



## **17 Social Impact Assessment**

### **17.1 Introduction**

A social impact assessment (SIA) is a proactive and anticipatory tool used to help understand the potential impacts that a proposed project may have on a community.

A baseline study of the community's existing social environment is developed by analysing demographic characteristics, social infrastructure, social values and lifestyles. The baseline information is then used to help predict any social impacts the community may face, or changes that may occur to the existing social environment, by introducing the proposed project.

The SIA enables the proponent and government to determine effective strategies to help mitigate the negative impacts, and maximise positive impacts, of a project.

The Caval Ridge Project SIA has been prepared to meet the requirements outlined in the Terms of Reference for an Environmental Impact Assessment – Bowen Basin Coal Growth Project (BBCGP), October 2008. This SIA is the second project-specific SIA prepared as part of BMA's BBCGP. The first SIA related to the proposed Daunia Mine.

While project-specific SIAs have been, and will continue to be developed for the individual components of BMA's BBCGP, it is recommended that the SIAs are read in conjunction, to help gain an overarching understanding of the potential cumulative social impacts of the BBCGP on local and regional communities. Cumulative impacts are addressed in each project-specific SIA, and will be reviewed and updated to build a clearer understanding of cumulative impacts, as each of the project studies progress.

#### **17.1.1 How to read this Section**

This section provides a platform for the community and stakeholders, including local and state authorities, to understand and effectively assess the potential impacts (positive and negative) associated with the project.

The content is intended to provide a framework that enables stakeholders to make informed decisions on the likelihood and level of impacts on their community, organisation or individual interests. The section also outlines how BMA intends to prepare for and manage potential impacts, in a way that benefits the local and regional communities.

The study area, consultation activities and study limitations are described, followed by a project description focussing on workforce requirements across construction and operation.

Finally, a description of the existing social environment provides a broad overview of the local and regional communities. Key social indicators such as demographic characteristics, existing community infrastructure, residential amenity and social values are showcased. It should be noted that the existing environment section of the report provides a broad overview of the social characteristics of the study area and region, not just those aspects that could be impacted by the project.



From this baseline information, the section highlights the project's potential impacts and BMA's mitigation strategies, which are addressed case-by-case. A summary table which provides a snapshot of potential issues, suggested mitigation strategies, and existing BMA mitigation measures, is also provided.

It is recommended that the SIA is read in conjunction with Section 16 - Community Consultation, to consider BMA's extensive consultation with key stakeholders. Feedback from BMA's consultation and engagement program plays a significant role in understanding the existing social environment, as well as identifying potential project impacts.

### **17.1.2 Methodology of Assessment**

Data was sourced from a number of resources to define and understand the existing community environment, as documented in this section. From this baseline data, an assessment of the potential impacts (positive and negative) has been made.

Baseline data sources include:

- Statistical information from a range of sources including Australian Bureau of Statistics (ABS) 2001 and 2006 Census data, Queensland Planning and Information Forecasting Unit and the Queensland Office of Economic and Statistical Research.
- Social service providers' websites, including local councils and relevant government websites and real estate information portals.
- Community feedback from surveys, BMA's community reference group, information displays and face to face meetings.
- Feedback from government and non-government stakeholders and in particular, those stakeholders located within Moranbah or who regularly service the community.
- Technical studies prepared as part of the project EIS.
- Existing BMA documentation, policies and programs.
- Case studies and examples of similar projects.

Where the project is likely to impact on or change the existing social environment, this report proposes a range of mitigation measures, to address potential impacts and help manage short-term and long-term community interests.

These mitigation strategies have been developed to address specific social impacts, or to continue to build on the support programs BMA is already implementing in the local and regional communities.

The implementation and management of mitigation measures is considered a shared responsibility. All proposed mitigation measures require the full support, participation and commitment of the local communities, service providers and in particular, state and local governments to ensure success.

### **17.1.3 Study Area**

The project is located south-east of Moranbah in the Isaac Regional Council. For the purpose of this SIA, the local study area is defined as the Queensland state suburb of Moranbah (SSC 36793). Statistics



presented for the study take into account the area immediately surrounding the township of Moranbah and equates to an area of approximately 6,166.5 km<sup>2</sup>.

A second data set used for this study was obtained using the combined local government area (LGA) statistics for the former Belyando, Broadsound and Nebo shires, which were amalgamated in March 2008 to form the Isaac Regional Council. The combined data of these shires provides an understanding of the wider community demographics and values, and is identified as the region. At times, due to the availability of data, reference is made to the single former shires rather than in combination.

It is understood that potential impacts may extend to other LGAs and adjacent communities over the life of the project, however due to the project's proximity to the relatively dense population of Moranbah, it is determined appropriate to focus studies on those most likely to be directly impacted.

Data focussing on Queensland is provided, where appropriate, to offer a comparison of state trends.

#### **17.1.4 Consultation**

It is recommended that this SIA report is read in conjunction with Chapter 16 – *Community Consultation*, which provides a detailed list of key stakeholders related to the project and an overview of BMA's community consultation and stakeholder engagement programs.

