



# PROJECT OVERVIEW

## SECTION 3.4

### SOCIO-ECONOMIC ENVIRONMENT

## Jervois Base Metal Project

### VOLUME 1 Project Description

#### SECTION 3.4 | SOCIO-ECONOMIC ENVIRONMENT

## 3.4 Socio-Economic Environment

### 3.4.1. Introduction

As entitled by the Terms of Reference, this Section provides a description of the existing socio-economic environment of the region within which the Project lies. The information provided herein draws on the economic and social impact assessments that were undertaken as part of the Project (Appendix C-9 and C-10). It also draws on the consultation with community and government undertaken during the development of the Project. Potential social and economic impacts, along with proposed mitigation measures are addressed in the EIS impact assessment Section 4.7.

Social impacts were assessed through an initial desktop study, the preparation of an engagement strategy and an impact assessment which included the compilation of baseline socio-economic data, detailed research and stakeholder interviews to obtain a local context of stakeholder perspectives of the Project. The purpose of the engagement strategy was to ensure all relevant stakeholders were consulted and aspects of the Project were addressed. KGL have a good working relationship with the local pastoralists and the Bonya community as a result of regular communication between the parties over several years. These communications further assisted in the stakeholder engagement process and the development of the SIA. The Social Impact Assessment (SIA) is provided in Appendix C-9 was prepared with reference to the Guidelines for the Preparation of an Economic and Social Impact Assessment (NT EPA 2013) as well as other national and international guideline documents.

Historically, sporadic exploration and mining activity has occurred in the Project area dating back to 1929 as detailed in Section 1 of this EIS. As a result of this history, the local community is somewhat experienced with nearby mining activity which had an effect on the stakeholder engagement outcomes.

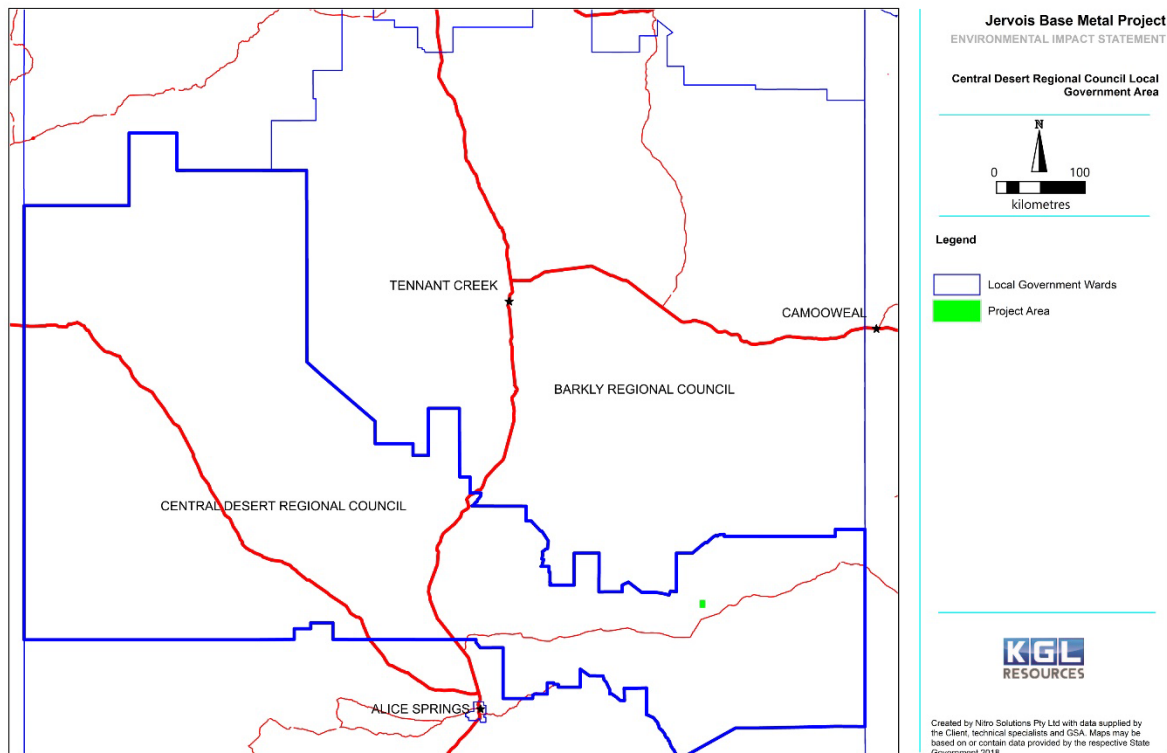
The economic impact assessment process involved desktop research, liaison with the SIA authors and stakeholders including KGL and ICN NT. Standard input/output multiplier models for the Alice Springs and NT regional economies and the Australian economy were constructed to estimate relevant flow on effects of the Project. The complete economic impact assessment is located in Appendix C-10 with impacts addressed in Section 4.7.

### 3.4.2. Local and Regional Social Environment

The Project area is located in the Plenty River Basin, a sparsely populated area in Central Australia's Northern Territory. The Project area is characterised by small Indigenous communities and homelands and large pastoral leases.

The Project is located within the Central Desert Regional Council Local Government Area (LGA) approximately 380 kilometres (km) north-east of Alice Springs off the Plenty Highway in Central

Australia. The Central Desert Regional Council LGA includes the communities of Anatyne, part of Anmatjere, Atitjere, Chilla Well, Engawala, Gurindji, Hart, part of Lajamanu, Lake Mackay, Laramba, Nyirripi, part of Sandover, Tanami, Ti Tree, Willowra, Wilora, Yuelamu and Yuendumu. With a total land area of 28,206,365 hectares (282,064 km<sup>2</sup>) and an estimated population of 4,230 (.idcommunity, 2017) the population density of the Central Desert Regional Council LGA is 0.00 persons per hectare or 0.00015 to be exact.



