Alpha Coal Project Environmental Impact Statement

20 Social





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## **Section 20 Social**

#### 20.1 Introduction

This section provides a description of the social values of the local and regional study areas relevant to the Alpha Coal Project (Rail) (herein referred to as the Project) and provides an assessment of potential impacts and suggested mitigation and management measures. The following section provides a summary of the assessment with full assessment details contained within Volume 6, Appendix K.

The study has adopted the relevant International Association for Impact Assessment (IAIA) SIA principles, including the precautionary and uncertainty principle when predicting social impacts. Social impact predictions may change as the Project becomes better defined in detailed design and as the Project is being constructed and operated. A monitoring program has been developed in order to validate the social impact assessment and allow mitigation measures to be adjusted as required.

#### 20.2 Social and Cultural Area of Influence

The social and cultural area of influence for the Project was defined as part of the initial scoping study of the SIA. Table 20-1 sets out how the Terms of Reference (TOR) considerations were addressed when defining the social and cultural area of influence.

Table 20-1: Considerations for the Project's Social and Cultural Area of Influence

Consideration	How Considered
	The majority of impacts associated with the Project will affect landholders and therefore landholders are therefore the focus of the local study area.
	Closest towns to the Project are Alpha, Clermont, Collinsville and Bowen; however these towns are more than 20 kms from the alignment and are considered as part of the regional study area.
	The regional study area will incorporate the Local Government Areas (LGAs) of :
	Barcaldine Regional Council (BRC);
	Isaac Regional Council (IRC); and
	Whitsunday Regional Council (WRC).
	Social impacts are not expected to be significant at a State level.
The location of other relevant proposals or projects within the local area, district or region.	<ul> <li>There are other State significant projects<sup>1</sup> in the district and region:</li> <li>Kevin's Corner Project (adjacent to the Alpha Coal Mine);</li> <li>X110 Expansion Project (adjacent to the existing Abbot Point Coal Terminal);</li> </ul>
	Abbot Point Multi Cargo Facility (at the Port of Abbot Point);
	<ul> <li>Galilee Coal Project (Northern Export Facility), 30 kms west of Alpha; and</li> </ul>
	Galilee Basin Power Station (30 kms west of Alpha).

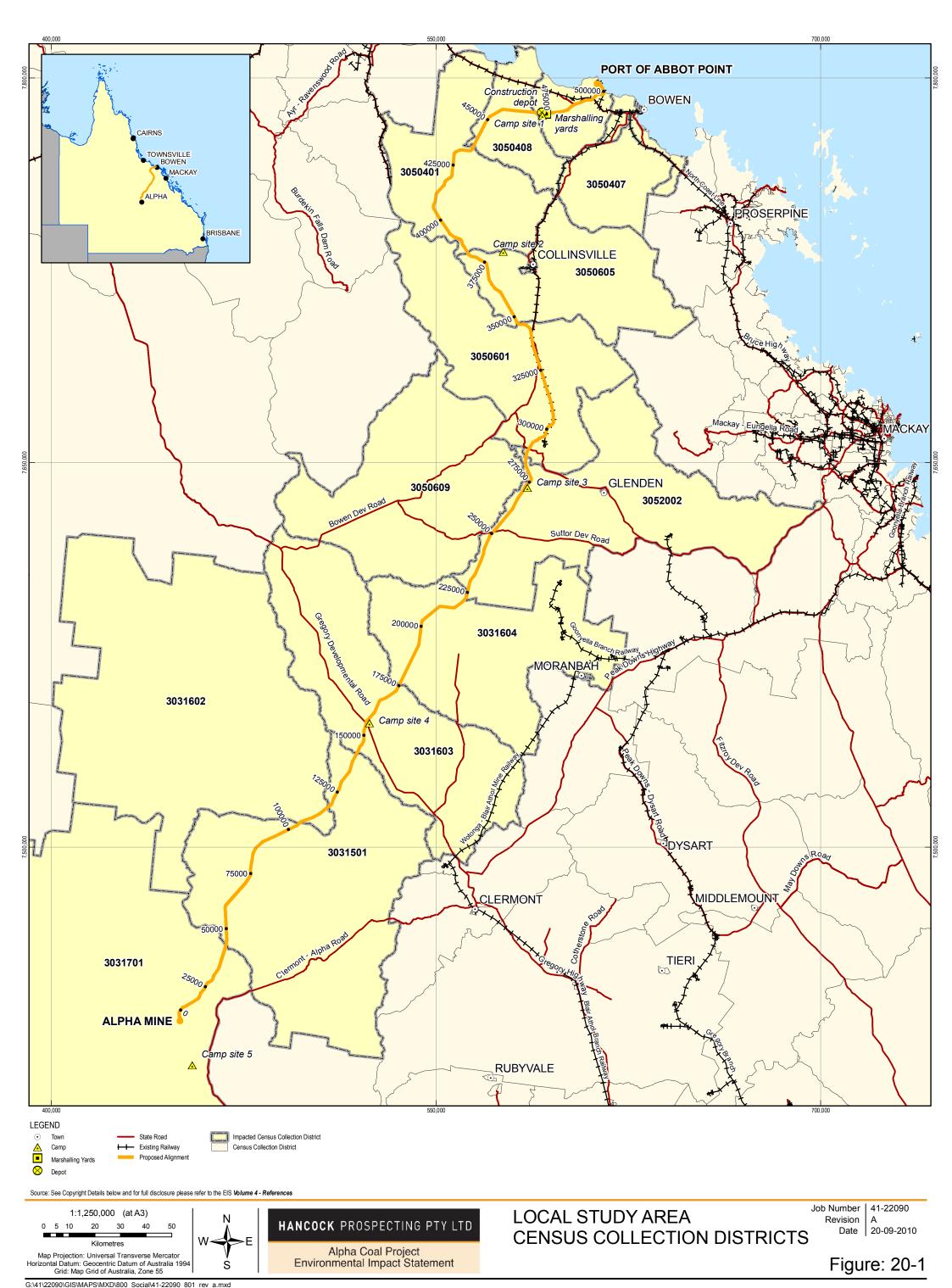
Currently developing EIS for the Coordinator-General under Part 4 the State Development and Public Works Organisation Act 1971.

