration of impact

Any increases in demand on community services would generally be experienced for the duration of the construction and operations phases. However, after initial increases in demand, it would be expected that the services would respond to meet any higher levels of demand for the overall period of at least 10 years.

#### iii Significance of impact

Generally the significance of additional demands hospitality and community services are considered to be 'low' because of the existing capacity in most community services sectors in Balranald town. The lead-up time to project commencement would assist local stakeholders to develop a comprehensive understanding of the size, sourcing and accommodation arrangements for both the construction and operations workforce.

'High' positive impacts are expected on retail services due to predicted increased demand and spend on these services. This demand would provided the opportunity for the expansion in retail and business capabilities (diversification) or capacities (scale).

#### iv Extent of impact

The extent of this impact would be experienced by elements of the retail, hospitality and community facilities and services in and around Balranald town.

# v Potential to mitigate

Given the capacity that exists in most community services and facilities, there would be few if any specific mitigation measures that need to be undertaken. Communication between Iluka and service providers would ensure a cohesive understanding of potential demand and supply constraints.

# 6.3.5 Impacts on social amenity

#### i Scope of impact

Community image and social cohesion issues related to 'FIFO communities' (and, by implication, to DIDO communities) in Australia's resource sector were addressed in a recently released report on the Inquiry into the use of FIFO workforce practices in regional Australia undertaken by the House of Representatives Standing Committee on Regional Australia (2013). While some of the issues identified are relevant to the Balranald Project, a number are of limited relevance because of the relatively limited life of the project.

Key issues in relation to community image and social cohesion identified in the Standing Committee's report that have some relevance to the Balranald Project are the potential for:

• the development of an 'us and them' division between the established Balranald community and the Balranald Project workforce;

- a real or perceived reduction in community safety in and around Balranald town; and
- a lack of respect from the incoming workforce for local community values and the community capital through voluntary effort that has developed many of the local community's facilities.

During both the construction and operational phases of the Balranald Project, there would be the presence of more people and traffic movements in and around the shops and other businesses in the town centre focussed on Market Street, as well as in hospitality venues such as the Shamrock Hotel and the Ex-Servicemen's Memorial Club.

These changes may generate some minor pressures for local residents such as not being able to always park outside the shop people may want to go to or disquiet caused by the number of new faces and people in 'high visibility' clothing around the town. In some people's minds, these changes may add up to a feeling that the town is not what it used to be while others may appreciate the increased level of activity and energy around the town.

There may be an increased demand on existing recreation and sporting facilities (refer to Section 5.2.4) as a result of the incoming construction and operational workforce, and the likelihood that some of this workforce participates in sporting competitions (ie football). The extent of this demand and participation would depend on shift times and rosters. However, based on the results of interviews with officers of BSC, it is expected that any demand can easily be accommodated by the existing facilities and competitions. In fact, any additional participation is sporting facilities generated by the Balranald Project workforce is likely to be welcomed by the local community particularly if any of the new workforce participate in organisation of the sporting competitions.

The results of the House of Representatives Standing Committee on Regional Australia (2013) indicate the there may be some increase in minor offences resulting from any conflicts within members of the Balranald Project workforce or with local residents. It should be noted that Iluka's existing operations have seen negligible or no increases in anti-social behaviour.

Iluka has implemented a range of corporate policies and procedures to inform all company employees and contractors of their obligations with regards to behaviour and interaction with local communities at other operations. These policies and procedures (ie be respectful, maintain appropriate behaviour in public places, responsible consumption of alcohol) is reinforced through site induction and other training processes. It is expected that these activities would reduce the likelihood of nuisance complaints or incidents arising. However, if any such incidents occur, there are likely to be sufficient police resources within Balranald town to ensure that there are no negative impacts on the wider community or the general social amenity of Balranald town which is considered to be a safe and friendly town.

Increases in the level of activity around Balranald town generated by the Balranald Project workforce are likely to be most noticeable in the early stages of both the construction and operations periods and then the situation would stabilise for the duration of these project phases.

Overall, the increased level of activity around Balranald town that would be generated by the Balranald Project workforce is considered to be positive because of the likely economic and social benefits that would be experienced in the town.

For some residents close to the mine sites and related transport routes, there may be the potential for amenity impacts related to increased noise, dust and light spill.

#### ii Duration of impact

Impacts on the social fabric of Balranald may occur throughout the construction and operations phases but are likely to be most evident in the early stages of workforce establishment in and around Balranald town.

# iii Significance of impact

The significance of impacts on the social fabric of Balranald town is considered to be of 'medium' significance because of the peak size of the Balranald Project workforce (approximately 550 workers during the operational phase) relative to the permanent population of Balranald town (approximately 1,159 people in 2011).

#### iv Extent of impact

The extent of this impact is likely to be focussed on Balranald town. Operation impacts on amenity may occur on a limited number residences in proximity to the mine sites and related transport routes.

#### v Potential to mitigate

Based on experience in resource communities elsewhere in Australia, as well as overseas, there is a suite of measures that can be implemented to manage and mitigate negative impacts on the social fabric of Balranald town (see Section 0).

# 6.3.6 Construction and operational traffic impacts

#### i Scope of impact

As there are no rail transport connections to the Balranald Project, road transport would be utilised during both the construction and operational phases.

During construction, a range of heavy vehicles would be used to transport construction materials and plant and equipment to the project area, including the transport of oversized plant from Iluka's WRP mine. It is expected all main roads would be utilised, including the Sturt Highway, Balranald Tooleybuc Road and Balranald Ivanhoe Road. It is estimated that up to 83 truck deliveries of construction materials and plant and equipment would be made to the project area each day for a period of 2.5 years.

During operations, B-Double trucks would be utilised for all mine product (HMC and ilmenite) transport within NSW. The product would be transported via Balranald-Ivanhoe Road, McCabe Street by-pass, Sturt Highway, Balranald-Tooleybuc Road and then west into Victoria.

During operations, a maximum total of 75 B-Double trucks transporting product would be generated daily. Of these, approximately 71 trucks would return each day back-loaded with either gravel (58 trucks per day) or mining by-products from the Hamilton MSP (13 trucks per day). In total, 150 B-Double truck movements would be generated each day associated with product haulage and back-loading of gravel and/or mining by-products. While the majority of the product haulage route in NSW is located within rural areas, two small sections are located in non-rural areas containing dwelling houses; the southern section of McCabe Street/Sturt Highway intersection in Balranald town and the section of the Balranald-Tooleybuc Road which passes through Tooleybuc.

In addition to the above, there would be a number of light vehicle and bus traffic movements generated by the construction and operational workforce. During the construction and operational phases, it has been estimated that there would be about 132 and 157 traffic movements per day, respectively, to and from the project area.

There is the potential that additional vehicle movements generated by the Balranald Project would impact on some resident's amenity, such as potential noise impacts.

#### ii Duration of impact

Impacts would occur throughout the construction and operational phases of the project.

# iii Significance of impact

Two technical studies contained within the EIS address potential transport related impacts of the Balranald Project; the transport assessment and the noise assessment. The transport assessment states that the roads in the local area generally have low current traffic volumes and operate at high levels of service. It further states that due to these low traffic volumes, there would not be any significant traffic impacts in terms of level of service or traffic flow impacts for any road in either Balranald town or Tooleybuc. The noise assessment states that predicted road traffic levels would satisfy relevant road traffic noise criteria on all transport routes, including on McCabe Street/Sturt Highway intersection in Balranald town and the Balranald-Tooleybuc Road at Tooleybuc for construction traffic and product haulage.

It should also be noted that the NSW Road and Maritime Services (RMS), in partnership with VicRoads, has started planning the replacement of the existing bridge crossing the Murray River at Tooleybuc. A number of options are being considered, including a new bridge realignment which would allow for a bypass of the town. Should this option be pursued, traffic flow and road traffic noise would be significantly reduced from existing levels. However, should an option be pursued which maintains traffic through Tooleybuc, project related traffic impacts in terms of level of service or traffic flow impacts, and project related traffic noise would still comply with relevant criteria.

The significance of traffic impacts during the construction and operational phases is considered to be of 'low' significance because of the results of the transport and noise assessments.

# iv Extent of impact

The extent of this impact would be focussed on the transport routes which occur mainly on rural roads. However, some impacts will be felt within Balranald and Tooleybuc towns.

#### v Potential to mitigate

A range of transport related mitigation measures have been proposed to reduce potential impacts associated with additional construction and operational traffic generated by the Balranald Project. These measures are provided in both the transport and noise assessments.