**Figure 3.4-1 Location of the Project within the Central Desert Regional Council LGA**

The closest significant population centre to the Project is Alice Springs, approximately 380 km by road. Alice Springs is the major service centre in the region with a regional economy that consists of a traditional pastoral industry, tourism, sporadic mining activity, Indigenous communities and transport services. Alice Springs provides substantial employment in Government services, wholesale, storage and retail, business services, accommodation and tourism services.

The estimated resident population of the Alice Springs Town Council LGA is 26,674. Covering a total area of 32,834 hectares (328km<sup>2</sup>), the population density is 0.81 persons per hectare (.idcommunity, 2017).

The census population recorded in the Plenty area of Atitjere, Akarnehe and Engawala is detailed in the following Table.

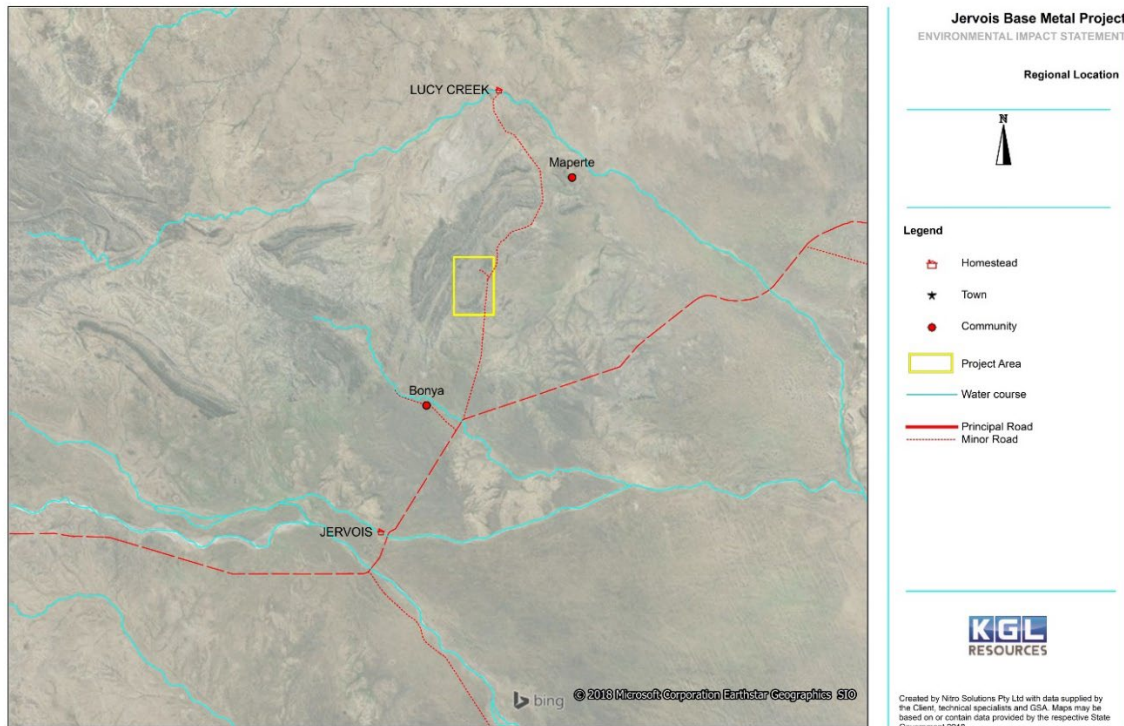
**Table 3.4-1 Estimated Residential Population, Plenty Area (Usual Place of Residence), Census 2011, 2016**

Year	Indigenous	Non-indigenous & Unspecified	Total
<b>2011</b>	403	121	524
<b>2016</b>	494	175	672
<b>Growth 2011-2016</b>	91	54	148
<b>% Growth</b>	+23%	+45%	+28%

Source: Cummings Economics 2018

The Project is on the south-eastern edge of the Jervois Range in the Central Desert Region. This region is home to Eastern Arrernte people and people of the Alyawarra and Anmatyerre (Aboriginal Areas Protection Authority, 2018). Indigenous people have traditionally lived in the area and continue to do so, mainly in small communities and homelands.

There are two Aboriginal communities within 20 km of the Project as indicated in Figure 3.4-2. The Bonya Community is approximately 17 km to the south-west and the Maperte Community is approximately 16 km to the north-east. According to the Northern Territory Department of Health [DoH] (2011), the population of Bonya is approximately 93, with 86 Indigenous people and seven non-indigenous. At the time when the social impact assessment was completed for the Project, Bonya had approximately 20 residents. The Maperte Community consists of two abandoned houses. According to the local property owners and members of the Bonya Community, Maperte has been mostly unoccupied for some time. The next closest permanent settlement is the Atitjere Aboriginal Community which is located 160 km west by road.



**Figure 3.4-2 Location of Local Aboriginal Communities**

The Bonya community functions as a resource centre for surrounding smaller homelands and family outstations. There is an airstrip for day use only (no lights) and a community store that opens for three hours each morning except Sundays. There is a community school, council office, health centre and women’s centre, and government personnel visit the community on a regular basis.





Source: True North Strategic Communication, 2018.