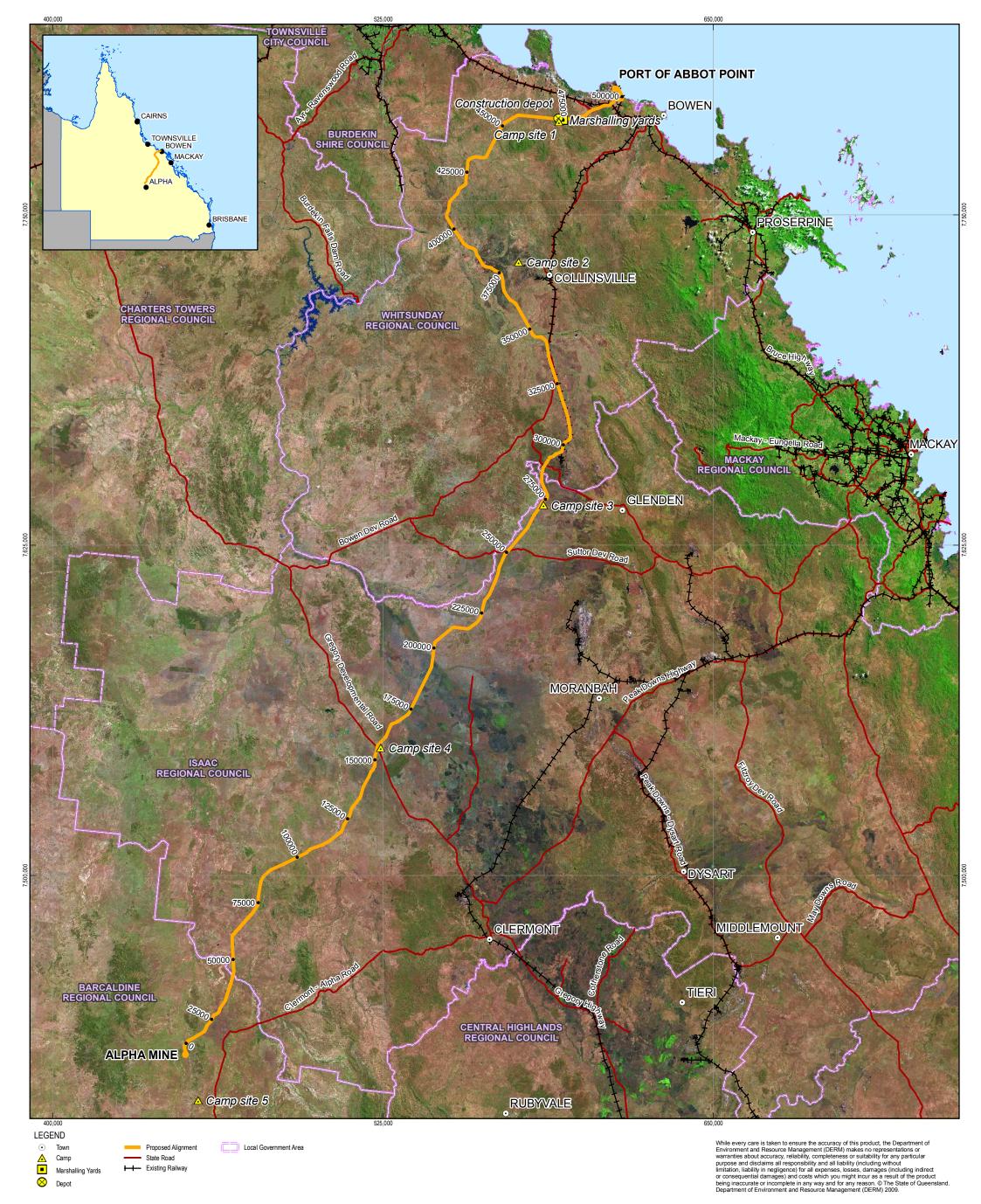
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Consideration	How Considered
	Recently constructed resource projects along the Project corridor include:  Coal Connect (Northern Missing Link EIS) – history of rail EIS;  Other Coal Projects – history of coal developments;  Water pipeline (SunWater); and  Electrical easement (Powerlink).  Further consideration is given to cumulative impacts in Volume 4, Appendix G.
region that might be affected by the Project (e.g. including integrity of social conditions, visual amenity and liveability, social	Based on a review of information available on Regional Council websites, lifestyle and community identity were strong social values in the local and regional study area. Further insights into social values were gained during consultation activities (refer to Volume 3, Section 20.3 and 20.4 of this EIS).
	The majority of land use along the Project is agricultural with small dispersed settlements focused around homesteads on properties. These areas have limited social infrastructure and are very sparsely settled.  Coal mining and associated infrastructure is also present in the central portion of the Project, and it enters the industrial designated areas in the north near the Port of Abbot Point. Workforces for these activities tend to be fly in/fly out or drive in/drive out, with very limited permanent settlement.
	The Project affects three native title claim areas. Separate processes are in place .to manage native title and cultural heritage interests. Consultations undertaken in relation to cultural heritage are detailed in Volume 3, Section 18 of this EIS.

Based on the above considerations and the nature of the Project, the social and cultural area of influence consists of a local and regional study area as follows:

- the local study area for the SIA is based on the Australian Bureau of Statistics (ABS) Census Collection Districts (CDDs) that are intersected by the Project (refer to Figure 20-1); and
- the regional study area includes the LGAs of BRC (closest town to the Project is Alpha), IRC (closest town to the Project is Clermont), and WRC (closest towns to the Project are Collinsville and Bowen), (refer to Figure 20-2).





Source: See Copyright Details below and for full disclosure please refer to the EIS Volume 4 - References

1:1,250,000 (at A3) 0 5 10 20 30 40 Kilometres Map Projection: Universal Transverse Mercator Horizontal Datum: Geocentric Datum of Australia 1994 Grid: Map Grid of Australia, Zone 55



HANCOCK PROSPECTING PTY LTD

Alpha Coal Project **Environmental Impact Statement**  **REGIONAL STUDY AREA** 

Job Number | 41-22090 Revision

Date | 20-09-2010

Figure: 20-2

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## 20.3 Community Engagement

#### 20.3.1 Local Study Area (Affected Landholders)

Landholders were invited to participate in the SIA consultation process in a number of ways:

- as an SIA case study;
- in EIA Public Consultation events (either Community Information Sessions or the Alpha or Clermont Regional Shows); or
- in landholder meetings in either Clermont or Collinsville.

Information provided by landholders has been used to understand social issues that are currently occurring, including those associated with the feasibility stage of the Project, and to predict potential social impacts which may occur in the construction and operational stages of the Project.

Reactions from landholders to the Project ranged from strong objection (refer to Case Study C in Volume 6, Appendix K), anger and disappointment regarding the Project, resignation (refer to Case Studies for landholders that have already been impacted by resource development) through to being able to identify potential opportunities associated with the Project (feedback during EIA Public Consultation events).

One of the impacted landholders provided a letter describing the impacts on their property and a section of the letter is quoted below:

"So now, for Hancock Coal, a very wealthy company to make more money you will destroy the livelihood of 10 people and crush us to a life we don't know. Where will it leave us? We are Country People, we don't complain, we put up with droughts, floods, low cattle prices, high taxes and a Government that would rather see us sink than swim and after all of that we are still here, until Hancock Coal, the richest coal company in Australia wants to make more money and comes in and destroys our income and livelihood.

How can or will Hancock Coal sleep at night when for them to earn more money dollars destroys lives of families and their income?"<sup>2</sup>

A number of the landholders in the local study area know of the experiences of landholders in the Bowen Basin either first hand (their property is already being impacted) or they know of someone who is affected by mining and/or associated infrastructure. As such, landholder's views on the Project are affected by legacy issues associated with development of the Bowen Basin.

Many of the landholders indicated willingness to work with Hancock Prospecting Pty Ltd (HPPL) to develop the Project as long as they, their family and their business were respected as there was a recognition of HPPL and the landholders being future long term neighbours.

Concerns and issues raised by landholders who participated in the SIA consultation process are summarised in Table 20-2.

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<sup>&</sup>lt;sup>2</sup> Name of the letter's withheld at the request of the author.

Table 20-2: Summary of issues raised by landholders

Issue	Feasibility Stage	Construction Stage	Operation Stage
Uncertainty and frustration of not being able to plan for the future.	✓	✓	
Decrease in physical, mental and emotional health (noise, dust, stress and anxiety).	✓	✓	✓
Increased pressure on family and social networks (break down of relationships).	✓	✓	✓
Distraction from running the business and living life	✓	✓	✓
Anger and frustration; there appears to be one set of rules for the mining companies and another for the landholders.	✓	✓	✓
Decrease in property value.	✓	✓	✓
Lack of communication between HPPL and landholders.	✓		
Decrease in the viability of the business due to increased costs direct (e.g. loss of land and implementing new management strategies) and indirect (e.g. skills shortage and increase in insurance, rates and rent).	✓	✓	✓
Increased pressure on existing infrastructure networks (e.g. mobile phone and internet access).		✓	
Concern for safety and security because of the workers, in particular the construction camps (e.g. construction workers trespassing and/or hunting pigs and/or kangaroos) on landholders' properties outside contract conditions).		<b>✓</b>	
Loss of connection to the land.		✓	✓
Changes to property management and business operations.		✓	✓
Environmental impacts (change in flooding and drainage regime, rubbish and waste management, noise, dust).		✓	✓
Cumulative impacts with other infrastructure developments already constructed or planned to be constructed on the property.		✓	<b>√</b>
Increased risk of fire.		✓	✓
Increased spread of weeds.		✓	✓
Loss of working animals and stock.		✓	✓
Disturbance to cattle (noise and dust) and loss of viable land (cattle won't use areas because of impacts) and pastures (coal dust).		✓	✓
Providing uncontrolled access to properties.		✓	✓
Decrease in the quality of public roads.		✓	
Decreased road safety due to the size and number of extra vehicles on the roads which are not designed for them.		<b>√</b>	
Decreased quality of life, decrease in the positives of living on the property (e.g. seclusion).		✓	✓

Issue	Feasibility Stage	Construction Stage	Operation Stage
Decreased safety of families and employees on the properties plus dangers to animals (cattle, horses and dogs).		<b>√</b>	✓
Loss of access within property.		✓	✓
Impacts on wildlife and changes to their habitats (e.g. loss of trees in the Project corridor).		✓	✓
Decreased safety at rail crossings on private land and public roads.		✓	✓

### 20.3.2 Regional Study Area

#### 20.3.2.1 Barcaldine Regional Council LGA

HPPL met with the Barcaldine Regional Council (BRC) (Councillors and staff) on Tuesday 4 May 2010. The BRC had previously received Project updates from HPPL. Table 20-3 contains background information and a list of issues raised by BRC.