### 6.3.7 Cumulative impacts with other mining projects

### i Scope of impact

There is the potential for some cumulative social impacts associated with the Atlas-Campaspe Mineral Sands Project located approximately 90 km north of Balranald town. State and Commonwealth approvals were obtained for the project in June and September 2014, respectively. While the project has an expected life of about 15 to 20 years, no date has been set for start of construction.

The information presented in the following sections is a combination of that relating to the Balranald Project (see Chapter 2) together with information derived from the EIS for the Atlas-Campaspe Mineral Sands Project (Resource Strategies 2013).

As stated in Section 0, the Balranald Project could lead to a population increase of 120 people in the Balranald LGA, leading to the demand for46 dwellings. Resource Strategies estimates that the Atlas-Campaspe Mineral Sands Project could lead to a population increase of 36 people in the Balranald LGA. This would generate demand for an additional 14 dwellings. Cumulatively, the two projects could increase the population of the Balranald LGA by 156 people and generate demand for 60 dwellings.

Similarly with workforce and accommodation impacts of the Balranald Project alone, cumulatively the two projects would:

- help to offset population decline in the Balranald LGA and region;
- increase the overall occupancy rates for tourist and temporary accommodation, which could result in short term stresses during community events; and
- place some short term stress on the availability and price of accommodation for the wider community (both in the property market and rental properties).

### ii Duration of impact

Cumulative impacts may occur for the extent of any concurrent construction and operations periods for both the Balranald Project and the Atlas-Campaspe Mineral Sands Project.

### iii Significance of impact

Cumulative impacts are considered to be of low significance. While there may be some short terms stress on the provision of accommodation, cumulatively the projects would provide greater work opportunities and provide more potential for offsetting of population decline.

### iv Extent of impact

The extent of this impact would be focussed on Balranald town.

### v Potential to mitigate

Given that both projects are still in the planning phases, there is potential to mitigate any cumulative impacts.

### 6.3.8 Rehabilitation and decommissioning

### i Scope of impact

At the completion of the mining activities at Nepean mine, infrastructure would be decommissioned and the mine sites progressively rehabilitated over several years until they are formally closed. As result of the completion of the mining activities, most of the Balranald Project's operational jobs would cease for both the non-local and local workforce components.

It is possible that the accommodation facility at the West Balranald mine would be retained to support any other regional mine development. The history of the mineral sands industry in the Murray Basin indicates that as one mining project is completed, another project generally comes on stream or is in development. This is particularly the case with Iluka as they aim to maintain availability of product (HMC) to supply its processing and distribution facilities in Victoria. As a result, a proportion of operational workers usually transfer to the next project in the region.

In the event a new project within the region is not developed to follow the Balranald Project, the accommodation facility may be dismantled and the site restored.

In community terms, as the Balranald Project workforce winds down, there would be reductions in the use of community services and facilities and the retail and hospitality sector in Balranald. In relation to the retail and hospitality sectors in particular, there may be some job reductions if there is any substantial reduction in business activity.

### ii Duration of impact

The impacts of the decommissioning period would be experienced over a relatively short period as operations are scaled down and site plant decommissioned and relocated. The rehabilitation and mine closure period would take several years.

### iii Significance of impact

The decommissioning of the Balranald Project has the potential to result in the permanent loss of the operations jobs for the regional/commuting and locally based workforce together with related flow-on economic benefits within the Balranald community. Assuming that another mineral sand project is not developed in the Murray Basin at the time of decommissioning of the Balranald Project, the significance of this impact is considered to be 'medium'; however, assuming another mineral sands project is developed in the Murray Basin as the Balranald Project winds down, which is presumed to be the case, the significance of this impact is considered to be 'low'.

### iv Extent of impact

The extent of this impact would be focussed on Balranald town but would have more diffuse impacts throughout the assumed 200 km region from which the majority of the Balranald Project workforce would be drawn.

### v Potential to mitigate

Given that the Balranald Project would be completed in terms of extraction of the mineral sands products from the identified West Balranald and Nepean deposits, the potential to mitigate the impacts of the winding down of the Balranald Project workforce during the decommissioning period would in part depend on whether a subsequent mining project comes on stream in this period (see Section 7.6).

### 7 Mitigation measures

### 7.1 Introduction

This chapter describes the mitigation measures Iluka proposes to implement to address the potential social impacts of the Balranald Project. This chapter assembles the various threads of the impact assessment, integrating stakeholder and expert risk perceptions. The development of mitigation measures has also been guided by the outcomes of stakeholder engagement, particularly the stakeholder interviews and community information sessions.

Iluka is committed to entering into an agreement with BSC in relation to Iluka's contributions to and involvement in the local area and has commenced discussions regarding the scope and terms of such an agreement.

### 7.2 Workforce

A key matter to be addressed in relation to the proposed Iluka workforce is to ensure that opportunities are created for local residents to gain employment on the Balranald Project and to contribute to the management of any local workforce shortages that may arise for existing businesses and other employers. As previously stated, Iluka endeavours to draw the majority of its workforce from the local region, which for the Balranald Project, is defined as the area within a 200 km radius of the town of Balranald.

Iluka would continue engagement with key stakeholders (including BSC) and the general community in relation to workforce issues. The trade training facilities at the Balranald Central School may be useful in the development of 'partnership' opportunities for the delivery of training programs.

Iluka's approach to employment embodies the following principles:

- a preference for local employment wherever possible this approach has been employed across
  the Murray Basin operations, with a large proportion of the workforce drawn from the relevant
  local region;
- local contractors are encouraged to tender for work, both during the construction and operations phases; and
- use of local businesses such as hotels, motels and restaurants over the life of the Balranald Project.

In order to achieve this outcome, Iluka proposes to:

- provide advance information about its approach to workforce sourcing, recruitment policies of local people, and work arrangements in relation to such matters as shifts, transport and work, health and safety obligations;
- work with recruitment, education and training providers in Balranald, Swan Hill and Mildura to
  encourage the provision (in advance of project commencement) of future employment and training
  opportunities for skills that would be directly and indirectly generated by mining projects;
- continue liaison with relevant agencies to ensure that any wider community issues about training
  and labour availability for 'vacated' local jobs in favour of jobs on the Balranald Project does not
  become an 'Iluka' issue;

- participate, as appropriate, in business groups, events or programs as part of a Balranald business
  association and/or provide training programs directly relevant to project needs or broader industry
  skills (including programs specifically designed to assist local companies to comply with Iluka's prequalification and contractual requirements); and
- participate in a BSC mining liaison committee so that relevant project information can be provided and community feedback received.

The provision of these activities would be supported by Iluka's proposed development of a local employment and business policy. The intent of this policy is to provide relevant commitments to drive Iluka activity in potential areas including:

- product and service procurement;
- equitable or contracted procurement;
- pre-qualification assistance;
- employment advertising and resourcing;
- training assistance or participation; and
- service referrals.

### 7.3 Housing and accommodation

### 7.3.1 Workforce accommodation

To address workforce housing and accommodation requirements, Iluka proposes to develop an accommodation facility for the life of the Balranald Project (including construction, operations and rehabilitation phases).

As stated in Chapter 2, Iluka proposes to lodge a separate DA under Part 4 of the EP&A Act with BSC for an accommodation facility in the Balranald town. Approval for a second, alternative site adjacent to the West Balranald mine is being sought as part of this EIS. In the event that approval is received for both options, Iluka would only construct an accommodation facility at one of the approved locations.

### 7.3.2 Flow-on accommodation demands

Due to the relatively small volume of potential new residents to Balranald LGA as a result of the Balranald Project, it is not anticipated that this would impact the availability of accommodation for existing or other new residents. Relatively low house prices, along with affordable land and new build developments, would provide an even opportunity for non-project related home purchasing or leasing. In terms of short-term accommodation demand (ie hotels and motels during early construction works), Iluka may restrict availability of supply to other users during peak demand periods. Iluka will investigate opportunities where it may reduce its local short-term accommodation demand, at defined periods, such as during large community events. Iluka will work with local short-term accommodation providers, event planners and BSC's tourism development officer to identify such periods and determine what, if an, modifications can be made to Iluka scheduling and accommodation demand.

### 7.3.3 Rental and housing and land development markets

Although the predicted population increase forecast to be generated by the Balranald Project may offset the forecast population decline in the Balranald LGA, the project, may place some short term stress on housing availability and the capacity of some community services in Balranald. This stress could be accentuated should the Project be developed concurrently with the Atlas-Campaspe Mineral Sands Project.

It is likely that the private sector would respond to this demand.