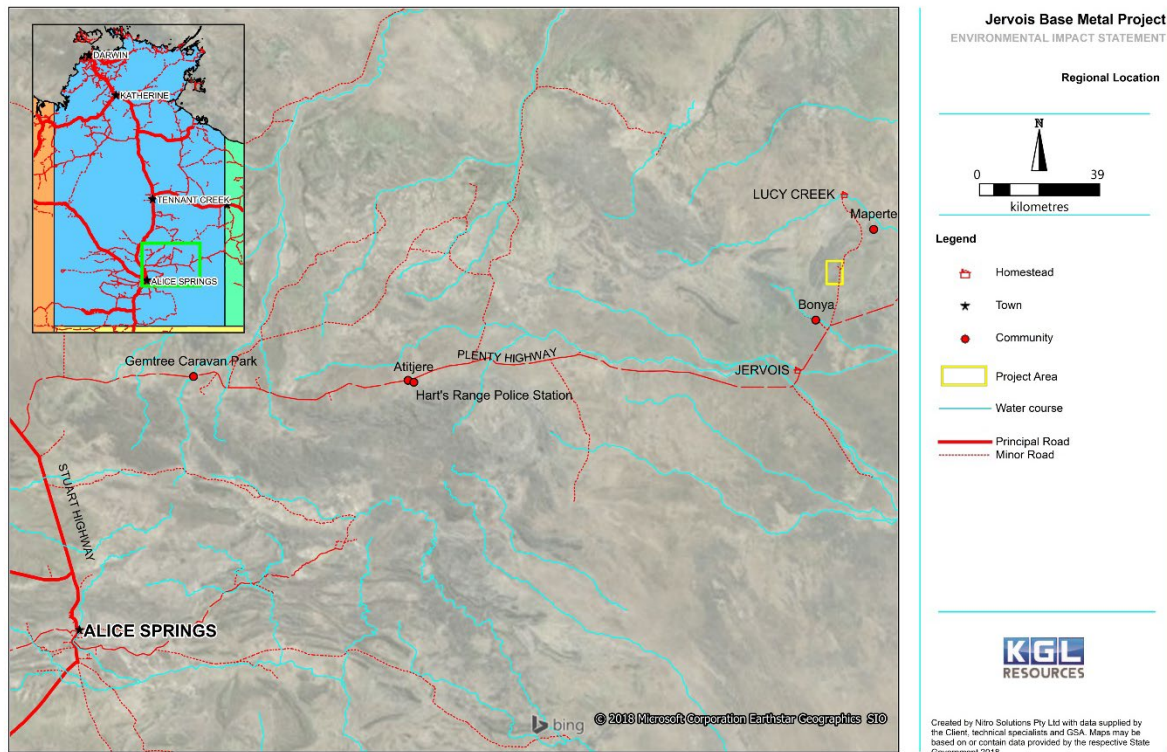
**Figure 3.4-3 Bonya Community**



**Figure 3.4-4 Maperte Community**

Atitjere community, also known as Harts Range, is located approximately 160 km by road west of the Project. This community is typical of many communities in the region and has a young population, with the median age being 26. The ABS 2016 identified a population of 224 with 77.9% being Aboriginal (ABS Census, 2016), but the Central Desert Regional Council has indicated it could be as high as 460 people (True North Strategic Communication, 2018). The community has basic services including a school and crèche, police station, remote health clinic, Central Land Council office, Central

Desert Council office, post office agency, airstrip, a shop with fuel and takeaway food, and limited aged care and disability services.



**Figure 3.4-5 Location of Atitjere Community**

Lucy Creek Station is a 405,522 hectare beef cattle station running about 10,000 head of beef cattle owned and operated by Fogarty Holdings Pty Ltd. The Lucy Creek homestead is about 24 km from the Project site (Figure 3.4-2) and has an airstrip which is capable of use for night time landings. At the time the social impact assessment consultations were completed, there were eight people living at the station, including five employees.

Jervois Station is a 273,600 hectare beef cattle station owned by the Jervois Pastoral Company Pty Ltd. The Jervois Station is a regular stopover point for travellers along the Plenty Highway, consisting of local community residents and tourists driving between Alice Springs in the NT and Boulia in Western Queensland. The cattle station has an area for bush camping and ecolodges for passing travellers. Other facilities at the Jervois Station are fuel, a shop, an airstrip, public payphone, water, shower and toilet facilities. There are about 20 visitors a day to the station during the winter months, mostly tourists passing through to Uluru and Kings Canyon.

### 3.4.3. Key Stakeholders

The SIA completed for the Project involved communication and engagement strategies including stakeholder meetings and briefings to ensure relevant stakeholders were informed of the Project and third party individual stakeholder interviews were completed to gather feedback. The communication and engagement process also included a fact sheet, individual stakeholder emails, updates to the KGL Resources website, ASX announcements and a PowerPoint presentation to some stakeholders.



Stakeholder briefings and interviews were held in Alice Springs, Bonya, the Project site and at locations along the Plenty Highway.

Key stakeholders that were identified through the stakeholder engagement and SIA process include:

- Northern Territory Police, Southern Desert Division;
- Harts Range Police Station;
- Gemtree Caravan Park;
- Harts Range Community Store;
- Traditional Owners, the Arrernte people
- Bonya community;
- Arramwelke Aboriginal Corporation;
- Atitjere community;
- Jervois pastoral leaseholders;
- Lucy Creek pastoral leaseholders;
- Central Australian Health Service;
- Central Desert Regional Council;
- Industry Capability Network NT;
- Tourism Central Australia;
- Outback Way Committee;
- Housing and Community Development;
- Arid Lands Environment Centre;
- My Pathway;
- Central Land Council;
- Chamber of Commerce NT;
- Member for Lingiari, Warren Snowdon;
- Central Australian Regional Economic Development Committee;
- NT Environment Protection Authority;
- Department of Environment and Natural Resources;
- Department of Primary Industries and Resources
- Department of Aboriginal Affairs;
- Department of Trade, Business and Innovation;
- Department of Infrastructure, Planning and Logistics;
- Water Resources NT;
- Alice Springs/Central Australia Regional Economic Development Committee
- Regional Coordination Group which includes representatives from all NT government departments in Central Australia;
- Minerals Council Australia, NT Division
- NT Fire and Rescue; and
- Lindsay Johannsen.