Table 20-3: Issues raised by the Barcaldine Regional Council

Topic	Issue raised
Background information	<ul> <li>the town of Alpha was originally a railway town but now is preparing to become a mining town;</li> <li>top issues for BRC in regard to Alpha and Jericho are: <ul> <li>availability of residential land (there are only 30 quarter acre blocks available (currently being developed by Council), land availability is restricted because of flooding, water availability and existing power and sewerage capacity;</li> <li>lack of water and the need for infrastructure upgrade (the Town of Alpha currently relies on bore water but the aquifers are shallow);</li> <li>unreliable power and the need for power infrastructure to be upgraded; and</li> <li>sewerage system needs upgrading.</li> </ul> </li> <li>town of Alpha has the following transport options: <ul> <li>two passenger trains per week (to Longreach);</li> <li>two passenger bus services per day (Greyhound and Paradise);</li> <li>two freight trucks per week;</li> <li>one freight train per week; and</li> <li>no commercial flights.</li> </ul> </li> <li>BRC is aware that it may need to make amendments to the planning scheme to allow for future development, e.g. industrial areas; and</li> <li>communication services are limited (still mobile phone (Next G) black spots in town).</li> </ul>
Social impact issues	<ul> <li>safety, predominantly road safety, e.g. line of sight on crest of hills such as the turn off to Pine Hill;</li> </ul>

Topic	Issue raised
	<ul> <li>housing and land prices are increasing; a vacant flat four years ago could be purchased for \$6,000 - \$8,000 now it could sell for \$150,000. A house block four years ago could be purchased for \$8,000 - \$12,000 now sells for \$32,000. There is a lot of interest in housing in Alpha; however houses and house sites are not available;</li> </ul>
	<ul> <li>changes in the way that properties are changing hands; people from the coast are heading west and people out west are heading east;</li> </ul>
	<ul> <li>there has been a recent change in the population of Alpha; the number of older people has decreased. There is a 'vacuum' of young people; they leave to attend boarding school and tertiary studies until their mid 20s when they might return (usually to get a job in the mines). The boys tend to return but the girls rarely do;</li> </ul>
	BRC would like to see local training and apprenticeship programs for young people (both genders) to keep young people in the community; and
	<ul> <li>quality and number of medical services currently provided is inadequate. Staff and volunteers do their best but if more people are going to move to the region then there needs to be an improved level and type of medical service provided. At present, there is no doctor and the Queensland Ambulance Service ambulance is operated on a volunteer basis). Reduction in the numbers of people in Alpha coincides with the reduction of government services provided to regional areas.</li> </ul>
Environmental concerns	• impacts of the Project (predominantly the Alpha Coal Mine component of the Alpha Coal Project) on ground water as the landholders have a high reliance on ground water because of the intermittent surface water flows.
Cumulative impact issues	<ul> <li>BRC is trying to manage the opportunities created by all the proponents and their projects to ensure a positive outcome for their region; however Council will wait for information from the mining companies prior to making any changes (e.g. employment numbers during construction and operation). They explained that locals had seen the 'hype' before with no outcomes and nothing happened and are sceptical of local opportunities;</li> </ul>
	<ul> <li>BRC is struggling to attract and retain staff because of the housing impacts and can not match the employment conditions of the mines. Shortage of tradespersons. There was the suggestion that the mines could job share with the Councils; and</li> </ul>
	• concern about the impacts of skills shortages on property owners who already struggle to get employees and contractors because of the mines.
Landholder impacts	fencing of the Project corridor and maintenance responsibilities.

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Topic	Issue raised
Project design	<ul> <li>do not want HPPL to build a stand alone airport. Would prefer the existing airport to be upgraded and be available to the general public as common user infrastructure (increasing services which can be made available in Alpha);</li> <li>the construction and operation needs to take into consideration the school bus service; and</li> </ul>
	• Jericho has the land to develop, so may be an alternative location to Alpha for an operational workforces (including service industries).

The Alpha Community Information Session was held on Tuesday 4 May 2010 from 5.00 to 8.00 pm at the Alpha Town Hall. A total of 19 people attended the session. Table 20-4 contains a list of issues raised by people who participated in the Alpha Community Information Session.

Table 20-4: Issues raised at the Alpha Community Information Session

Topic	Issue raised (as described by participant)
Social impact issues	<ul> <li>the fly-in/fly-out (FIFO) nature of the workforce versus growing the local community (having the workforce based in Alpha or surrounding towns). Having a locally based workforce would increase the loyalty to the local community and increase benefits to local businesses;</li> </ul>
	<ul> <li>the SIA should have been started in 2007 when the Alpha Coal Project (Mine) was announced. Social impacts (such as an increase in property values) started to occur in 2007;</li> </ul>
	<ul> <li>some older people have sold their properties and left Alpha because of concerns about the Project;</li> </ul>
	<ul> <li>need to look at other towns in the region for development, such as Barcaldine and Jericho as options for a permanent workforce (rather than FIFO);</li> </ul>
	<ul> <li>there are a number of families who would relocate to Alpha if there was secure employment for one or both of the parents, this was seen as beneficial;</li> </ul>
	<ul> <li>HPPL needs to have a local liaison person based in town to keep the residents informed;</li> </ul>
	• important to view landholdings as people's homes, not just businesses;
	<ul> <li>there are already people driving out to Alpha looking for work;</li> </ul>
	<ul> <li>Alpha needs to receive some of the benefits of the Project, rather than bypassing the town (e.g. better roads, better services (particularly medical services), education (more students, hence teachers at the school);</li> </ul>
	<ul> <li>potential impacts on the local Queensland Ambulance Service which is currently run by volunteers from the local area;</li> </ul>
	<ul> <li>currently there is no incentive to relocate to Alpha as there are few services and facilities. There is concern as to how can Alpha compete with Brisbane (assumed base of the FIFO operation) with all its services and facilities?</li> </ul>
	<ul> <li>need to support the elderly so they can stay in town. They are an important part of the community.</li> </ul>

Topic	Issue raised (as described by participant)
Economic issues	<ul> <li>Alpha needs the financial benefits that could flow from the Project;</li> <li>concern about bringing in an overseas workforce;</li> <li>farmers are also in business, they need to keep their 'shareholders' happy as well;</li> <li>if there is a FIFO operation, there will be no direct economic benefit for Alpha. Do not wish to see a repeat of Clermont's current situation in Alpha (Clermont is seen as bearing the cost of mining but not receiving the benefits);</li> <li>there are already speculators in town driving the house prices up rendering real estate less affordable. House prices are already comparable to the coast;</li> <li>FIFO has the potential to increase property prices without workers staying in the town;</li> <li>local businesses in town need some guarantee that the Project is going ahead so they can make preparations; and</li> </ul>
	<ul> <li>need to have a local employment and procurement policy to support local businesses and contractors.</li> </ul>
Cumulative impacts	<ul> <li>impacts on the water table from the Alpha Coal Mine but also the other proposed mines;</li> <li>coal mining versus primary production (the region is part of the food belt of Queensland); and</li> <li>whether there would be two railway lines constructed and operated (referring to the Alpha Coal Project (Rail) and the Galilee Coal Project (Northern Export Facility).</li> </ul>

A staffed Project display was set up at the Alpha Regional Show on 19<sup>th</sup> May 2010. Issues raised at the Alpha Regional Show included:

- employment and procurement opportunities (e.g. local contractors);
- general interest in where the Alpha Coal Project (Mine) and Alpha Coal Project (Rail) are proposed to be constructed;
- impacts on landholders and suggestions for how they could be managed; and
- general support for the Alpha Coal Project and opportunities for the region to grow and increased service provision.

### 20.3.2.2 Isaac Regional Council Local Government Area

HPPL met with the IRC on Wednesday 5 May 2010. Table 20-5 contains background information and a list of issues raised by IRC.