However, to assist the identification and management of any housing availability, Iluka proposes to:

- maintain dialogue with stakeholders who regularly monitor the local housing market relative to any direct Iluka requirements;
- continue engagement with BSC, Cristal and accommodation suppliers, to monitor general shortterm accommodation usage by Iluka and Cristal and any impacts on other accommodation sectors;
- consult with Cristal to ensure that potential negative social impacts result from any concurrent stages of project construction and operation are minimised; and
- augment temporary accommodation if required at the accommodation facility.

### 7.4 Community services

As it is unlikely that there would be any significant project-related demands on most community infrastructure in Balranald town that could not be accommodated by the existing capacity in this sector, there would not be any need for specific upgrades to facilities such as primary or secondary schools and the child care centre.

Where there may be some project-related demands on certain community services, Iluka proposes to:

- have discussions with health and emergency services (ambulance, fire and rescue services) prior to commencement of construction, to ensure that there would be appropriate interface arrangements for operational matters;
- provide advance briefings about corporate purchasing policies and assistance to local businesses to become pre-qualified to assist them to tender for the supply and/or delivery of goods and services to Iluka during the construction, operational and rehabilitation/decommissioning periods; and
- provide a conduit between local businesses and major Iluka contractors.

### 7.5 Social amenity

To maintain and further develop positive relations between Iluka and the local community, Iluka proposes to:

- build on the existing base of community goodwill in the local community by ensuring, through the
  nominated mitigation and management measures presented in this social assessment as well as a
  regular stakeholder communications program, to ensure that the benefits to the community as a
  result of the Balranald Project area realised; and
- emphasise acceptable behaviours in Balranald town as part of its induction program for the incoming workforce and ensure workers continue to adhere to such expectations.

### 7.6 Rehabilitation and decommissioning

At the completion of the mining activities, the Balranald Project's mine infrastructure would be decommissioned and the mine sites progressively closed and rehabilitated over several years. While it is likely there would be some permanent loss of jobs, the timing of operational wind down and ultimate site decommissioning would be known and communicated in advance. Iluka would work with relevant stakeholders to provide information about the timing of these final stages and appropriate support to employees, suppliers and the community as may be required.

As noted previously, there is likely to be the opportunity for a proportion of the Balranald Project workforce to transfer to a subsequent mineral sands project in the region should opportunities eventuate into the future.

### 8 Conclusion

Based on the results of this social assessment, the net community benefit of the Balranald Project for the Balranald community is considered to be positive. This assessment is based on the outcomes of comprehensive stakeholder engagement with the Balranald community and the test of whether a proposal is likely to have, in planning terms, 'acceptable' or 'reasonably acceptable' outcomes. This is a process of weighing up the positives (or benefits) and negatives (or disbenefits) of a proposal and coming to a view as to whether the benefits outweigh the disbenefits to support a proposal.

The key social benefits of the Balranald Project as a result of employment and expenditure are considered to be:

- enhancement of the local and regional economies; and
- assisting to arrest predicted local and regional population decline, diminishing availability of services and facilities in the Balranald region and declining community sustainability.

The Balranald Project has the potential to diversify and strengthen the region's economic base. It would likely increase the size of a number of industry sectors — particularly mining, but also mining related services such as mechanical repairs, utilities, wholesale and retail trade, accommodation and entertainment.

Businesses in the region would likely benefit through direct expenditure and the extra money injected into the area through mine employment and services catering to the Balranald Project.

These factors mean the economy of the Balranald region could be more resilient in the short and longer term. During construction and operations there would be greater economic activity and employment opportunities than currently exist. The social benefits of stronger local and regional economies would include more diverse employment opportunities for local residents and the availability of enhanced retail and other businesses.

Populations of many regional and rural parts of Australia are declining because of a range of factors, including amalgamation of farms, regionalisation of government and other services, and improved transport and communications infrastructure, which is encouraging activity and thus population to concentrate in regional centres. Locally, the population of the Balranald LGA and town has declined as a result of the impacts of the Millennium Drought and the closure of the river red gum timber industry. As farming populations decline, local community facilities and activities in rural areas decline and, in rural towns, local retail, community services and employment opportunities are reduced. This combination has a compounding effect resulting in an overall loss in the community's productive capacity, especially youth and working age people, reductions in the range and viability of community and sporting clubs, and declining asset values, such as of private residences.

Much of the Balranald Project's host region is at risk of these negative social impacts of broader structural changes in the agriculture sector in particular. The DP&E predicts that the population of the Balranald LGA would likely continue to decline for at least the next 20 years. Jobs created through the Balranald Project and other mineral sands mining projects would provide the opportunity for more people to remain in the region.

Although the Balranald Project has the potential to have some negative social impacts as identified in this social assessment, through the application of identified mitigation measures, the identified impacts could be variously avoided, reduced to acceptable levels or managed through the life of the Balranald Project. As a result of the key social benefits of the Balranald Project identified above, it is expected that the Project would have a net community benefit for the Balranald LGA and town and surrounding region.

### References

### **Publications**

Bemax, 2011. Atlas-Campaspe Preliminary Environmental Assessment.

Balranald Shire Council, 2012a. Community Strategic Plan 'Balranald Shire 2022'.

Balranald Shire Council, 2012b. Resourcing strategies.

Balranald Shire Council, 2012c. Strengthening Basin Communities – Community Development Plans for Balranald and Euston 2012-16.

Balranald Shire Council, 2011a. Management Plan 2011/14.

Balranald Shire Council, 2011b. Economic Development Strategy Balranald Shire (Western Cluster) 2011-16

Balranald Shire Council, 2011c. Draft Balranald Crime Prevention Plan 2011-15.

Department of Education, Employment and workplace Relations, 2013. *Small Area Labour Markets Australia – December Quarter 2012*. Labour Market Research and Analysis Branch, Labour Market Strategy Group.

EMGA Mitchell McLennan Pty Ltd (EMM), 2012. Cobbora Coal Project: Social Impact Assessment. Report for Cobbora Holding Company Pty Ltd.

Gillespie Economics, 2015. Balranald Mineral Sands Project - Economic Assessment. Report prepared for Iluka Resources Limited.

House of Representatives Standing Committee on Regional Australia, 2013. *Cancer of the bush or salvation for our cities? Fly-in, fly-out and drive-in, drive-out workforce practices in Regional Australia*.

Murray Darling Basin Authority, 2012a. Murray Darling Plan.

Murray Darling Basin Authority, 2012b. Socio-economic implications of the proposed Basin Plan.

NSW Bureau of Crime Statistics and Research, 2013. New South Wales Recorded Crime Statistics 2012.

NSW Department of Planning, 2010. NSW Statistical Local Area Population Projections, 2006-2036. Prepared by Department of Planning.

NSW Department of Planning, 2007. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

NSW Government, 2011. NSW 2021: A Plan to Make NSW Number One. Report prepared by Department of Premier and Cabinet.

NSW Government, 2012. Murray-Lower Darling Regional Action Plan.

New South Wales Government. Office of Social Policy, NSW Government Social Policy Directorate. *Techniques for Effective Social Impact Assessment: A Practical Guide.* 

Regional Development Australia, 2010. Murray Regional Plan NSW 2010-2015.

Resource Strategies, 2013. *Atlas-Campaspe Mineral Sands Project Environmental Impact Statement*. Report prepared for Bemax.

Riverina and Murray Regional Organisation of Councils, 2011. *Supplementary State of the Environment Report*.

Sinclair Knight Mertz, 2010. Scenario Planning for an Innovative Response to the Water Challenge in the Murray Riverina Region - Existing Situation Analysis – Revised 22 December 2010. Report prepared for Regional Development Australia Murray, Regional Development Australia Riverina and Trade and Investment NSW.

#### Websites

Australian Bureau of Statistics (ABS), 2011 *Census Community profiles*, viewed 21 November 2011, 15 October 2014 and 23 March 2015, http://www.abs.gov.au/.

- 2006 Census Community profiles, viewed 21 November 2011, 15 October 2014 and 23 March 2015, http://www.abs.gov.au/.
- 2012 Census 2011 Community profiles (released June 2012), viewed 6 August 2012, 15 October 2014 and 23 March 2015, http://www.abs.gov.au/.

http://www.myschool.edu.au/ viewed on 27 September 2012, 17 October 2014 and 23 March 2015.

http://www.myhospitals.gov.au/hospital/balranald-multi-purpose-service/admissions viewed on 28 September 2012, 15 October 2014 and 23 March 2015.

NSW Government, 2007, State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, viewed on 10 February 2012 and 23 March 2015, http://www.legislation.nsw.gov.au/fullhtml/inforce. Prepared by Parliamentary Counsel's Office.