A full list of stakeholders can be found in Section 4.7 of this EIS and in the SIA document located in Appendix C-9.



### 3.4.4. Economic Setting

#### **Local Economy**

The local economy consists mainly of pastoral activities in the form of beef cattle grazing, mining and exploration, tourism and government support services. Estimated beef cattle transport movements over the Plenty Highway are in the order of 12,000 head per annum (Cummings, 2018). The Plenty area has experienced sporadic mining for many years, including that within the Project area dating back to 1929. Other mining and exploration projects are dotted across the region, including the Molyhil project, a garnet sands project at Harts range which is currently in care and maintenance, and a gem fossicking area at Harts Range. There is also some interest in phosphate, diamonds and uranium to the north of the Project.

Local tourism is generated by the Outback Way which runs from Winton in Queensland to Laverton in Western Australia via Alice Springs. Based on AADT traffic count figures, it has been estimated that approximately 20,000 visitors move through this route (Cummings, 2018) with a substantial proportion travelling along the Plenty Highway route. Tourism stops along the way include the Gemtree Caravan Park, Tobermorey Station, Jervois Station and Harts Range (Atitjere). The Gemtree Caravan Park business is mostly dependent on traffic using the Plenty Highway. The Bonya community which lies just off the Plenty Highway also has a community store.

Traditionally, substantial government funding has been made available to support Aboriginal families and communities and this expenditure is a substantial element in the economy of the area. Government administration in the area centres around the police station at Harts Range (Atitjere), where there is also school facilities, a general store, a local government administrative office and Land Council offices.

#### **Alice Springs Regional Economy**

The Alice Springs regional economy centred around the regional hub city of Alice Springs consists of the following major elements:

- A traditional pastoral industry based on cattle with a small amount of irrigated farming;
- Mining activity and the Central Australian gas field;
- A substantial tourism sector especially based in Alice Springs and around Uluru (Ayers Rock) and Kata Tjuta National Parks (the Olgas);
- A number of Indigenous communities mainly supported by government but with art income significant in some; and
- Substantial transport services in Alice Springs for traffic along the road and rail route between Adelaide and Darwin along with small roadside service centres on the Stuart Highway, and some roadside service activities on the Plenty Highway, Lasseter Highway and Tanami Road.

Alice Springs acts as the major regional service centre for the region but also as a major transport hub on the Stuart Highway, on the railway from Adelaide to Darwin, and for air services. Alice Springs has substantial sections of employment in:

- Government services for the region including administrative, safety and justice, education and training and health and community services;
- Wholesale, storage and retail;
- Accommodation and services and tourism related services;

- Business services.

Mining developments in the region other than those in the Plenty area include the Nolans Rare Earths project, Mount Peake and the Chandler Salt Mine. The Central Australian gas field is also a long-term contributor to the region.

The latest Northern Territory Government estimate of Gross Regional Product for the Alice Springs region is \$2.9 billion.

### **Northern Territory Economy**

Most of the Territory's business and industrial structure is located in Darwin with smaller amounts in Alice Springs and Tennant Creek.

The Northern Territory economy has three important elements:

- "Base industries" earning income from outside the Northern Territory of the pastoral industry with limited cropping, a substantial mining element and a substantial tourism element.
- A large government sector underpinned by a strong defence element (army, navy and airforce), and strong state government employment compared with other northern regions.
- A high Aboriginal population heavily supported by federal government funding.

In the mining sector, Darwin was a provider of workforce to other areas in the Northern Territory and is a source of FIFO workers for Groote, the INPEX gas project and the Granites (Tanami).

The latest Northern Territory Government estimate of Gross Regional Product for 2016-17 was \$25.4 billion.

## **3.4.5. Economic Value of the Project**

### **Economic Feasibility of the Project**

The Project is proposed to come into production at an auspicious time. Demand for copper is increasing, there are questions over the supply sources, and higher prices for copper are being forecast. Macquarie Bank forecasts a substantial and widening deficit in copper supply over the next three to five years. RBC Capital Markets analysts forecast a need by 2028 for 5 million tonnes of new copper supply, that is, 25% of current annual production. The timing of the Project in the global copper market can be expected to enhance the profitability of the Project from its early stages. (Source: KGL Annual General Meeting speech May 2018)

Shareholders participated strongly in a \$2.48 million shareholder purchase plan in February 2017 and a \$12.4 million placement and entitlement offer in September 2017. New investors in the placement included RCF Opportunities Fund LP, a fund in the global resources private equity firm Resource Capital Funds. In addition, a \$1 million share placement to four parties including KGL's major shareholder KMP Investments funded the Unca Creek exploration project comprising the acquisition of the tenement adjoining the Project and future exploration on the tenement. In February 2018, a private placement at a premium price raised \$6.73 million (KGL Annual Report, 2017). KGL had another successful placement in August 2018 raising \$5.7 million at a premium price of \$0.38 per share. The total raising was \$6.45 million.

As reported in the KGL half-yearly financial statement as at June 2018, the company cash reserve as at 30 June 2018 was \$1,017,363 plus \$12,037,770 in term deposits.