Table 20-5: Issues raised by the Isaac Regional Council

Topic	Issue raised
Background information	<ul> <li>the diversity of towns in the Isaac Region is a key characteristic. Clermont was described as a traditional town, with the history of Clermont based in sheep farming, then the transition to gold and copper mining then coal, but being actively supported by the beef industry (which grew after the shearers' strikes);</li> <li>other towns in the Isaac Region are:</li> </ul>

Topic	Issue raised
	<ul> <li>Moranbah, Middlemount, Glenden and Dysart – mining;</li> <li>Coppabella – rail; and</li> <li>Nebo – agriculture and more recently mining.</li> </ul>
	• the IRC Local Government Area (LGA) is the source of 75% of Queensland Gross Domestic Product (GDP) but only receives 0.1% back from the State Government in service delivery (per capita basis);
	<ul> <li>the IRC is currently validating its Community Plan for Clermont under the Sustainable Planning Act 2009 (SPA). The Community Plan will have a 10 year life and contains the vision of the people living in the Isaac Region. It will be completed by July 2010;</li> </ul>
	<ul> <li>Clermont will be impacted by the Project because of the social networks between people in the region, how people access the region (e.g. road networks including the Alpha to Clermont Road) and location of services and facilities (e.g. recreational facilities and health services);</li> </ul>
	<ul> <li>Clermont is ready to grow, there are already houses ready for purchase and rent, education and medical services are provided. There are two general practitioners, Queensland Ambulance Services, police and a dentist in town;</li> </ul>
	<ul> <li>Clermont is facing a decreasing population with the closure of the Blair Athol mine, the new Clermont mine will not require the number of positions that were required at Blair Athol;</li> </ul>
	• with the existing mines (Moranbah and Dysart) in the area relying on a drive-in/drive-out model, the travel of fatigued workers is a large local issue; and
	<ul> <li>the level of legislated involvement of Councils in Environmental Impact Statements (EIS) is restricted to only making comments on the draft TOR and draft EIS. This sets up a negative relationship potentially based on conflict and this should be expanded to a more positive negotiation based approach.</li> </ul>
Social impact issues	<ul> <li>impacts on people living in the Isaac Region need to be taken into consideration. It was explained that people living in this region identified the Project as being beneficial to the region if opportunities are provided (e.g. local employment and procurement). The staff of the IRC also pointed out that people in the region are aware of the potential impacts of development and would like to see these minimised; and</li> </ul>
	• HPPL needs to work with IRC to ensure that future plans (including the construction camps) are taken into consideration for forward planning of the Isaac Region.
Economic impact issues	• the importance of having opportunities created for those towns and regions that will be impacted by the Project. The fly-in/fly-out (FIFO) arrangements do not create local opportunities;
	<ul> <li>there is a strong business group in Clermont (a subcommittee of the Clermont Progress Association) who would like Council to negotiate with the mining companies on their behalf to ensure that local opportunities are realised; and</li> </ul>
	<ul> <li>the business group sees economic development of the region as a way of achieving a sustainable Clermont, by having a permanent and growing population.</li> </ul>
Cumulative impact issues	• the Isaac Region is already experiencing the cumulative impacts of a number of mining projects.
Landholder impacts	<ul> <li>impacts on landholders need to be explored in consultation with landholders and documented in the SIA. Key issues reported by landholders to the Council include fencing, severance of paddocks, safe occupational crossing for cattle, people and machinery, safety of people living and working on the properties and the impacts of coal dust on cattle.</li> </ul>

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The Clermont Community Information Session was held on Wednesday 5 May 2010 from 3.00 to 7.00 pm at the Clermont Community Hall. A total of 41 people attended the session.

Table 20-6 contains a list of issues raised by people who participated in the Clermont Community Information Session.

Table 20-6: Issues raised at the Clermont Community Information Session

Topic	Issue raised (as described by participant)
Social impact issues	<ul> <li>concern over crossing of the Gregory Development Road (Charters Towers to Clermont), it is already busy, particularly on the change of mine shifts and the presence of road trains. There is a need for an overpass on level crossings;</li> <li>need to have emergency evacuation procedures for the construction camps and for the relevant services to be aware of these plans;</li> <li>there needs to be on site security for camps. Need to stop the 'roo shooting' and there could be looting of local properties;</li> <li>need to have a locally based community liaison officer (similar to Rio Tinto) and an overall liaison officer for the Project; and</li> <li>if the Project is going to be utilising the Alpha-Clermont Road, it needs to be upgraded and maintained to a higher standard.</li> </ul>
Economic issues	<ul> <li>concern about bringing in an overseas workforce;</li> <li>need to employ locally (unlike Rio Tinto);</li> <li>no local benefits from a FIFO workforce; and</li> <li>consider transporting workforce from Clermont to Alpha (source of local employment).</li> </ul>
Cumulative impact issues	<ul> <li>people asked if there were going to be two railway lines constructed and operated (referring to the Project and the Galilee Coal Project (Northern Export Facility)).</li> </ul>

A staffed public display regarding the Project was set up at the Clermont Regional Show on 26<sup>th</sup> May 2010. Issues raised at the Clermont Regional Show included:

- employment and procurement opportunities (e.g. local contractors);
- general interest in where the Alpha Coal Project is proposed to be constructed;
- impacts on landholders and suggestions for how they could be managed; and
- general support for the Alpha Coal Project and opportunities for the region to grow (population) and increased service provision.

#### 20.3.2.3 Whitsunday Regional Council Local Government Area

HPPL met with the Whitsunday Regional Council (WRC) on Thursday 6 and Friday 7 May 2010. The Council representative noted that the Whitsunday region is very diverse with a different development and focus in each of the major towns:

- Arlie Beach/Cannonvale tourism;
- Proserpine agriculture;
- · Bowen agriculture and recently heavy industrial; and
- Collinsville mining mixed with agricultural.

Table 20-7 contains background information and a list of issues raised by WRC regarding Collinsville.

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Table 20-7: Issues raised by the Whitsunday Regional Council regarding Collinsville

Topic	Issue raised
Background information	<ul> <li>council representative explained that mining brings people to the Whitsunday Region; however it also takes them away. Workers are supported to have a drive- in/drive out rather than incentives to live with their families in Collinsville, however there are not the services to support families living in Collinsville (e.g. child care). It is hard to plan and implement for a sustainable community with the highly transient population.</li> </ul>
	• for those people who permanently live in Collinsville, there is a high sense of pride of living in Collinsville and people have a wonderful sense of community;
	<ul> <li>Collinsville has an ageing population and older people do not wish to relocate.         There is only one nursing home in Collinsville and it is at capacity. There needs to be an increase in the services provided to older people so they can remain in Collinsville; and     </li> </ul>
	• WRC will start working on its Community Plan in the new financial year (2010-2011).
Social impact issues	<ul> <li>many people who live in Collinsville spend their recreational time along the Bowen River, camping and fishing.</li> </ul>
Economic impact issues	<ul> <li>would like Collinsville to be a sustainable community; however it needs families to relocate to Collinsville to achieve this, not just a drive-in/drive-out workforce.</li> </ul>

The Collinsville Community Information Session was held on Thursday 6 May 2010 from 3.00 to 7.00 pm at the Collinsville Community Centre. A total of 17 people attended the session. Table 20-8 contains a list of issues raised by people who participated in the Collinsville Community Information Session.

Table 20-8: Issues raised at the Collinsville Community Information Session

Topic	Issue raised (as described by participant)
Social impact issues	<ul> <li>potential health impacts of the Project on people who live along the Project corridor;</li> <li>impacts on how people use the Bowen River; it is the community's main recreational area for camping, fishing and general relaxing;</li> <li>safety of the Project;</li> <li>Need to upgrade the Peter Delemonthe Road as there aren't enough passing lanes, particularly if there is going to be construction traffic on the road;</li> <li>Collinsville is a mining town (not an agricultural town), it needs the workers and the contractors associated with mining to stay alive; and</li> <li>the Project needs to be fenced to protect people and animals.</li> </ul>
Economic issues	<ul> <li>need to employ locally;</li> <li>need to employ local Indigenous youth;</li> <li>operational workforce is likely to be based in Collinsville, there is space for up to 5,000 workers; and</li> <li>local procurement policy, support local hotels and suppliers.</li> </ul>
Environmental concerns	<ul> <li>air quality;</li> <li>freshwater aquatic flora and fauna;</li> <li>land disturbance;</li> <li>sensitive environmental areas; and</li> <li>soils.</li> </ul>

Topic	Issue raised (as described by participant)
Cumulative impact	• impacts on existing services (especially health services in the region);
issues	• impacts on the Bowen River (plants, animals and health of the river); and
	• people asked if there were going to be two railway lines constructed and operated (referring to the Project and the Galilee Coal Project (Northern Export Facility)).

Table 20-9 contains background information and a list of issues raised by WRC regarding Bowen.