NSW Bureau of Crime Statistics and Research 2012 and 2014.

The Daily Telegraph (15 July 2011) *Selling off the farm* viewed on 13 September 2012 <a href="http://www.dailytelegraph.com.au/news/sydney-news/selling-off-the-farm-foreign-raiders-are-killing-the-bush/story-e6freuzi-1226094940269">http://www.dailytelegraph.com.au/news/sydney-news/selling-off-the-farm-foreign-raiders-are-killing-the-bush/story-e6freuzi-1226094940269</a>.

# Abbreviations

ABS	Australian Bureau of Statistics
AHS	Aboriginal Health Service
ASX	Australian Stock Exchange
BDL	Baseline diversion limit
BHS	Balranald Health Services
CSP	Community Strategic Plan
DFS	Definitive Feasibility Study
DGRs	Director General's Requirements
DIDO	Drive in, drive out
DP&E	Department of Planning and Environment
EIS	Environmental impact statement
EL	Exploration Licence
EP&A Act	Environmental Planning and Assessment Act 1979
FACS	(Department of) Family and Community Services
FIFO	Fly in, fly out
Gl	Gigalitre
ha	Hectare
НМС	Heavy mineral concentrate
HOW	Homes Out West
ICSEA	Index of Community Socio-Educational Advantage
km	Kilometre
LGA	Local government area
m	Metre
MFC	Mallee Family Care
MSP	Mineral separation plant
NSW	New South Wales
PFS	Pre-feasibility study
RDA	Regional Development Australia
SA	Social assessment
SEIFA	Socio Economic Indexes for Areas
SEPP	State Environmental Planning Policy
SOE	State of the Environment
SSD	State Significant Development
VRS	Volunteer Rescue Service
WRP	Woornack, Rownack and Pirro

Appendix A		
Stakeholder interviews		



### Table A.1 Stakeholder interviews

Agency/organisation	Interviewee	Purpose of interview
Health		
Balranald Health Services	Manager	Capability and capacity of health services in Balranald
	General Practitioner	As above
Aboriginal Health Service	CEO (as of July 2012)	Information about the health service's operations and capacity
Education		
Balranald Early Learning Centre	Director	Information about the centre's operations and capacity
St Joseph's Primary School	Principal	Information about the school's operations and capacity
Balranald Central School	Principal	Information about the school's operations and capacity
Community services		
Mallee Family Services	Team Leader Senior Case Worker	Information about the service's operations and capacity
St Vincent de Paul	Volunteers	Information about the service's operations and capacity
Emergency services		
NSW Police	Employee	Information about the service's operations and capacity
NSW Ambulance Service	Employee	Information about the service's operations and capacity
Voluntary Rescue Service	President and aptain	Information about the service's operations and capacity
NSW Fire Service	Employee (by phone)	Information about the service's operations and capacity
Religious denominations		
St Barnabas Anglican Parish	Minister	Information about the role and activities of the church in Balranald and district observations about Balranald community
Presbyterian Parish	Minister	Information about the role and activities of the church in Balranald and district observations about Balranald community
St Dymphna's Catholic Parish	Parish Priest	Information about the role and activities of the church in Balranald and district observations about Balranald community
State and Local Government ag	encies	
Balranald Shire Council	Mayor (in 2012)	Information about council's operations and facilities
	Mayor (in 2013 and 2014) CEO	and observations about the Balranald community
	Economic and Community Development	
	Director – Corporate Services	
NSW Office of Heritage and Environment	Discovery Ranger, Yanga National Park	Information about the park's operations and facilities and plans for improvements

Table A.1 Stakeholder interviews

Agency/organisation	Interviewee	Purpose of interview
NSW Attorney General's Department	Court Registrar	Information about the court's operations and matters heard
Business sector		
Balranald Inc	Community Development and Events Manager and Committee Member	Information about Balranald Inc's role, structure and activities
Balranald Bakery	Proprietor	Information and observations about Balranald's retail sector
Balranald Caravan Park	Managers (until December 2012)	Information about the caravan park's operations,
	Managers (from January 2013)	facilities and occupancy rates
Balranald Club Motel	Proprietors	Information about motel operations and occupancy rates
Balranald Colony Motor Inn	Proprietor	Information about motel operations and occupancy rates
Balranald Ex-Servicemen's Memorial Club	Manager	Information about the club's facilities and operations
Balranald Motor Inn	Proprietors	Information about motel operations and occupancy rates
Balranald Pharmacy	Retail assistant	Information and observations about Balranald's retail sector
Capri Motel	Proprietor	Information about motel operations and occupancy rates
Conway's Real Estate	Proprietors	Information about the real estate market and housing demand and supply in Balranald
IGA Supermarket	Proprietors	Information and observations about Balranald's retail sector
Sair's Clothing	Proprietor	Information and observations about Balranald's retail sector
In the Garden	Proprietor	Information and observations about Balranald's retail sector
Brian O'Haire, Solicitor	Solicitor	Information and observations about Balranald community
Sturt Motel	Proprietor	Information about motel operations and occupancy rates
Potentially affected landholder	s	
Mine footprint/access roads	Various landholders	Information about how the Balranald Project might
Transmission line		affect the local community generally and agricultural operations on particular properties
Mungo Street residents		
	Various residents	Information about Mungo Street residential area and effects of potential accommodation village if developed on site on north side of Mungo Street

Appendix B						
Аррениіх в						
Information disp	olays at 2014	l communi	ty informa	tion sessio	ns	





# What are mineral sands?

Mineral sand deposits are formed from the erosion and weathering of old beach sands. Deposits of mineral sands are formed along ancient coastlines where heavier minerals have been concentrated by wave and wind action.



### Titanium dioxide

Titanium dioxide is used as a pigment for the manufacture of paints, coatings and plastics, as well as in a range of other applications including inks, fibres, rubber, food, cosmetics and pharmaceuticals. It is also used in the production of titanium metal used in commercial aerospace, military and industrial applications.

### 7ircon

Zircon is used predominantly in the manufacture of ceramics based products including tiles, bathware and tableware. It is also used in paper coatings, paint driers, antiperspirants and catalysts, and the manufacture of zirconium metal for nuclear reactor cores.

### Mineral sands in Australia

Australia's mineral sands deposits occur from central New South Wales to northern Queensland and in Western Australia. Ancient beach deposits are also found in Victoria, New South Wales and South Australia.

Mineral sands deposits are characterised by the heavy mineral concentrate (HMC) found in a deposit and relative proportion of valuable HMC components of rutile, ilmenite, leucoxene and zircon.

### **Products**

Mineral sands consist of two core product streams:

- titanium dioxide in the form of rutile, ilmenite and leucoxene; and
- zircon.





# Iluka Resources in the Murray Basin

Iluka Resources (Iluka) is involved in the recovery and development of mineral sands. Iluka has existing long—term commitments and operations in the Murray Basin, in both NSW and Victoria.

# **Exploration**

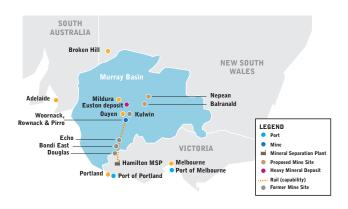
Exploration involves securing tenements, drilling, geological resource modelling and evaluation work to identify economically viable mineral deposits.

Iluka has been undertaking exploration in the Murray Basin for more than 10 years and continues to work a number of exploration leases in the region. At present, this primarily includes exploration leases near Balranald, NSW.

# Project development

Project development follows exploration, and involves determining the most appropriate method for the development of a mineral deposit. This includes evaluating the main technical challenges associated with mining, and conducting baseline environmental studies.

West Balranald and Nepean are two rutile-rich mineral deposits in the northern Murray Basin, NSW. The deposits contain valuable heavy minerals, including rutile, zircon and ilmenite. If mining of these deposits proceeds, the project will eventually form a major part of Iluka's rutile production following the completion of mining at the deposits of Woornack, Rownack, Pirro (known as WRP) in Victoria.

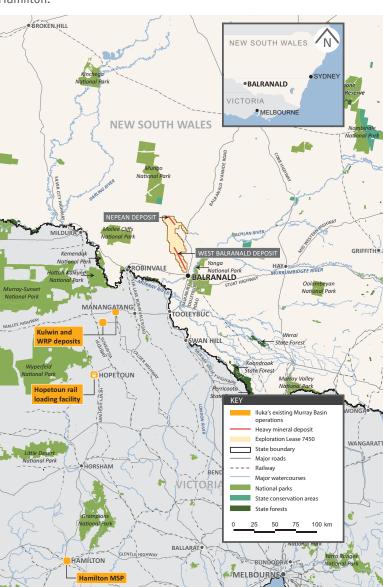


# **Operations**

The Murray Basin is Iluka's primary source of rutile and zircon production. Iluka's Murray Basin Stage 1 operations began in 2006 at deposits located near Douglas, concluding in 2012.