### Construction Phase Expenditure

Capital cost of the initial construction phase is estimated at \$189.5 million composed of the following major elements.

**Table 3.4-2 Project Capital Expenditure**

	\$m
Contractors	\$17.8 m
Workforce	\$46.0 m
Transport	\$5.7 m
Processing Plant	\$35.7 m
Infrastructure Inputs	\$31.0 m
Professional Services	\$19.8 m
Management	\$2.9 m
Plant Preparation Labour & Spares	\$4.9 m
Plant Preparation Reagents	\$2.4 m
Contingencies	\$23.3 m
<b>Total (Estimated)</b>	<b>\$189.5 m</b>

Source: Cummings Economics, 2018

Estimated direct expenditure relating to each area is as follows.

**Table 3.4-3 Estimated Location of Direct Expenditure in Initial Construction Phase**

	\$m
Alice Springs Region SA3	\$55.6 m
Remainder Northern Territory	\$55.3 m
<b>Total Northern Territory</b>	<b>\$110.9 m</b>
Rest of Australia	\$37.6 m
<b>Total Australia</b>	<b>\$148.5 m</b>
Overseas	\$41.0 m
<b>Overall Total</b>	<b>\$189.5 m</b>

Source: Cummings Economics, 2018

Expenditure into impacts by industry sectors for the Alice Springs region, the Northern Territory and at National level, and estimated impacts on Gross Regional Product and Employment including “flow-on” effects are provided in the following table.

**Table 3.4-4 Estimated (Modelled) Economic Impact, Initial Construction Phase**

	Initial Direct Expenditure \$m	GRP including "Flow-on" \$m
<b>Alice Springs Region</b>		
Heavy & Civil Construction	\$41.1 m	\$32.1 m
Construction Services	\$6.1 m	\$4.3 m
Road Transport	\$3.3 m	\$2.7 m
Professional & Technical Services	\$5.2 m	\$4.9 m
<b>Total</b>	<b>\$55.7 m</b>	<b>\$44.0 m</b>
<b>Northern Territory</b>		
Heavy & Civil Construction	\$76.3 m	\$61.3 m
Construction Services	\$14.2 m	\$10.7 m
Road Transport	\$4.9 m	\$4.1 m
Professional & Technical Services	\$15.5 m	\$15.1 m
<b>Total</b>	<b>\$110.9 m</b>	<b>\$91.2 m</b>
<b>Australia</b>		
Heavy & Civil Construction	\$96.1 m	\$82.9 m
Construction Services	\$20.3 m	\$17.2 m
Road Transport	\$6.2 m	\$5.6 m
Professional & Technical Services	\$25.9 m	\$27.4 m
<b>Total</b>	<b>\$148.5 m</b>	<b>\$133.1 m</b>

Source: Cummings Economics, 2018

Assuming initial construction occurs over one year, the initial construction phase impact of the Project in the Alice Springs region on Gross Regional Product including "flow-on" effects is estimated at \$44 million, being an increase of about 2%. In relation to the Northern Territory economy, the Projects construction phase is estimated to result in an increase in Gross Regional Product of the order of \$91 million including "flow-on" effects, i.e. an increase of the order of 0.4%. At a national level impact on Gross Domestic Product including "flow-on" increases to \$133 million (representing about a 0.01% increase).

It is expected that the subsequent construction phase of \$26.7 million would have a similar pattern of impacts on the economy with overall impacts at that time in current dollars as provided in Table 3.4-5.



**Table 3.4-5 Estimated (Modelled) Economic Impact Subsequent Construction Phase**

	Initial Direct Expenditure \$m	GRP including "Flow-on" \$m
Alice Springs Region	\$12.1 m	\$9.5 m
Northern Territory	\$21.0 m	\$17.7 m
Australia	\$26.9 m	\$29.7 m

Source: Cummings Economics, 2018

### Operational Phase Expenditure

The expected approximate operating costs for the Project when fully operational at Year 3, 2022 is provided in Table 3.4-6 below. (Note: There will be some variations on these depending on minerals targeted and processing needs and does not include income tax, royalties, depreciation and payments to Traditional Owners and landholders).

**Table 3.4-6 Operating Costs**

	\$m
Mining Operations	\$51.6 m
Employees	\$10.0 m
Supplies	\$16.0 m
Maintenance	\$5.0 m
Power Costs	\$20.6 m
Cartage	\$1.1 m
Processing	\$39.5 m
Employees	\$12.4 m
Supplies	\$12.4 m
Power Costs	\$14.7 m
Transport Road & Rail	\$16.0 m
Shipping (overseas and within Australia)	\$12.9 m
Administration	\$6.6 m
<b>Total</b>	<b>\$127.7 m</b>

Source: Cummings Economics, 2018

These allocations translate through to the following tables for the Alice Springs region and the Northern Territory that also translates expenditure into industry classifications.

**Table 3.4-7 Estimated Allocation of Operating Costs by Industry**

	Alice Springs Region \$m	Northern Territory \$m	Australia \$m
Non-Ferrous Metal Ore Mining	\$62.2 m	\$88.9 m	\$91.1 m
Road Transport	\$9.1 m	\$9.1 m	\$9.1 m
Rail Transport	\$2.0 m	\$5.0 m	\$8.0 m
Transport Support Services	\$0.0 m	\$2.6 m	\$2.6 m
Professional & Technical Services	\$0.0 m	\$2.0 m	\$6.6 m
<b>Total</b>	<b>\$73.3 m</b>	<b>\$107.6 m</b>	<b>\$117.4 m *</b>

Source: Cummings Economics, 2018

\*Note: This excludes overseas shipping expenditure.