Table 20-9: Issues raised by the Whitsunday Regional Council regarding Bowen

Topic	Issue Raised
Background information	<ul> <li>temporary accommodation in Bowen is limited due to the tourists and seasonal workers who relocate to Bowen (April to September). Accommodation such as caravan parks, hotels, backpackers – the lower cost temporary accommodation;</li> </ul>
	<ul> <li>availability of affordable housing in Bowen is a growing issue as Bowen has pockets of highly disadvantaged community. As house prices increase, there is a portion of the community who become displaced; and</li> </ul>
	<ul> <li>concerns about the quality of the facilities at the Merinda accommodation camp.</li> <li>Council representative explained that there are many people who are not staying at the Merinda Camp because of the apparent poor facilities and consequently prefer to rent.</li> </ul>
Social impact issues	<ul> <li>the majority of people who live in the Bowen district would like the region to develop, but not at the cost of displacing people; and</li> <li>impact of the accommodation camp at Merinda will be looked at.</li> </ul>
Environmental impact issues	<ul> <li>the environmental impacts of development, particularly impacts on the Caley Valley wetlands near Abbot Point are a major concern for people living in the Bowen district.</li> </ul>

The Bowen Community Information Session was held on Friday 7 May 2010 from 3.00 to 7.00 pm at the Barrier Reef (Technical and Further Education) TAFE. A total of 17 people attended the session. Table 20-10 contains a list of issues raised by people who participated in the Bowen Community Information Session.

Table 20-10 Issues raised at the Bowen Community Information Session

Topic	Issue raised (as described by participant)
Social impact issues	<ul> <li>ensure there is adequate infrastructure to support future population growth in the area;</li> <li>need to recognise cultural heritage values;</li> <li>Bowen needs to be sustainable and maybe this Project can help in achieving that;</li> <li>what about the construction workers who stay on after the Project is over?</li> <li>opportunity for local clubs to gain extra members.</li> </ul>
Economic issues	<ul><li>source of local employment and business; and</li><li>do not have the FIFO rosters too long; need to respect families.</li></ul>
Environmental concerns	<ul> <li>sustainable development;</li> <li>freshwater aquatic flora and fauna;</li> <li>coastal processes;</li> <li>groundwater; and</li> <li>noise and vibration.</li> </ul>

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Topic	Issue raised (as described by participant)				
Cumulative impact	environment, social and economic impacts of the Project; and				
issues	• multiple projects impacting on Bowen (not just this Project).				

### 20.4 Existing Socio-Economic Conditions

#### 20.4.1 Settlement Patterns

Settlement in the local study area is predominantly based on agriculture including livestock and crops. Each of the towns in relative proximity to the Project has different settlement histories. Alpha was established in 1884 to serve the construction of the railway and the town prosperity has mirrored the railway. Clermont was established in 1864 to serve the growing sheep industry and mining (including gold, copper and coal). Collinsville was established to serve the coal mining industry in 1866. Bowen was established in 1861 and is Queensland's oldest town and has a proud pioneering and World War II history.

#### 20.4.2 Identity, Values and Lifestyle

People living in the local study area defined themselves as hard working, family orientated, having a quiet lifestyle with strong connections to their property. People who live in the area are typically passionate about their properties and businesses due to the large component of physically hard work it takes to run the property successfully. The properties are people's homes not just the location of their business and they have a strong connection or a strong sense of place.

People living in the regional study area defined themselves as having a strong sense of community and community pride. They would like to see the towns in their region to develop to encourage young people and families to stay, which supports the provision of community services and facilities, such as medical and educational services.

#### 20.4.3 Land Use

The majority of the properties in the local study area are primary producers, with cattle breeding and fattening or crops being the main source of income.

The regional study area has a more diverse mix of land use with agriculture (livestock and crops) and mining being the main industries. More detailed information in relation to land use is contained in Volume 3, Section 6 of this EIS.

#### 20.4.4 Population

The total enumerated population in the local study area in 2006 was 2,912 people. The average number of people living permanently on each property is three, however landholders explained that seasonal activities such as mustering could result in much larger numbers of people present on the property for a short duration.

The estimated resident population for the regional study area in 2009 was 59,988 (1.3% of the Queensland population). This consisted of:

- 3,376 (or 0.1% of the Queensland population) in the BRC LGA;
- 22,417 (or 0.5% of the Queensland population) in the IRC LGA; and

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• 34,195 (or 0.8% of the Queensland population) in the WRC LGA.

The population of the regional study area increased from 53,000 in 2004 to 60,000 in 2009. The population of the BRC LGA decreased slightly from 2004 to 2009 from 3,443 to 3,376, a decrease of 0.4% per annum. The population of the IRC LGA increased from 2004 to 2009 from 19,764 to 22,417, an increase of 2.6% per annum. The population of the WRC LGA increased from 2004 to 2009 from 29,781 to 34,195, an increase of 2.8% per annum. The population of the regional study area is expected to increase from 2009 to 2031, from 60,000. A population increase is fprecast in each of the regional council LGAs.

#### 20.4.5 Full Time Equivalent Population

Full Time Equivalent (FTE) is an estimate of population taking into account the present of rostered and seasonal workers.

In 2009, Office of Economic and Statistical Research (OESR) calculated the FTE population for the Bowen Basin, including the pre-amalgamated boundaries for the Belyando, and Bowen LGAs as 93,500 persons. The Belyando LGA had a FTE population estimate of 14,109 which included 17% non-resident workers. Bowen LGA had a FTE population estimate of 14,240 which included 2% of non-resident workers.

#### 20.4.6 Family Structure

In the local study area, 'couple family with children' was the most common family type (50% of all families), followed by 'couple family with no children' (41%). The proportion of one parent families was 6%, much lower than the Queensland average of 15.9%.

During the SIA case studies, landholders explained that it was common for properties to be in a stage of transition, with one generation handing over to the next, so there could be two generations living on one property or one family getting ready to leave and the next generation getting ready to relocate.

At a regional level, there were 12,555 families in the regional study area in 2006. There were 823 families in the BRC LGA, with 40.9% being couple families with no children, 45.9% couple families with children and 12.0% one parent families. There were 4,663 families in the IRC LGA, with 35.2% couple families with no children, 55.7% couple families with children and 8.0% one parent families. There were 7,069 families in the WRC LGA, with 42.4% couple family with no children, 46.7% couple family with children and 10.9% one parent families. The BRC and IRC LGAs had a higher percentage of couple families with children which are consistent with the rest of Queensland, however WRC LGA had a higher percentage of couple families with no children, perhaps reflecting a higher number of retirees.

#### 20.4.7 Age and Gender Distributions

There are significantly more males than females in the local study area. The male to female ratio is 129 to 100 which reflects the higher ratio of females leaving the region at a school age and not returning. There are comparatively very few children and young persons between the age of 10 and 20 years which is probably due to high school students relocating to boarding schools and for tertiary education. There are very few persons over the age of 70 years which may reflect a migration to coastal areas by retirees, and may also relate to low levels of aged care in the region. The median age

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in the local study area is 35 years, which is similar to the Queensland median of 36 years (ABS 2006a, ABS 2006b).

In 2006 the BRC and WRC LGAs had a similar population pyramid to the Queensland. IRC had a significantly lower percentage of older people (that is people aged 65 and above) compared to Queensland. This may be representative of the higher percentage of people in the labour force age groups (15-64) in the LGA.

#### 20.4.8 Birthplace

The majority of the population in the local study area, 1,482 persons or 82%, were born in Australia, followed by New Zealand (35 persons or 2%) and the United Kingdom (17 persons or 1%). The only non European country among the top five countries of birth was Indonesia, with four persons identified as being born there. Due to the low value and the ABS introduced random error, this may however reflect a distortion of the real value. During the SIA case studies, landholders explained that there was a significant (although minor) presence of backpackers working in the area.

In the regional study area, 41,056 residents were born in Australia and 5,433 born overseas:

- 89.4% of people within the BRC LGA were born in Australia and 4.6% born overseas (3.0% born in English speaking countries and 1.7% born in non-English speaking countries;
- 81.7% of people within the IRC LGA were born in Australia and 7.4% were born overseas (5.1% in English speaking countries and 2.3% in non-English speaking countries; and
- 75.0% of people within the WRC LGA were born in Australia and 13.1% were born overseas (8.3% in English speaking countries and 4.7% in non-English speaking countries.

#### 20.4.9 Indigenous Population

In 2006, 44 persons identified as Indigenous (Aboriginal or Torres Strait Islander) in the local study area, with 26 males and 18 females. The Indigenous population constituted 2% of the usually resident population (ABS 2006a).