Murray Basin Stage 2 has involved mining a series of northern deposits at Kulwin (completed in 2012) and Woornack, Rownack and Pirro (WRP) deposits, located 30 km south-east of Ouyen.

Iluka operates a number of facilities in Victoria which support operations in the Murray Basin, including a purpose-built rail loading facility at Hopetoun and a mineral separation plant in Hamilton.





# The Balranald Project

### The mineral resource

The Balranald Project includes construction, mining and rehabilitation of two high grade mineral sand deposits:

- West Balranald, containing an ore body:
  - · approximately 50 to 80 m below the ground
  - · approximately 20 km long
  - between 160 and 300 m wide and up to 6 m thick
- Nepean, containing an ore body:
  - approximately 40 to 60 m below the ground
  - approximately 8 km long
  - between 130 and 160 m wide and up to 5 m thick

# Mining

It is anticipated that mining of the ore shall use conventional 'dry mining' techniques — incorporating the potential use of various earthmoving equipment such as excavators, scrapers, dozers trucks and conveyors. The ore bodies and overlying material (referred to as 'overburden') are saturated by very saline groundwater, which is up to two times more salty than sea water. Mining first requires the saline groundwater to be extracted, using a network of bores, so that the overburden can be excavated using trucks and excavators. The extracted groundwater would be reinjected into the same aquifer further away from the mine.

Direct placement of most overburden into the excavated pit is the preferred material handling process, although some will be placed in stockpiles outside the pit, and returned to the pit as mining progresses. Rehabilitation will be undertaken continuously.

Post-mining land uses are likely to include a mix of chenopod shrublands, mallee, and some cropping.



# Processing and transport

Ore extracted from West Balranald and Nepean is planned to be processed onsite at a processing plant to be located at West Balranald, to produce HMC and ilmenite.

It is proposed that HMC shall be transported by truck to Iluka's existing rail loading facility at Hopetoun and then sent by rail to the Hamilton mineral separation plant (Hamilton MSP). A potential ilmenite product may be transported by road to a new rail loading facility proposed to be constructed at Manangatang, which will then be sent by rail to a new loading facility proposed to be constructed at the Port of Geelong.



### Other infrastructure

The Balranald Project may also require the construction and operation of other components including:

- workforce accommodation facility to house workers during the mine construction and operation phases.
- transmission line to supply power to the mine.
- water supply pipeline to supply freshwater for the project.

The Balranald Project is expected to run for approximately 10 years, including around 18 months to two years for the construction phase and up to 10 years for the operational (mining) phase. Following mining, rehabilitation and mine closure activities will be completed.



# Project development and approvals

There are five stages in the project development process at Iluka; prefeasibility, definitive feasibility, execute, operate, and closure/rehabilitation.

# Pre-feasibility and definitive feasibility studies

The pre-feasibility study (PFS) for the Balranald Project (completed in 2013) investigated mining methods for the West Balranald and Nepean deposits, and also included baseline environmental investigations.

The definitive feasibility study (DFS), currently in progress, aims to evaluate how the project will be developed to a greater level of certainty than the PFS. The DFS stage involves obtaining all relevant government approvals.

The Iluka Board must first approve each stage before the PFS stage can progress to the DFS stage, and the DFS stage progress to the execute stage.

# **Project Approvals**

A number of government approvals are required for the Balranald Project at local, State and Commonwealth government tiers. The two main approvals are:

- approval from the Commonwealth Minister for the Environment under the Commonwealth Environment Protection Biodiversity and Conservation Act 1999 (EPBC Act) for most aspects of the project; and
- development consent from the NSW Minister for Planning under Part 4 (Division 4.1) of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) for the construction and operation of the project;

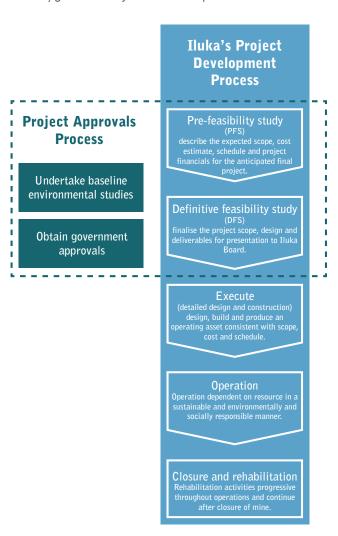
Other approvals are required for:

- a transmission line to supply power to the Balranald Project;
- a workforce accommodation facility in NSW, near Balranald;
- the Manangatang rail loading facility in Victoria; and
- a port facility in Victoria.

These approvals will be sought from relevant planning authorities (councils or state government agencies).

Applications for all approvals will be supported by detailed environmental assessments. In particular, applications for the approvals under the EPBC Act and Part 4 (Division 4.1) of the EP&A Act will be supported by environmental impact statements (EISs) that are required to comprehensively address all environmental, social and economic aspects.

Preparation of the EIS has commenced and will include technical studies prepared by experts covering noise, air quality, greenhouse gas, ecology, bushfire, heritage (Aboriginal and historic), water resources (ground and surface water), land resources (soils and agriculture), rehabilitation, traffic, social, economics, geochemistry and visual impacts.





# Want more information?

Community engagement is an important part of Iluka's business as it allows stakeholder values, issues, impacts and opportunities to be identified and included in Iluka's project designs and implementation.

Iluka has engaged with a number of stakeholders since late 2010 regarding various aspects of the Balranald Project, including land owners, business owners, service providers, Commonwealth and State government agencies and local councils.

Further engagement is planned with the community and stakeholders. This will include provision of further information before applications are prepared and submitted for the various required approvals.







If you want more information on the Balranald Project please contact the Community Relations Team:

• Phone 08 8300 2000

• Fax 08 8300 2003

• Email balranald.community@iluka.com

Appendix C		
Community newsletters		







# Balranald Community Update

#### COMMUNITY ENGAGEMENT

Engaging with landholders, members of the Balranald community, government regulators and other stakeholders is a crucial part of Iluka's project development.

Throughout the DFS process, Iluka plans to continue to meet with stakeholders within the Balranald region, providing information on current and future activities while responding to enquiries from the general public.

Iluka has already engaged in a number of consultation activities during 2014, including numerous discussions and workshops with regulators and other government officials.

Recent community activities include quarterly briefings to the Balranald Shire Council to update councillors and executive staff on the development of the Balranald Project.

Additionally, Iluka has participated in several landholder forums, hosted by the Homebush Landcare Group. This forum (held quarterly) provides Iluka and landholders an opportunity to discuss key land management issues.

Ongoing opportunities to discuss the project with Iluka representatives will be made available through 2014 and 2015; however, please feel free to contact us with any queries or questions you may have at any time.

#### COMMUNITY PARTNERSHIPS

In addition to our sponsorship of the 5 Rivers Festival, Iluka has most recently supported the Balranald Murrumbidgee Fishing Classic and the Balranald Golf Club Ladies Day. We congratulate all involved on the fantastic success of each

Iluka is also continuing its support of Balranald Central School students, as part of the NSW Minerals Council Minerals Education Bursary Scheme (MEBS). The MEBS is a scholarship-style program aimed at supporting those students interested in developing a career in mining.

Iluka would like to congratulate the 2014 recipient, a Year 11 student considering a career in mechanical or electrical engineering. This student was selected from a number of other deserving candidates and will join a current Year 12 student as Balranald Central School participants in the scheme.

Iluka is looking forward to working with both students this year and wish all students well in their academic endeavours in 2014 and beyond.

#### FOR MORE INFORMATION ON THE BALRANALD PROJECT

Any questions or comments relating to the Balranald Project, Iluka's current activities or our future operations can be directed to:

Allan Kane – Senior Community Relations Advisor

phone: (08) 8300 2000 | mobile: 0467 766 748 | fax: (08) 8300 2003

email: balranald.community@iluka.com

address: Iluka Resources, PO Box 149, Balranald NSW 2715



### Meet the Team:

PAUL GENTLES, Senior Health and Safety Specialist

### When did you join Iluka?

I joined Iluka in 2007 as a safety specialist, working at the Jacinth-Ambrosia (SA) and WRP (Vic) mines. I started work on the Balranald Project in 2012.