When input/output multipliers for the Alice Springs region and the Northern Territory are applied to the expenditure figures, they give the following estimated impacts of expenditure on Gross Regional Product multipliers.

**Table 3.4-8 Estimated (Modelled) Economic Impact**

	Initial Direct Expenditure \$m	GRP including "Flow-on" \$m
<b>Alice Springs</b>		
Non-Ferrous Metal Ore Mining	\$62.2 m	\$40.4 m
Road Transport	\$9.1 m	\$7.6 m
Rail Transport	\$2.0 m	\$1.6 m
Transport Support Services	\$0.0 m	\$0.0 m
Professional & Technical Services	\$0.0 m	\$0.0 m
<b>Total</b>	<b>\$73.3 m</b>	<b>\$49.6 m</b>
<b>Northern Territory</b>		
Non-Ferrous Metal Ore Mining	\$88.9 m	\$65.8 m
Road Transport	\$9.2 m	\$7.9 m
Rail Transport	\$5.0 m	\$4.4 m
Transport Support Services	\$2.6 m	\$2.3 m

	Initial Direct Expenditure \$m	GRP including "Flow-on" \$m
Professional & Technical Services	\$2.0 m	\$2.0 m
Total	\$107.7 m	\$82.4 m
<b>Australia</b>		
Non-Ferrous Metal Ore Mining	\$91.1 m	\$91.1 m
Road Transport	\$9.1 m	\$10.4 m
Rail Transport	\$8.0 m	\$9.4 m
Transport Support Services	\$2.6 m	\$3.1 m
Professional & Technical Services	\$6.6 m	\$8.6 m
Total	\$117.4 m	\$122.6 m

Source: Cummings Economics, 2018

This indicates that when fully operational, impact in the Alice Springs region will be to increase Gross Regional Product including "flow-on" effects by about \$50 million, ie. by of the order of 2%. The Northern Territory increase in Gross Regional Product of about \$80 million including "flow-on" would represent an increase of the order of about 0.3%. At a national level, impact on Gross Domestic Product of about \$120 million represents an increase of about 0.008%.

### Royalties & Tax Benefits to Northern Territory Government

It is estimated (modelling as at 2018) that the company will pay over the life of the Project, a total of \$413 million in royalties and corporate taxes (Royalties \$215m, Corporate Taxes \$198m) on the assumption that:

- Copper Prices will remain at US\$3.25 for the life of mine
- USD: AUD Exchange rate at 0.72
- The 2018 model results in an estimated 30% increase in royalties and corporate tax due to increased copper tonnes resulting from higher grade and lower unit costs combined with an increased mine life from eight to ten years; and
- These numbers have not had any discounting factors applied.

In addition, it is expected that the company will pay payroll tax at Northern Territory payroll tax rate of 5.5% for amounts over \$1.5 million per annum. At this rate, it is estimated that the operation would have liability for payroll tax of the order of \$8 million over the life of the Project.

However, royalties and payroll tax amounts could be reduced by the Local Employment Package announced in the 2018 budget. The extent of these reductions cannot be estimated at this time (Cummings Economics, 2018).

**Exports**

The Jervois Project is expected to contribute to Australia's export earnings an amount of \$2.39 billion over the life of the mine (Cumplings Economics, 2018).

**Employment**

As there is a high rate of unemployment and lack of participation in the workforce in the local Indigenous communities, the Project has the potential financial benefit to government of employing currently unemployed local residents being supported by unemployment benefits. Should the Project be successful in employing 30 in this position, the annual saving to government would be of the order of \$600,000 a year with the prospect of taxation income being received from these employed workers. Assistance to the company in helping organise and train local workforce would also provide a net financial benefit for government.

### 3.4.6. Economic Opportunities

The main industries in Central Australia include mining, and oil and gas exploration, pastoral, tourism, defence, and Aboriginal arts and culture. Mineral production and exploration are a key driver of economic activity and employment in the region around Alice Springs (Northern Territory Department of Treasury and Finance, 2017). (True North Strategic Communication, 2018)

Mining in remote areas can have a significant positive impact on regional economic development, through procurement of local goods and services, wages and the payment of taxes and royalties to governments and Traditional Owners. The resource industry is a major contributor to the Northern Territory's economy and is seen as important for regional economic development, jobs in disadvantaged regional areas and reducing the Territory's dependence on federal funding. There can also be cumulative benefits if several resource projects stimulate investment in regional capacities and infrastructure. (True North Strategic Communication, 2018)

Overall, feedback on the Project from stakeholders was mostly optimistic due to the positive benefits it could bring to Central Australia such as those to local businesses and people, the economy and communities in general. There is an expectation that the Project will provide great opportunities for local employment and work for local suppliers and services.

Three Bonya residents are already employed by the Project and there is potential for future job opportunities for Bonya residents. The Project has the potential to offer opportunities for local jobs, both in the local communities and Alice Springs through direct and indirect employment.

The SIA risk assessment identified seven opportunities of significance and their associated risk ratings as detailed in the following Table. More detail on these opportunities can be found in Section 4.7.