There are 1,742 who identified as being Indigenous in the regional study area.

#### 20.4.10 Income

In 2006, the majority of people in the local study area had reported gross individual weekly income of \$400-\$599, which is supported by the median weekly individual income of \$539, which is higher than the Queensland median of \$476 (ABS 2006a, ABS 2006b). There was also a relatively large group with nil or negative income.

At the time of the 2006 Census, 42.1% of people aged 15 years and over in the BRC LGA stated their gross individual weekly income was less than \$400, and 2.3% who stated their gross individual weekly income was higher than \$2,000.

At the time of the 2006 Census, 29.4% of people aged 15 years and over in the IRC LGA stated their gross individual weekly income was less than \$400 and 13.7% stated their gross individual income was more than \$2,000.

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At the time of the 2006 Census, 34.5% of people aged 15 years and over in the WRC LGA stated their gross individual weekly income was less than \$400 and 2.0% stated their gross individual income was more than \$2,000.

#### 20.4.11 Labour Force

The total labour force participation rate for the regional study area was high (72.6%). Very few people were unemployed, with the unemployment rates at 1%. For both women and men, Manager was the most common type of occupation (444 persons), followed by Labourers (261 persons) and Machinery Operators and Drivers (110 persons). In conjunction with the large dominance of agriculture in the local study area, the large number of managers is likely to reflect a large number of self employed property owners and/or employed managers.

At the time of the 2006 Census Agriculture, Forestry and Fishing was the largest industry of employment in the BRC LGA (33.5% of the population). Only 0.7% of the workforce was employed in mining.

By contrast, mining was the most significant proportion of the workforce in the IRC LGA, accounting for 38.9% of the workforce, while Agriculture, Forestry and Fishing accounted for 10.5%.

In WRC, Accommodation and Food Services was the dominant industry of employment, with 15.6% of the workforce employed in this sector, 11% in Agriculture, Forestry and Fishing and 3.7% in Mining.

#### 20.4.12 Housing Availability and Affordability

In 2006 the largest home loan repayment bracket in the local study area was \$2,000 to \$2,999 per month, followed by \$3,000 and over. It should be noted that 54% of the respondents did not state their housing loan repayment levels and with only 81 dwellings being purchased at the time, it is difficult to draw any certain conclusions from the data. More than 70% of the 191 rented dwellings were being rented for less than \$49 per week. These very low rents may indicate a large proportion of employer subsidised rental housing.

#### 20.4.13 Disability Prevalence

At the time of the 2006 Census, there were 96 persons (2.9% of population) in need of assistance with a profound or severe disability in the BRC LGA. At the time of the 2006 Census, there were 267 persons (1.3% of the population) in need of assistance with a profound or severe disability in the IRC LGA. At the time of the 2006 Census, there were 1,135 persons (3.9% of the population) in need of assistance with a profound or severe disability in the WRC LGA.

#### 20.4.14 Crime

In 2002-2003 the crime profile of the pre-amalgamated LGA of Jericho, Barcaldine, Blackall, Isisford and Tambo had lower rates of crime than the Queensland average.

In 2002-2003 the crime profile of the pre-amalgamated LGA of Belyando and Nebo had a higher crime rate of offences against the person but lower rates of offences against property and other crime than Queensland.

In 2002-2003 the crime profile of the pre-amalgamated LGA of Bowen had had a higher crime rate of offences against the person but lower rates of offences against property and other crime than Queensland.

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#### 20.4.15 Agricultural Production

The total value of agricultural production in the BRC LGA in 2005-2006 was \$109.6 million (1.3% of Queensland production). This consisted of 2.5% crops, 88.5% livestock slaughtering and 9.1% livestock products.

The total value of agricultural production in the IRC LGA in 2005 – 2006 was \$232.8 million (2.7% of Queensland production). This consisted of 14% crops and 86% livestock slaughtering.

The total value of the agricultural production in the WRC LGA in 2005 – 2006 was \$336 million (3.9% of Queensland production). This consisted of 82.8% crops, 17.0% livestock slaughtering and 0.3% livestock products.

#### 20.4.16 Social Infrastructure

There was no social infrastructure identified as located within the local study area. People living in the local study area travel to nearby towns where services are provided. For medical emergencies, the local study area is serviced by the Central Queensland Rescue Helicopter (based in Mackay) and an ambulance service.

The BRC Corporate Plan 2009-2014 describes community access to services as one of the regions' dilemmas, with the communities not having a large enough population to support key infrastructure such as education and health care. The Corporate Plan also recognised that services need to be provided to be able to attract people to move to the region. The BRC describes this situation as a 'chicken and egg' situation that raises important challenges. The rates base for the LGA is relatively low and it is difficult to support infrastructure and services over a large geographical area. This makes the attraction of State and Federal funding critical. The Corporate Plan acknowledges that the costs of service provision are increasing and the rationalisation of public funding has seen a continuing trend toward centralisation of services to major centres (usually outside the region). Small communities are struggling to maintain hospitals and schools. There are innovative service delivery models being implemented such as Rural Transaction Centres and the Queensland Government Agent Program, however high level services such as medical practitioners and associated infrastructure is a challenge.

Social infrastructure and services available within IRC include built and natural recreational opportunities, lakes, dams and pristine coastal environments, well established sporting groups and facilities, attractive and a wide range of cycle ways and footpaths, local parks, playground equipment and public open spaces in towns. The IRC LGA has eight libraries, fifteen schools, a TAFE facility and Training Excellence Centre. The region also contains social and crisis accommodation. Other facilities include undercover arena at Nebo and art galleries which are able to be used for exhibitions which support local artists and an active arts culture. Community volunteers are active in areas such as cataloguing and documenting local history and preserving heritage places. A Regional Arts Development Fund supports arts and cultural activities.

Within WRC, there are hospital facilities available in Bowen, Proserpine and Collinsville providing the community with maternity, acute inpatient, accident and emergency and theatre services. Visiting specialists to the region include orthopaedic, paediatric, general surgery physician, obstetrician and gynaecologist. Other services include both local and visiting physiotherapy, speech therapy, social work, mental health, podiatry, dietetics and orthodontic. A range of disability services are available in the WRC including employment assistance, information services and respite care. Youth within the region have access to youth centres/spaces situated in Bowen and Proserpine as well as a Police

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Citizens Youth Club (PCYC) in Airlie Beach. Exchange programs are available with the assistance of Lions and Rotary. Sporting opportunities include football, golf, cricket, netball, tennis, swimming, soccer and sailing. The Whitsunday Region has 13 primary schools and three high schools and the Barrier Reef Institute of TAFE operates two campuses. There is an Entertainment Centre at Proserpine.

### 20.5 Project Workforce

#### 20.5.1 Construction

The construction stage of the Project is scheduled to occur from September 2011 through to March 2014. The Project will be constructed in six sections to allow for the concurrent construction programs, reducing the overall time of construction and negative construction impacts on landholders and other stakeholders.

The following construction activities will be undertaken for the construction stage of the Project:

- · civil works including, earthworks, drainage and bridge construction; and
- track construction including track laying, installation of signalling and communications.

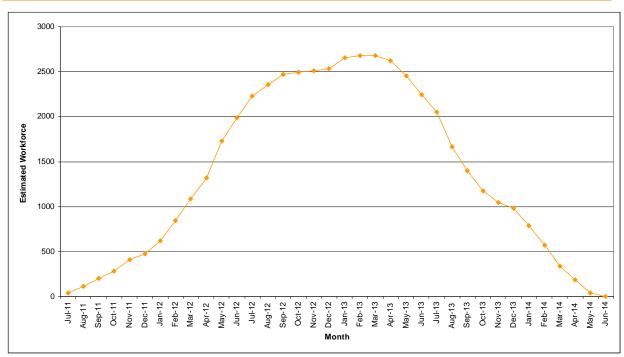
The construction workforce is expected to be primarily a FIFO operation, with workers sourced from the region or wider areas, according to skill levels, with the majority of workers expected to be recruited within Australia. Local employment opportunities will be through sub-contracting of local businesses. Figure 20-3 shows the total estimated construction workforce over the construction timeframe of the Project.

Workers will be housed at one if five accommodation camps that are proposed to be located along the Project corridor, including the construction camp for the Alpha Coal Mine and camps to be constructed at locations known as Gregory Highway, Eaglefield, Collinsville<sup>3</sup> and Salisbury Plains camps as shown in Figure 20-1. The camps have been equally spaced along the Project corridor to minimise travel for the construction personnel. The camps have also been positioned in the vicinity of an existing access or main road so as to aid in the transport of goods to the camp sites and to minimise interaction of camp traffic with construction traffic. Figure 20-4 shows the estimated construction workforce per accommodation camp over the construction timeframe of the Project.