### Why do you work in health and safety?

I eniov it as I feel I can make an important contribution by preventing just one person from getting hurt. I also get motivated when I can see local contractors develop their safety cultures by working with Iluka.

### What do you like about working in Balranald?

Everyone I have come across in Balranald has a positive attitude towards the project. are always willing to help out and really are some of the friendliest folk I've come across.

# **ABOUT ILUKA**

Iluka Resources Limited (Iluka) is involved in mineral sands exploration, project development, operations and marketing, with mining, processing and transportation throughout Victoria, South Australia, Western Australia and the US. The Balranald project includes two deposits, West Balranald and Nepean, located north of the township of Balranald, New South Wales.

#### BALRANALD PROJECT UPDATE

Iluka continues to progress the development of the Balranald Project with the continuation of the Definitive Feasibility Study (DFS) Stage 1. Integral to the DFS Stage 1 is a number of work programs that will determine how the Balranald Project will be developed in an economic, environmentally and socially sustainable way.

Work programs that Iluka is currently resourcing include:

- field trials to confirm operating conditions:
- an engineering and design program;
- development and environmental approvals, and
- stakeholder and government relations activities.

The information gathered from the field trials will support both the engineering (design and mine planning) and the federal, state and local government approvals processes. Ultimately, all work programs will inform Iluka's final decision on the progression of Balranald Project into an operating mine.

### **OCTOBER 2014**

IN THIS ISSUE: Stage 3 Hydrogeology Investigation Borehole Mining Trial Community Engagement Community Partnerships Meet the Team Contact Iluka

### **CURRENT WORK PROGRAM -OVERVIEW**

You may have noticed Iluka's substantial presence within the Balranald community in the last twelve months. highlighted by an operations base being established in the town.

Iluka employees, along with work crews from a number of our service contractors, have been undertaking a series of works to validate the dewatering and reinjection of saline water and complete site works in preparation for the borehole mining trial. Further information on these activities is included in their respective sections overleaf.

At the same time, other Iluka representatives are active in Balranald in support of our administrative, environmental, government and community relations activities.









# STAGE 3 HYDROGEOLOGY INVESTIGATION

### Mine dewatering trials

Should the Balranald Project be approved as a 'truck-and-shovel' style mining development, the West Balranald deposit would need to be dewatered so the resource can be efficiently extracted and processed. As a result, the third stage of Iluka's hydrogeology investigation has been developed to assist Iluka to validate:

- the understanding of the regional hydrogeology and to demonstrate the technical feasibility of lowering the saline water table within the direct vicinity of the mineral resource; and
- dewatering and reinjection parameters, which shall influence final engineering design and inform environmental impact assessments.

This investigation will be achieved through the development and operation of three dewatering-reinjection trial sites — one long-term and two smaller short-term sites — and the associated monitoring, capturing and analysis of data.

Starting in October 2013, Iluka has undertaken a comprehensive drilling campaign (production, injection and monitoring bores) in preparation for the start of three trials.

More recently, initial trials have been completed with the successful pumping of saline groundwater from the production bores with concurrent reinjection of water into the same aquifer.

Monitoring bores, designed to assist Iluka to assess any hydrogeological changes generated from the pumping and reinjection activities, have yielded significant volumes of data.

Iluka's hydrogeology specialists are now integrating the data into our comprehensive regional groundwater model for inclusion in the environmental impact Statement (EIS) and development design considerations.

Iluka is currently planning on a second trial at the long-term pump test site to add further value to the Balranald Project.

"Initial trials have been completed with the successful pumping... and reinjection of water"

# BOREHOLE MINING TRIAL

### Developing a new mining technique for Iluka

Within the Balranald region, there are a number of identified resources that under current economic conditions are not commercially viable to develop. Iluka is currently exploring ways to develop resources with lower costs and lower impacts to the environment. By the end of 2014, Iluka plans to complete an innovative research and development initiative that may have significant benefit for the future mining of these resources — Iluka refers to these activities as borehole mining.

The West Balranald deposit has been selected as the preferred location to validate the potential of a borehole mining resource extraction application for Iluka.

The trial will involve a drilling rig (similar to that in the picture below) that is designed to extract mineral to the surface for screening and resource assessment. Should the trial be successful in mining material to the surface, Iluka will also investigate the concept of reinjecting material back into the yold.

Construction work in support of the trial is almost finalised with the civil works program complete and plant construction concluding. Drilling is expecting to commence in mid-October with the trial scheduled for completion by the end of this calendar year.

This is an exciting program for Iluka and we look forward to updating the Balranald community on its successful operation.



# ILUKA at the 5 RIVERS FESTIVAL

Iluka is proud to once again join in the local festivities at the 2014 '5 Rivers' Festival and support this important community event as a Gold Sponsor.

As part of our ongoing commitment to consultation, Iluka representatives will be in attendance to speak directly with the community on any matters related to the Balranald Project.

Iluka representatives will be part of the following 5 Rivers Festival events:

Friday 10 Oct, 9:00AM - 4:00PM: Local Retailers Fair, Market Street Saturday 11 Oct, 9:00AM - 4:00PM: Riverbank Bash, Balranald Caravan Park (this event is ticketed)

Please note that while the Riverbank Bash is a ticketed event, all communit members can access Iluka on Friday without restriction

Iluka encourages all locals and visitors alike to drop in on our information stand to find out more about Iluka, the Balranald Project and learn about minerals sands and how they are used.

As always, Iluka is very keen to hear of your views on the project, whatever your interest. As Iluka seeks to finalise its EIS, your views are important in ensuring our proposal has adequately considered community concerns and aspirations.



Iluka's Laura Otrakdjian and Gloria Xiaowan Gu, 2013 5 Rivers Festival





November 2013

Iluka Resources is involved in mineral sands exploration, project development, operations and marketing, with mining, processing and transportation operations throughout Victoria, South Australia, Western Australia and the US. The Balranald project includes two deposits, West Balranald and Nepean, located north of the township of Balranald.

### PROJECT UPDATE - STUDY PROGRAM

Throughout 2011 and 2012, Iluka completed a Pre-Feasibility Study (PFS) for the Balranald project, to determine how the Balranald mineral sands deposits could be developed. This study was submitted to the Iluka Board, who provided approval in August 2013 for the project team to enter the next stage of project development, the Definitive Feasibility Study (DFS) Stage 1.

This phase of the project has commenced and will confirm information accumulated to date, and further define the scope of the project through a number of field programs.

### **CURRENT WORK PROGRAM**

You may notice a number of work crews moving through the Balranald area over the next 6–8 months, conducting the field programs as part of the DFS Stage 1. The two major programs are:

- Hydrogeology investigations which involves undertaking activities to improve Iluka's understanding of the groundwater environment,, as well as completing additional tests to confirm current information regarding the reinjection of water back in to the groundwater system during mining, and
- Borehole mining trial which involves the testing of innovative mining methods, including a proposal to extract mineral through a series of bore holes.

The information gathered from these work programs will enable the engineering design and mine planning works to better define the scope of the next phase of the project and subsequently form a recommendation to Iluka's Board on progression of the project.



Matt Landers from KCB, testing drill core samples

### **COMMUNITY ENGAGEMENT**

There are a number of project elements which the team will engage with the local community over the coming months, to help inform the project design and Environmental Impact Assessment regulatory approvals process.

These elements include confirming:

- an accommodation facility design and layout;
- transportation route; and
- opportunities for local businesses and suppliers.

If you would like to participate in discussions about any of these project elements, please look out for notices of community meetings in the Balranald Shire Council newsletter and around town in early 2014.

### **COMMUNITY PARTNERSHIPS**

### Education scholarships

Iluka is proud to continue their support of Balranald Central School students, as part of the NSW Minerals Council Minerals Education Bursary Scheme (MEBS). The MEBS is an education initiative designed to attract and retain senior secondary students' interest in the minerals industry. Students participating in the program receive financial support during their final two years of high school and also their first year of tertiary studies in a mining related course.

An additional scholarship will be offered in 2014 for one student entering Year 11. More information will be available through the school in the coming weeks. Iluka wishes all participating students good luck with their progress in the program.

### 5 Rivers Festival

Iluka were pleased to once again join the Balranald community for the 2013 5 Rivers Festival. The Iluka team had a stand in the Sponsors Tent at the Caravan Park, and were delighted to have been visited by people from the region wanting to understand more about mineral sands mining and the Balranald project. Congratulations to the Balranald community for hosting such a wonderful event that continues to build on its successes each year.



lluka's display at the 5 Rivers Festival

### **TIMEFRAMES**

The anticipated program for the project development is detailed below.