**Table 3.4-9 Potential Residual Project Economic Opportunities**

<b>Economic Opportunity</b>	<b>Residual Rating</b>
Direct and indirect jobs and training for local Indigenous people and residents in Alice Springs	High
Distribution of sponsorship funds to local community	High
Boost to local business being awarded contracts from the Project	High
<b>Social Opportunity</b>	<b>Residual Rating</b>
Distribution of sponsorship funds and royalties to local community	High
Early sealing of Plenty Highway from Jervois to Stuart Highway and upgrade to the Bonya or Lucy Creek airstrip - benefit to communities, tourism and property owner	Low
Direct and indirect jobs and training for local Indigenous people and residents in Alice Springs	High
<b>Cumulative Opportunity</b>	<b>Residual Rating</b>
Cumulative impacts can enhance the opportunities – local jobs, economic benefits, Indigenous employment and education outcomes	Low

Economic opportunities have the potential to provide local and regional benefits to the Harts Range community store, the Bonya store and Indigenous artwork sales, the Bonya Enterprise Development Program, the Jervois Station store and fuel stop, local pastoralists through the use of them for some services and minor works, Alice Springs through FIFO worker transition, the Gemtree fossicking area and the Alcoota fossil site, local community groups and events. Furthermore, the Project has the potential to contribute to the turnaround of the recent downturn in construction and commercial development in Alice Springs.

Other flow-on social opportunities resulting from the Project may include:

- Return of community members to Bonya and surrounds;
- Upskilling of local residents, particularly in Bonya;
- Potential for an earlier than anticipated upgrade of the Plenty Highway to bitumen;
- Upgrading of the Lucy Creek or Bonya airstrip (also referred to by some sources as Baikal airport
- Potential for improved telecommunications in the area due to the Projects requirements; and
- Local population growth.

These economic social opportunities will relate mostly to the construction and operational phases but some have the potential to continue on indefinitely through the rehabilitation and beyond the closure phase of the Project.

Opportunities to the local community and the broader region will be enhanced through several measures as detailed in Section 4.7. Potential project risks and their associated mitigation measures are also addressed in Section 4.7.

### 3.4.7. Workforce

Project workforce numbers have the potential to peak at 360 during construction and 300 at full production which would include all contractors, subcontractors, offsite support, supply, fabrication and engineering support personnel employed directly and indirectly by the Project. Extra workforce numbers will also be imported to site to meet critical construction and production deadlines if required.

From an operational perspective, there will be three major parties on site – KGL, a major contractor for engineering and construction (including the plant operation) and a major contractor for mining. The remainder of the workforce on site will be specialist contractors for aspects such as drilling and exploration. Other short-term or periodic roles, environmental monitoring and reporting, auditing, consultation and heritage, will generally be undertaken by specialist consultants.

Tables 3.4-10 to 3.4-12 provide a preliminary estimation of the workforce by occupational classification which may be required.

**Table 3.4-10 – Processing, Administration and Product Haulage Personnel**

Position	Number
<b>Mining</b>	
Mine Manager	1
Mine Engineers	2
Mine Surveyors	3
Survey Assistants	3
Senior Mine Geologists	2
Mine Geologists	3
Geological Technicians	3
<b>Processing</b>	
Process Manager	1
Senior Metallurgist	1
Plant Metallurgists	2
Shift Supervisors	3
Crusher Operators	3
Loader Operators	3
Milling Operators	3
Flotation Operators	3
Conc. Dewatering/Hauling Operators	3
Control Room	3
Reagent Mixing/Clean-up Operators	3
<b>Laboratory</b>	
Laboratory Manager/Chemist	1
Senior Assayers	3
Laboratory Technicians	6
<b>Process Maintenance</b>	
Maintenance Superintendent	1
Maintenance Planner	1
Mechanical Supervisor	1
Electrical Supervisor	1
Boilermakers/Fitters	3

Position	Number
Trades Assistants	3
Electricians/Instrument Technicians	3
<b>Administration</b>	
Administration Manager	1
Accounts Clerk	1
Payroll Clerk	1
Environmental Officer	1
OH&S Officer	1
Training Officer	1
Supply Manager	1
Purchasing/Stores Coordinators	2
Warehouse Officers	2
Bus Drivers	2
<b>Accommodation Village</b>	
Accommodation Manager (D/S)	1
Chefs (x2 Shifts)	6
Kitchen Hands (x2 Shifts)	6
Maintenance Persons (D/S)	2
Cleaners (D/S)	6
Nurse/Paramedic	2
<b>Road Haulage Contractor</b>	
Logistics Manager	1
Road Train Operators	9
<b>Total Personnel</b>	<b>114</b>

**Table 3.4-11 Open Pit Mining Personnel**

Position	Number
<b>Fleet Operators</b>	
Excavators	6
Haul Trucks	12
<b>Ancillary Operators/Support</b>	
Dozer	3
Grader	3
Watercart	3
Integrated Tool Carrier	2
Loader	3
Batter Digger	2
Fitters and Service Personnel	12
<b>On Site Supervision</b>	
Project Managers	2
Senior Engineers	2
Production Supervisors	2
Clerks	2
OH&S Officers	2
Maintenance Managers	2

Position	Number
Maintenance Supervisors	2
Maintenance Planners	2
Maintenance Clerks	2
Storepersons	2
<b>On Site Drill and Blast Personnel</b>	
Superintendents	2
Drillers	6
Shotfirers	3
Shotcrews	2
MMU Operators	2
Drill Fitters	3
<b>Total Personnel</b>	<b>84</b>

**Table 3.4-12 Underground Mining Personnel**

Position/Role	Number
<b>Mine Operators</b>	
Shift Boss	3
Jumbo Operators	9
Development Nippers/Offsiders	4
Production Drill Rig Operators	6
Loader/Truck Operators	6
Truck Drivers	12
Development Chargeup	3
Production Chargeup	3
Chargeup Offsiders	6
Services	6
Grader Operators	3
Cable Bolters	6
Pump Truck Operators	6
<b>Maintenance</b>	
Capital Projects/Infrastructure Fitters	3
Light Vehicle Fitters	2
Shift Fitters	12
Workshop Fitters	6
Workshop Manager/Leading Hand	2
Shift Electrician	6
Workshop Electrician / leading hand	2
Auto Electricians	2
<b>Total</b>	<b>108</b>

Indirect jobs throughout the supply chain will cover operational roles and personnel employed by businesses who provide support and services to the Project and specifically may include the following:

- Transport of ore by road and rail;
- Freight services for general freight and mining and construction equipment,
- Personnel transport by road and air;
- On-site support such as cooks, catering and cleaning services;



- Fabrication and engineering support;
- Drilling equipment supply and drillers;
- Maintenance staff;
- Geologists and field assistants; and
- Administration such as management, accountants and human resources personnel.