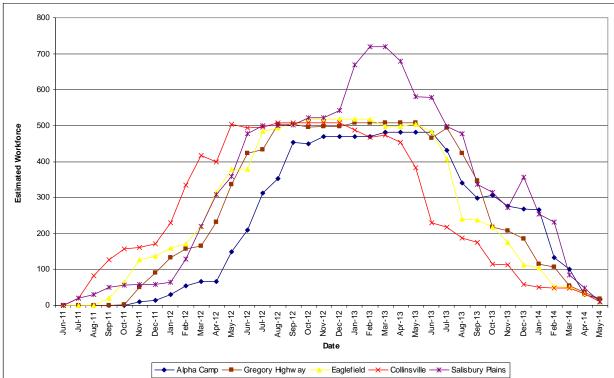
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<sup>&</sup>lt;sup>3</sup> Please note that this is not the town of Collinsville.

Figure 20-3: Estimated total construction workforce







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HPPL will develop an industry standard Code of Conduct for the camps. The Code of Conduct will include guidelines on:

- inductions (including access to properties);
- occupational health and safety;
- alcohol and drugs;
- · communication; and
- local travel and access to communities.

The temporary construction camps will need to be largely self sufficient. The construction camps are to be made from transportable units built on temporary foundations.

The temporary construction camps will contain the following facilities:

- accommodation units;
- · central dining/kitchen hall;
- enclosed food storage (include cold storage), preparation and serving areas;
- · mess with bar facilities;
- · laundry facilities;
- potable water supply;
- communications;
- sewerage system sufficient to accommodate the number of workforce personnel;
- electrical and telecommunications infrastructure;
- first aid station and designated vehicle;
- fuel, chemical and waste storage;
- · recreational facilities; and
- · parking facilities.

Each of the camps will require a Development Application to be lodged and approved by the relevant regional councils and associated referral agencies prior to construction. Other details associated with required approvals for construction of camps are provided in Volume 3, Section 1 of the EIS.

A variety of skills and trades will be required for the construction of the Project, including labourers, trades people, machinery operators (such as backhoes, bulldozers, graders etc), and technical specialists such as geotechnical engineers and site supervisors.

Rosters during the construction of the Project are expected to be either:

- one month roster, with three weeks (21 days) on and one week off (seven days); or
- fortnightly roster, with ten days on and four days off.

Table 20-11 sets out the expected transport arrangements for the workforce, which is dependant on the location of the accommodation camp.

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Table 20-11: Transportation of construction workforce

Accommodation Camp	Transport (base)	Method of Transport
Alpha	Alpha	Bus to site from Alpha airport
Gregory Highway	Alpha	Bus to site from Alpha airport
Eaglefield	Mackay	Bus to site from Mackay airport
Collinsville	Proserpine	Bus to site from Proserpine airport
Salisbury Plains	Merinda	Bus to site from Proserpine airport

HPPL will provide bus services from the respective bases to the construction camps. In order to reduce the risk of driver fatigue, HPPL will discourage workers from driving themselves to work, unless identified as:

- · a local employee or contractor;
- engaged on single shifts of no more than eight hours duration (e.g. camp staff); or
- contractors who require their own specialist transport (e.g. vehicle and machinery maintenance).

HPPL has an existing website where interested individuals and contractors can register their interest for work during construction and operation, which is: <a href="http://projectgateway.icn.org.au">http://projectgateway.icn.org.au</a>.

HPPL will develop an employment and procurement policy guided by industry standards and relevant government guidelines that will aim to:

- maximise use of local businesses and services:
- maximise local employment (including provision of work readiness training if appropriate);
- · maximise Indigenous employment (including work readiness if appropriate); and
- · increase employment of apprentices and trainees.

HPPL will work with contractors to ensure that contractors also maximise local procurement and employment when working on the Project.

#### 20.5.2 Operation

Key tasks during the operational stage of the Project include train crew, signalling, communication, and maintenance (including rolling stock and track). A rail yard including provisioning, stabling and maintenance facilities will be established. It is expected that the rail yard will be located near the Port of Abbot Point on land that has been identified by HPPL as suitable for this facility. Refer to Volume 3, Section 2 of the EIS for more details on the yard/maintenance facility.

Employment opportunities will include labourers, trades people, train crew, machinery operators, diesel mechanics and electrical fitters and signalling and communication and operational control specialists.

The operational workforce is expected to include a residential component and a FIFO component. The residential component of the workforce will be associated with the northern end of the Project where the rail marshalling yard, locomotive and rolling stock maintenance areas and signalling and communications offices will be located. Location of the main operational facilities at the Abbot Point end of the Project means that the majority of the operations workforce is likely to be based in Bowen

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and nearby towns. The FIFO component of the workforces will mostly comprise track maintenance workers who will be housed in permanent accommodation camps at the proposed Alpha Coal Mine and at Eaglefield and Salisbury Plains along the alignment, with an estimated 40 persons based in each camp. Table 20-12 shows the expected transport of the workforce to and from the permanent accommodation camps.

Table 20-12: Transportation of operational workforce (permanent and fly camps)

Accommodation Camp	Accommodation Camp Transport (base)	
Alpha	Alpha	Bus to site from Alpha airport
Eaglefield	Mackay	Bus to site from Mackay airport
Salisbury Plains	Salisbury Plains	Bus to site from Proserpine airport

The permanent camps will be operated in a similar fashion to the construction camps, with relevant Code of Conduct for workforce behaviour. Wherever possible use of local suppliers and businesses will be maximised.

The total number of the operational workforce will depend on whether automated train operation (ATO) is adopted or not. ATO is a system which enables partial or complete automatic train piloting and driverless functions.

Without ATO two train drivers would be required, with ATO it is expected that one driver would be utilised. The single driver ensures mitigation of risks associated with failures or emergencies. If ATO is not adopted, the workforce is expected to be approximately 120 persons in the first year of operation (2013), expanding to a peak of 225 persons by 2020.

If ATO is adopted, the operational workforce is still expected to commence at 120 persons in the first year of operation (2013) and then increase to a peak of approximately 200 in 2020.

#### **20.5.3 Potential Population Increase**

Estimating the potential population increase arising from operation employment opportunities depends on the proportion of employees that are recruited from within the vicinity of the Project, compared to workers that move to the area for employment, and also whether workers that relocate bring families with them

Assuming that all of the FIFO workers live outside the region or in major centres such as Mackay and 75% of the residential workers are recruited from the local/regional area, up to 90 workers will relocate to the area in 2013, the first year of operation. With an average Australian household size of 2.6, the initial increase in local/regional residential population related to the Project is 234.

By 2020, up to 165 workers will have relocated to the area with ATO and 170 workers without ATO. With an average Australian household size of 2.6, the overall increase in local/regional residential population related to the Project is 429 persons with ATO and 442 without ATO.

Assuming that this population resides in Bowen or the immediate area, this represents a population increase of under 3% of the 2016 population 3% of the 2020 population.

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### 20.6 Potential Impacts and Mitigation Measures

This section contains a summary of the potential impacts during the feasibility, construction and operational stage of the Project and identifies corresponding mitigation strategies (refer to Volume 6, Appendix K for the full description).

Social impacts and opportunities during the Feasibility Stage of the Project are summarised in Table 20-13. Table 20-14 and Table 20-15 provide a summary of potential impacts and opportunities during the construction and operational phases. Table 20-16 provides a summary of management strategies proposed to be implemented during relevant phases of the Project.

Landholders are experiencing significant social impacts during the feasibility stage of the Project. These impacts are reflective of the uncertainty of the Project and the high levels of emotions being experienced by landholders at the time of undertaking research for the SIA. Significant social impacts include changes to aspirations and a loss of sense of belonging and attachment to place. Landholders reported already experiencing a decrease in property value and a decrease in economic resilience. Landholders also reported a decrease in family and community cohesion. These emotional impacts have flow on impacts to the health of landholders.

Significant potential social impacts during Project construction are expected to be experienced by landholders and regional communities. Landholders are expected to experience impacts that relate to their health and wellbeing (including concern of construction camps, loss of aspirations and autonomy), the quality of their living environment (including physical construction impacts and decrease in personal safety), geographic surrounding and their economic and material wellbeing (including a decrease in property values, business impacts including impacts on cattle management leading to increased workloads). Regional communities are expected to experience changes including a temporary increase in population, decrease in road safety and an increase in skills shortage.