Project phase	Estimated timing and status
Pre FS completion	Complete
DFS Stage 1 commencement	Underway – commenced August 2013
DFS Stage 1 completion	Mid 2014
Prepare recommendation to Iluka Board	Mid 2014
DFS Stage 2 commencement (pending board approval)	Mid 2014
DFS Stage 2 completion	Mid 2015

As has previously occurred, the Iluka Board would make a final decision on the project's commencement, following the preparation of a recommendation by the project team. This recommendation will be based on the results of the DFS Stage 2 phase and remaining regulatory approvals. Upon approval, the project will enter a construction phase which is anticipated to take anywhere between 12 – 24 months, before the mine would move into production.

A number of factors will influence the timing and progression of the project, including regulatory approvals, market conditions and Iluka Board review. Iluka will keep you informed as the project continues to move through these phases.

### INTRODUCING ALLAN KANE

Allan will be joining the Iluka Team in December as Senior Community Relations Advisor, taking over from Andrew Ockenden who is moving on. You will see Allan in the community over the coming months, please come over and say hello.

### FOR MORE INFORMATION ON THE BALRANALD PROJECT

Any questions or comments can be directed to Manager, Health, Safety, Environment and Community Andrew Minns (08) 8300 2000, or andrew.minns@iluka.com.



Introducing Allan Kane

Appendix D	
2011 demographic data	



### D.1 Population size and growth

As shown in Table D.1, Balranald UCL had a population of 1,159 people in 2011. This is a decrease of 57 people from the population in 2006 (1,216 people) which represents a population decline of -4.7%. Balranald LGA had a population of 2,283 people in 2011. This represents a decline in population of -6.5% since 2006 (2,441 people). This decline is not consistent with trends across non-metropolitan NSW, which experienced a population increase of 3.8%, while NSW recorded 5.6% population growth during the same period.

The proportion of Aboriginal and Torres Strait Islanders residing in Balranald is considerably higher than both the NSW average (2.5%) and non-metropolitan NSW (4.6%). Balranald UCL had the highest proportion at 8.6%, followed by Balranald LGA (6.8%).

Table D.1 Population (2006 and 2011)

Population	Balranald UCL <sup>1</sup>	Balranald LGA	Non-metropolitan NSW	NSW
Total population - 2011	1,159	2,283	2,512,949	6,917,660
Total population - 2006	1,216	2,441	2,419,815	6,549,178
Population growth (2006-2011) (%)	4.9	-6.5	3.8	5.6
Annual population growth (2006-2011) (%)	1	-1.3	0.76	1.1
Aboriginal and Torres Strait Islander population 2011 (%)	8.6	6.8	4.6	2.5

Source: ABS 2006 and 2012.

Notes: 1.Changes to ABS collection catchment for localities occurred between 2006 and 2011 Census.

### D.2 Age distribution

The age distribution of the population of Balranald and across NSW is shown in Table D.2.

Balranald UCL had a high representation of people aged 45 to 54 years (17.1%) and 65 years and over (17.1%). The smallest cohorts in the UCL are represented by 0 to 4 year olds and 18 to 24 year olds (6.3% each).

Compared to non-metropolitan NSW, the LGA had a higher representation of people aged 45 to 54 years (15.9% to 14.1%) and 35 to 44 years (13.3% to 12.6%), with a higher proportion of children aged 0 to 4 years (7.3% to 6.3%) and 5 to 11 years (9.7% to 9.0%).

There was also a high proportion of people aged 65 years and over (15.6%). However, this is lower than for non-metropolitan NSW (18.0%). The smallest cohorts in the LGA are younger (teenagers) and early working age groups - 12 to 17 year olds (7.6%) and 18 to 24 year olds (6.8%) respectively.

Balranald LGA and non-metropolitan NSW had a median age of 41 years. This is above the NSW average (38 years) but below that of Balranald UCL (44 years).

Table D.2 Age distribution (2011)

Age groups	Balranald UCL (%)	Balranald LGA (%)	Non-metropolitan NSW (%)	NSW (%)
0-4	6.3	7.3	6.3	6.6
5-11	9.5	9.7	9.0	8.8
12-17	8.0	7.6	8.2	7.7
18-24	6.3	6.8	8.1	9.0
25-34	8.4	9.5	10.4	13.6
35-44	13.5	13.3	12.6	14.1
45-54	17.1	15.9	14.1	13.7
55-64	13.8	14.3	13.3	11.8
65+	17.1	15.6	18.0	14.7
Total	100.0	100.0	100.0	100.0

Source: ABS 2012.

### D.3 Ancestry

As with many rural areas across Australia, in Balranald, there were very low levels of people born overseas (seeTable D.3). Australian-born residents made up 85.3% of the population in Balranald UCL and 84.9% in the LGA. This is consistent with non-metropolitan NSW (84.0%). Of the 5.1% in the LGA who are born overseas, Italy (44 people), New Zealand (18 people) and England (18 people) were the highest recorded nations.

Table D.3 Place of birth (2011)

Place of birth	Balranald UCL (%)	Balranald LGA (%)	Non-metropolitan NSW (%)	NSW (%)
Australia	85.3	84.9	84.0	68.6
Born overseas	4.7	5.1	10.8	25.7

Source: ABS 2012.

### D.4 Household and housing

Household and housing data are shown in Table D.4 and Table D.5.

Table D.4 Household compositions (2011)

Household type	Balranald UCL (%)	Balranald LGA (%)	Non-metropolitan NSW (%)	NSW (%)
Couples with no children	44.3	42.2	21.2	24.8
Couples with children	38.9	43.6	51.4	45.9
Lone person households	15.9	12.7	26.9	24.2
Other households	1	1.5	17.9	18.0
Average household size	2.3	2.4	2.4	2.6

Source: ABS 2012.

Balranald UCL and LGA have a higher percentage of couples with no children (44.3 and 42.2% respectively) that non-metropolitan NSW and NSW overall. Conversely they also have a lower percentage of couples with children, particularly in the Balranald UCL.

Balranald UCL and LGA has a much lower proportion of lone person households (15.9% and 12.7% respectively) compared to non-metropolitan NSW and NSW (26.9% and 24.2% respectively).

Balranald UCL, Balranald LGA and non-metropolitan NSW generally had the same average household size of 2.3 or 2.4 persons. This was slightly below the NSW average of 2.6 persons.

There was a higher proportion of private dwellings in Balranald consisting of separate houses above the NSW average (75.7%). Balranald UCL and LGA both have more than 90% of dwelling stock comprising of separate houses.

In terms of home ownership, which includes property being purchased, Balranald UCL and LGA are generally consistent with the non-metropolitan NSW and NSW averages (about 65%). Balranald UCL and LGA are also generally consistent with the non-metropolitan NSW and NSW averages for the percentage of properties being rented (about 30%).

**Table D.5** Housing structure and tenure (2011)

	Balranald UCL (%)	Balranald LGA (%)	Non-metropolitan NSW (%)	NSW (%)
Occupied private dwelling				
Separate house	91.4	92.6	88.2	75.7
Semi-detached, terrace, townhouse	2.7	2.4	5.6	9.5
Flat, unit apartment	5.0	3.0	5.1	14.2
Other dwellings	0.9	1.9	1.0	0.6
Unoccupied dwellings	14.1	15.5	13.3	9.7
Tenure				
Fully owned/being purchased	63.3	65.7	68.7	66.5
Rented	31.7	29.1	27.6	30.1
Other tenure	0.9	1.2	0.9	0.8
Tenure not stated	4.1	3.9	2.8	2.6

Source: ABS 2012.

### D.5 Household income

As shown inTable D.6, the median weekly household income for the Balranald UCL and LGA (\$838 and \$894 respectively) was below the NSW (\$1,237) and non-metropolitan NSW (\$961) averages.

Table D.6 Weekly household income (2011)

Income	Balranald UCL	Balranald LGA	Non-metropolitan NSW	NSW
Median household income (\$/week)	838	894	961	1,237
Median individual income (\$/week)	447	470	490	561

Source: ABS 2012.

### D.6 Workforce and occupation

Of the employed people aged 15 years and over in the Balranald LGA, 16.5% worked in sheep, beef cattle and grain farming compared to 6.1% in the Balranald UCL(seeTable D.7). These are significantly higher than the NSW average (1.3%). Other major industries of employment in the Balranald LGA included fruit and tree nut growing 8.4%, School education 4.4%, road freight transport 3.6% and local government administration 3.5%. The pattern of Industry of employment for Balranald UCL was similar to that for Balranald LGA with the exception of people employed in fruit and tree nut growing.