### 3.4.8. Employment and Training

The main employment industries in Central Australia are pastoral, tourism, defence, Aboriginal arts and culture, mining, and oil and gas exploration. The main driver of economic activity and employment is mineral production and exploration. (True North Strategic Communication, 2018)

Employment training requirements throughout the life of the Project will be dependent on the particular job and level of skill required at a particular time. Employment training requirements will therefore be determined and tailored throughout the life of the Project through the construction, operation and mine closure and rehabilitation phases.

Key Project activities that will create opportunities for employment and education include:

- Mobilisation of the construction workforce;
- Awarding of contracts to local companies for supplies and services;
- Benefits negotiated under the Indigenous Land Use Agreement; and
- Employment of locals by KGL and Project contractors.

Employment and education opportunities identified through the SIA include:

- Improved educational outcomes for local Indigenous people;
- Direct and indirect jobs and training for local Indigenous people; and
- Direct and indirect jobs and training for Alice Springs residents.

The strong relationship between KGL Resources and the Bonya community has helped facilitate the employment of three Bonya residents and as a result of this opportunity, there is an appetite amongst the Bonya community to work at the Project in the future.

Low employment opportunities exist in the local region and the local communities of Bonya, Atitjere and Engawala and there are currently limited work options nearby. KGL is eager to provide local people with jobs and training so some jobs at the Project will be supported by job readiness training for unskilled workers to enhance the opportunities for the local communities.

Although unemployment is low in Alice Springs, it has experienced some economic downturn so there is anticipation around employment opportunities offered by the Project and other major projects in the region. KGL and its contractors will work with the Chamber of Commerce and other NT organisations and Government departments to enhance the direct and indirect employment and training opportunities for Alice Springs residents.

Employment and training opportunities will be enhanced through the following measures:

- Forward planning and communication;
- A Local Industry Participation Plan;

- Continued work with ICN NT, NT Government departments, the Chamber of Commerce and the REDC to promote tenders which suit local capacity, boost skills, prepare businesses for an increase in competition and standards required by KGL;
- Joint training initiatives to address backfilling; and
- A recruitment strategy focussing on locals and the encouragement of FIFO workers to relocate.

Potential opportunities for local businesses will be further maximised through the MOU with Bonya and working with NT Government business development staff, ICN NT, the Chamber of Commerce and REDCs to package and promote locally suited tenders.

The enthusiasm about job opportunities and willingness of the Indigenous community to work, and in particular that of the Bonya residents, will be matched with the work-ready skills to ensure their successful employment.

Improved educational outcomes for local Indigenous people, opportunities for direct and indirect job training for local Indigenous people and job opportunities will be enhanced through an Indigenous employment and training plan. The Indigenous employment and training plan will address barriers to employment and include support mechanisms to address cultural and family obligations. Training courses will aim to match jobs with individual skills and capabilities.

Low take up of jobs by local Indigenous people due to a lack of work-readiness and cultural issues will be managed through mitigation measures such as:

- Implementation of a local employment and training plan
- Working with local employment and training providers
- Open communication on job availability
- Workforce planning to address employment barriers
- Collaboration with communities, the Territory and Federal Governments
- Development of policies and procedures to include mentoring and provide a safe and welcoming workplace for Indigenous men and women; and
- Collaboration with other major resource projects on regional training and education programs and employment opportunities.

More information on the employment and training opportunities and measures for enhancing these are provided in Section 4.7.

### 3.4.9. Community and economic value

Throughout the life of the Project KGL will work with the community to identify new or upgrades to existing community infrastructure that would provide long term benefits. During the life of the Project KGL and its contractors will also demonstrate their commitment to the local and regional community through sponsorship of local events which may include the annual Harts Range Races and other local sporting events or festivals.

KGL will continue their campaign for the early sealing of 200 km of the Plenty Highway between the turnoff to Lucy Creek Road and the Stuart Highway. This upgrade would provide social, safety and economic benefits to road users including the local pastoralists, the local community, tourists,

government services and visiting workers. The current Federal Government is dedicated to sealing the entire Outback Way by 2025, with federal and state governments working together to determine the priority sections. A media release from the NT Department for Infrastructure, Planning and Logistics in June 2018 announced the approval of funding towards the Plenty Highway Upgrading project. Works to be delivered under the Australian Government's \$600 million Northern Australia Roads Program (NARP) includes approximately 20 kms of sealing and flood resilience works to be completed on a priority section of the highway.

KGL Resources also plans to upgrade the existing Bonya or Lucy Creek airstrip to enable some employees to fly in and out of the region. This upgrade will improve access for other flights, including the Royal Flying Doctor Service, into and out of the local area.

Since it was constructed for previous mining operations in the early 1970's, the Jervois Mine Dam is the largest and most permanent surface water body in the Jervois Region. The presence of this dam provides a source of water for local wildlife and post mining will benefit the local pastoralists for stock water and potentially recreational activities.