Significant potential social impacts during Project operation are expected to be experienced by landholders. Landholders are expected to experience changes to their geographic surroundings, health and wellbeing (including emotional health impacts), quality of their living environment (including physical operational impacts, increase in crime and decrease in personal safety) and changes to their economic and material wellbeing (including business impacts such as changes to cattle management practices leading to increased workloads).

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Table 20-13: Summary of social impacts and opportunities in the feasibility stage

		Existing Project Description				
Impact	Stakeholder group	Likelihood/ Consequence Rating	Status of impact	Duration of impact	Spatial extent of impact	Stakeholder importance
Health and Wellbeing						
Health impacts <sup>4</sup>	Landholders	High	Negative	Medium	Local	High
Loss of aspiration	Landholders	High	Negative	Medium	Local	High
Loss of sense of belonging and attachment to place	Landholders	High	Negative	Long	Local	High
<b>Economic and Material Wellbeing</b>						
Decrease in property value	Landholders	High	Negative	Long	Local	High
Decrease in economic resilience	Landholders	Medium	Negative	Long	Local	High
Family and Community						
Decrease in family cohesion	Landholders	High	Negative	Medium	Local	High
Decrease in community cohesion	Landholders	High	Negative	Long	Local	High

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<sup>&</sup>lt;sup>4</sup> Medical or psychological testing has not been undertaken by a suitably qualified medical practitioner as part of the SIA.

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Table 20-14: Summary of the potential social impacts and opportunities during the construction stage of the Project

			Exist	ing Project Descri	ption	
Potential impact	Stakeholder group	Likelihood/ Consequence Rating	Status of impact	Duration of impact	Spatial extent of impact	Stakeholder importance
Demographic						
Temporary increase in population	Regional Communities	Medium	-	Medium	Regional	Medium
Concern about construction workers and construction camps	Landholders	Low	Negative	Medium	Local	High
Services and Facilities						
Housing availability	Regional Communities	Negligible	-	-	-	-
Community Services and Facilities	Regional Communities	Low	Negative	Medium	Regional	Medium
Geographic						
Conversion of land use	Landholder's property	High	Negative	Long	Local	High
Physical splintering	Landholders	Medium	Negative	Medium	Local	High
	Regional communities	Negligible	Negative	Medium	Regional community	Medium
Physical construction impacts	Landholders	Low	Negative	Medium	Local	High
Health and Wellbeing						
Decrease in health <sup>5</sup>	Landholders	High	Negative	Medium	Local	High
Loss of aspirations	Landholders	Medium	Negative	Medium	Local	High
Loss of autonomy	Landholders	Medium	Negative	Medium	Local	High

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<sup>&</sup>lt;sup>5</sup> Medical or psychological testing has not been undertaken by a suitably qualified medical practitioner as part of the SIA.

		Existing Project Description				
Potential impact	Stakeholder group	Likelihood/ Consequence Rating	Status of impact	Duration of impact	Spatial extent of impact	Stakeholder importance
Quality of the living environment						
Decrease in the quality of the living and working environment	Landholders	High	Negative	Medium	Local	High
Changes to the natural environment	Landholders	Medium	Negative	Medium	Local	Medium
Decrease in personal safety and increase to hazard exposure						
Road safety	Road users	High	Negative	Medium	Regional	High
Fire	Landholders	High	Negative	Medium	Regional	High
Increase in crime and decrease in security	Landholders	Medium	Negative	Medium	Local	High
<b>Economic and Material Wellbeing</b>						
Increase in workload for landholders	Landholders	Medium	Negative	Medium	Local	High
Decrease in income, economic prosperity and resilience	Landholders	Medium	Negative	Medium	Local	High
Disturbance to cattle	Landholders	Medium	Negative	Medium	Local	High
Loss of viable land	Landholders	Medium	Negative	Medium	Local	High
Decrease in property values	Landholders	Medium	Negative	Medium	Local	High
Increase in local employment opportunities	Local employees	Low	Positive	Medium	Regional	Medium
Increase in skills shortage	Local businesses	Medium	Negative	Medium	Regional	High
Increase in business opportunities	Local businesses	Low	Positive	Medium	Regional	Medium

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Table 20-15: Summary of social impacts and opportunities in the operational stage

		Existing Project Description				
Potential Impact	Stakeholder Group	Likelihood/ Consequence Rating	Status of Impact	Duration of Impact	Spatial Extent of Impact	Stakeholder Importance
Demographic						
Increase in population	WRC LGA	Negligible	-	-	-	-
Services and facilities						
Housing availability	WRC LGA	Low	Negative	Long	Regional	High
Community services and facilities	WRC LGA	Low	Negative	Long	Regional	High
Graphic						
Conversion of land use	Landholders	High	Negative	Long	Local	High
Physical splintering	Landholders	Medium	Negative	Long	Local	High
Physical operational impacts	Landholders	High	Negative	Long	Local	High
Health and Wellbeing						
Decreased in health <sup>6</sup>	Landholders	High	Negative	Long	Local	High
Quality of the living environment						
Decrease in the quality of the living environment	Landholders	Medium	Negative	Long	Local	High
Changes to the natural environment	Landholders	Medium	Negative	Long	Local	Medium
Decrease in personal safety and increase to hazard exposure						
Train safety	Landholders	High	Negative	Long	Local	High
Fire	Landholders	High	Negative	Long	Regional	High

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<sup>&</sup>lt;sup>6</sup> Medical or psychological testing has not been undertaken by a suitably qualified medical practitioner as part of the SIA.

		Existing Project Description										
Potential Impact	Stakeholder Group	Likelihood/ Consequence Rating	Status of Impact	Duration of Impact	Spatial Extent of Impact	Stakeholder Importance						
Increase in crime and decreased security	Landholders	High	Negative	Long	Regional	High						
Economic and Material Wellbeing												
Increase in workload	Landholders	Medium	Negative	Long	Local	High						
Decrease in income, economic prosperity and resilience	Landholders	Low	Negative	Long	Local	High						
Disturbance to cattle and other animals	Landholders	Low	Negative	Long	Local	High						
Increase in local employment opportunities	Local employees	Low	Positive	Long	Regional	Medium						
Increase in business opportunities	Local businesses	Low	Positive	Long	Regional	Medium						

Table 20-16: Overview of management strategies

	Impact category																
Management Strategy	Feasibility		Construction						Operation								
	Health and wellbeing	Economic / material wellbeing	Family and community	Demographic	Geographic	Services and Facilities	Health and wellbeing	Quality of living environment	Economic / material wellbeing	Family and community	Demographics	Geographic	Services and facilities	Health and wellbeing	Quality of Living environment	Economic / material wellbeing	Family and community
Project Design				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
Good Neighbour Policy	✓	✓	✓	✓			✓	✓	✓	✓		✓		✓	✓	✓	✓
Individual Landholder Compensation Package	✓	✓			✓		✓	✓	✓	✓		✓		✓	<b>√</b>	✓	✓
Regional Stakeholder Engagement Program						✓		✓	✓	✓					✓	✓	✓
HPPL Community Development Fund					✓												
Employment and Economic Development Strategy									✓							✓	
Other technical study management strategies																	
Environmental Management Plan (EMP) (dust, noise, ecological)							<b>√</b>	<b>√</b>	✓					✓	<b>✓</b>		
Traffic Management Plan					✓			✓				✓					
Emergency Response Plan								✓							✓		

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#### 20.7 Conclusions

Given the different characteristics of the local and regional study areas and the different Project experiences to date, the potential social impacts at the local and regional level for both construction and operation will be different. The impacts or opportunities that are being experienced during the feasibility stage have 'set the tone' for the expected social impact during the construction and operational stages of the Project.

Landholders in the local study area are expected to bear the majority of the negative social impacts with the urban centres in the regional study area to experience the potential opportunities during construction and operation. Landholders are expected to experience impacts that relate to their health and wellbeing, the quality of their living environment, geographic surrounding and their economic and material wellbeing. Regional communities are expected to experience opportunities related to employment and business development.

Management strategies have been developed to reduce the potential for negative social impacts and maximise the opportunities created by the Project. These management strategies will further development in consultation with the relevant stakeholders to finalise the SIMP. A critical component of the draft SIMP is the ongoing monitoring of potential impacts and associated management strategies to ensure they are working.