Table D.7 Industry of employment - top responses (2011)

Industry of employment	Balranald UCL (%)	Balranald LGA (%)	NSW (%)	
Local government administration	7.1	3.5	1.3	
Sheep, beef cattle and grain farming	6.1	16.5	1.3	
School education	5.9	4.4	4.4	
Road freight transport	4.9	3.6	1.6	
Fruit and tree nut growing	3.1	8.4	0.2	

Source: ABS 2012.

In terms of the 2011 workforce, primary industries (agriculture, forestry and fishing) dominated in Balranald LGA with 31.2% employed in this industry group (seeTable D.8). Balranald UCL had high proportions of people employed in health care and social assistance (14.4%) and primary industry (14.2). Retail and community services dominated in areas outside of Balranald.

Table D.8 Industry of employed persons (2011)

Industry	Balranald UCL (%)	Balranald LGA (%)	Non-metropolitan NSW (%)	NSW (%)
Agriculture, forestry and fishing	14.2	31.2	5.8	2.2
Manufacturing			8.3	8.4
Retail trade	11.2	9.6	11.4	10.4
Accommodation and food services	7.7	7.1	7.7	6.7
Transport, postal and warehousing	6.5	4.6	4.2	4.9
Public administration and safety	9.8	5.3	7.2	6.1
Education and training	12.9	5.1	8.6	7.9
Health care and social assistance	14.4	9.9	13.0	11.6

Source: ABS 2012.

In 2011, the most common occupations in the Balranald UCL were labourers (18.5%), machinery operators/drivers (13.8%), community and personal services workers (13.2%) and managers (13.2%) (see Table D.9).

There were higher proportions of managers (which include farmers) (28.6%) and labourers (17.9%) respectively in the Balranald LGA than in the rest of NSW or NSW overall. This is indicative of the low population and the labour intensive industries in the area compared to the NSW average.

Table D.9 Occupation of the workforce (2011)

Occupation	Balranald UCL Balra LG				NSW			
	No.	%	No.	%	No.	%	No.	%
Managers	65	13.2	294	28.6	144,075	13.4	418,333	13.3
Professionals	48	9.8	76	7.4	186,237	17.4	713,547	22.7
Technicians and trades workers	60	12.2	104	10.1	162,648	15.2	414,671	13.2
Community and personal services workers	65	13.2	100	9.7	115,144	10.7	297,669	9.5
Clerical and administrative workers	52	10.6	100	9.7	139,309	13.0	473,140	15.1
Sales workers	27	5.5	50	4.9	104,306	9.7	290,496	9.3
Machinery operators and drivers	68	13.8	100	9.7	80,951	7.6	199,435	6.4
Labourers	91	18.5	184	17.9	121,304	11.3	273,130	8.7

Source: ABS 2012.

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esearch into social impacts of mining proposals in regional and remote NSW					



# E.1 Examples of social impacts from remote mining regions

To assist this social assessment of a mining project in a relatively remote area of regional NSW, the NSW Central West mining region was identified as a mining region that has experienced significant mining investment since the 1980s. The Central West contains the Mid-Western Regional LGA. This LGA is serviced by the town of Mudgee, located approximately three hours north-west of Sydney. There are currently seven coal mining projects in operation or planned in this LGA (seeTable E.1). As part of this social assessment, references to social impacts associated with the various project phases that have appeared in a scan of the media have been documented.

Table E.1 Active or planned mining projects in the Mid-Western LGA

Project	Proponent company	Project location
Ulan	Ulan Coal Mines Limited (UCML) - a joint venture between Xstrata Coal Pty Limited (90%) and Mitsubishi Development (10%), with Xstrata Coal NSW maintaining management responsibility for UCML.	North of existing mine which is located north of Ulan village, approximately 45 kilometres north-east of Mudgee and 25 kilometres east of Gulgong.
Moolarben	Moolarben Coal Operations Pty Ltd is the operator of the Moolarben Coal Complex on behalf of Joint Venture partners - YanCoal Australia Pty Ltd (80%), Kores Australia Moolarben Coal Pty Ltd (10%), and SojitzMoolarben Resources Pty Ltd (10%).	Moolarben Coal is located east and north-east of Ulan village, approximately 45 kilometres north-east of Mudgee and 25 kilometres east of Gulgong.
Wilpingjong	Peabody Energy - the world's largest private- sector coal company.	Open cut mine located 40 km north of Mudgee.
Cobbora	Cobbora Holding Company Pty Limited.	The Balranald Project is located approximately 5km south of Cobbora and 64km north-west of Mudgee.
Mount Penny	Mount Penny Coal – wholly owned subsidiary of Cascade Coal Pty Ltd.	In the Coggan Valley in mid west NSW. Site is 10 km by road from Bylong and 65 km north-east of Mudgee and 62 km north of Rylstone.
Bylong	KEPCO (Bylong) Australia Pty Ltd with Cockatoo Coal Limited as managers.	Exploration activities in over an area of approximately 10,300ha in Bylong valley 45 km east of Mudgee.
Inglenook	Centennial Coal Company Ltd is a wholly owned subsidiary of Banpu – a Thai based energy group.	Exploration area located near Ilford, in the NSW Western Coalfields between Lithgow and Mudgee.

Sources: Company websites

The key implications drawn from this analysis about the potential social impacts of coal mining projects in regional NSW include:

- the need for on-going consultation with local communities by project proponents;
- concerns about workforce-related accommodation and flow-on effects on housing availability in host communities;
- concerns about increased pressures on community infrastructure;
- concerns about changes to local amenity and community character;
- existing availability of housing and community infrastructure in the host community can affect the nature, extent and timing of potential social impacts;

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- concerns about non-local workforces and limited economic benefits for host communities; and
- concurrent development of projects in proximity to each other can result in cumulative impacts.

## E.2 Media coverage of mining proposals in Central West NSW

### E.2.1 Project phase - planning and feasibility

## i Landowner impacts

#### Project – Bylong coal project (proposed, exploration underway)

Loss of agricultural land and landscape amenity (Mudgee Guardian 14 September 2012, http://www.abc.net.au/news/2012-11-29/bylong-protest/4397944).

## Project - Cobbora coal project (proposed)

Insufficient community consultation on the proposal (ABC News 5 July 2012).

Issues raised by community during stakeholder consultations (May 2012):

- loss of water via aquifers;
- loss of agricultural land and a way of life (for predominantly rural/agricultural communities);
- decrease in property values and adequate compensation;
- living next to a mining project; and
- confidentiality agreements with landowners can fracture the community.

### E.2.2 Project phase – approvals

## i Extent of mining impacts

## Project - Cobbora coal project (proposed)

Council concerns on insufficient modelling to assess full social and environmental impacts (ABC News 2 August 2012).

#### ii Project conditions of approval

## Project - Wilpingjong and Moolarben coal projects

Loss of property values due to being located next to mine and not eligible for purchase (Sharon Beder 2001).

Project uncertainty and timing.

### Project - Cobbora coal project (proposed)

Future privatisation of the government controlled project (Australian Mining 18 March 2011).

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## E.2.3 Project phase – construction

## Project - MAC Group's Temporary Workers Village (Gulgong)

Proposed 400-room temporary workers' village on edge of Gulgong town will change character of local community and place pressure on local services (Mid-Western Regional Council 1 February 2012 and Orange News 5 December 2011).

## E.2.4 Project phase – operations

#### <u>Project - Moolarben coal project</u>

Approximately 43 properties bought and loss of local school due to project lead to community isolation and loss of cohesion (Professor Sharon Beder 2001).

Local population decline due to mining companies buying a high number of rural residential dwellings. Towns failed to absorb/accommodate new mine workers,eg Wollar and Ulan.

#### Project - Ulan coal project

Local population decline in small towns such as Wollar. Worker retrenchments due to mining downturn (Mudgee Guardian 25 September 2012).

#### Project - Ulan coal project

Pressure on community infrastructure and services (Orange News 5 December 2011).

### Project – Wilpingjong, Moolarben and Ulan coal projects

Pressure on local accommodation and competing with tourism industry (Sharon Beder 2001, Orange News 5 December 2011 and The Australian 10 October 2011).

Pressure to maintain key workers due to insufficient long-term accommodation (ABC News 19 July 2012).

## <u>Project – Wilpingjong, Moolarben and Ulan coal projects</u>

Increased traffic movements, increased noise, dust and light pollution and loss of water supply (Sharon Beder 2001).

## Project - Moolarben coal projects

Increased rail movements and associated noise and vibration impacts (Sharon Beder 2001).

## E.2.5 Project phase – decommissioning

No reports found.

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