BMA has conducted an extensive community engagement program for the BBCGP focussed on preparing the community for the project as well as the overall growth of BMA interests in the region. This growth includes the project, proposed Daunia Coal Mine, the proposed Goonyella Riverside Expansion and the relocation and upgrade of the Moranbah Airport.

BMA representatives hold monthly meetings with the Isaac Regional Council to discuss BMA operations, community investment and general activities in the region. These meetings provided the opportunity for BMA to present details about the project and outline general plans for growth, and to gather Council's input on mine planning, the EIS process, workforce accommodation, social services and community issues.

Discussions with the general community and key stakeholders assisted the development of the regional social profile. BMA conducted a mobile information shopfront program to engage with the broader community. This involved staffing public displays at local events and in areas with a high degree of pedestrian traffic. Seventeen displays were held in the Moranbah, Nebo and Mackay areas. Fact sheets, feedback forms and EIS information were all available the displays. Staff members were also on hand to discuss the project, and any issues and concerns, with community members.

In addition to general consultation with the Moranbah community (described in Section 16), the consultation team attended a workshop on behalf of BMA, and conducted one-to-one meetings and telephone interviews with service providers in the Moranbah area from May 2008 to December 2008.

A Community Reference Group was also established to discuss key issues associated with the project as well as the cumulative impacts of growth in the region. Members included representatives from the Isaac Regional Council, government service providers, local community and business groups and environmental organisations. Details of the meetings are included in Section 16.



BMA conducts regular *Community Perception Surveys* across the Bowen Basin, Mackay and Sarina communities to capture sentiment towards BMA's contribution to its host communities and any community concerns. In 2008 the survey was conducted by the University of Queensland's Centre for Social Responsibility in Mining (CSRMI) and captured feedback from more than 600 residents. More than 90 percent of those surveyed had heard about BMA.

The *2008 Community Perception Survey* findings highlighted that BMA's commitment to community engagement and investment activities contributed significantly towards BMA's positive reputation. Overall the study found that, *"BMA has a high profile in the communities and an enviable reputation. The company is seen as a good employer, a good corporate citizen and genuinely concerned about the welfare of the communities affected by its business."*

Three quarters of survey respondents said that BMA had made a positive contribution to their community, mainly through the provision of employment and support for community groups and the local economy.

Overall respondents rated BMA highly across six performance areas of workplace safety, involvement with the local community, as an employer, workforce diversity, trustworthiness and protection of the local environment. BMA rated highest (77%) for its approach to health and safety.

The top three BMA-supported community programs identified by respondents were site-specific sponsorships, CQ Helicopter Rescue (through BMA's Community Partnerships Program (CPP)) and the PCYC Blackwater Vacation Care (also through CPP). Respondents were also aware of contributions such as the Matched Giving Program, one-off events such as flood relief and BMA contributions to charity fundraising, road safety, disability programs, town beautification projects, youth workers (CPP) and in helping Aboriginal communities.

The survey found that 84 percent of respondents living in BMA's host communities were generally satisfied with their communities, and the benefits of living in small rural towns such as convenience, safety, friendliness and 'family friendly' lifestyle, were cited as the major reason for their satisfaction.

Respondents offered recommended actions to assist community liveability, including:

- Improving entertainment and recreational facilities
- Providing for and attracting more services and businesses, and
- Improving transport and infrastructure.

#### **17.1.5 Limitations**

In March 2008 the former shires of Belyando, Broadsound and Nebo were amalgamated to form a single local government entity, Isaac Regional Council, by the Queensland Government. This section recognises the change in these local council boundaries. However, statistical data for the region has been modelled on data obtained for the former Belyando, Broadsound and Nebo Shires as historical data suitable for comparison is not readily available for Isaac Regional Council.



BHP Billiton Mitsubishi Alliance

Data used for the demographic portion of this section is predominantly based on 2006 Census figures. Due to the high level of population growth and the lack of clarity in assessing actual non-resident working population, coupled with high housing demand within the study area and region, statistics may not align with the anecdotal advice provided by service providers and the community, particularly in relation to housing expenditure and earnings.

## 17.2 The Project

### 17.3 Construction Workforce

It is anticipated that the construction workforce for the project will peak at 1200. This phase will involve the construction of operational infrastructure. The construction workforce is expected to grow as the project progresses, with a ramp-up period peaking in Month 15, as shown below in FIG 17-1. The construction workforce begins to taper off in Month 21 with all construction expected to be completed in Month 25. The construction workforce would likely be sourced from throughout Queensland by the identified construction contractor(s).

#### 17.3.1 Operation Workforce

It is anticipated that the project's operational workforce would peak at 495 people. BMA would source the workforce from a number of areas including those who currently reside in or near the study area, those who move to the study area to work on the project, and others who live in other town centres and would travel to the region for their rostered on block of shifts. The operational workforce would begin site work in around Month 17 with figures increasing as the months progress. It is expected the operation workforce would peak by Month 29 as shown below in Figure 17.1. The roles required for operation include maintenance, administration, plant and supervisors.

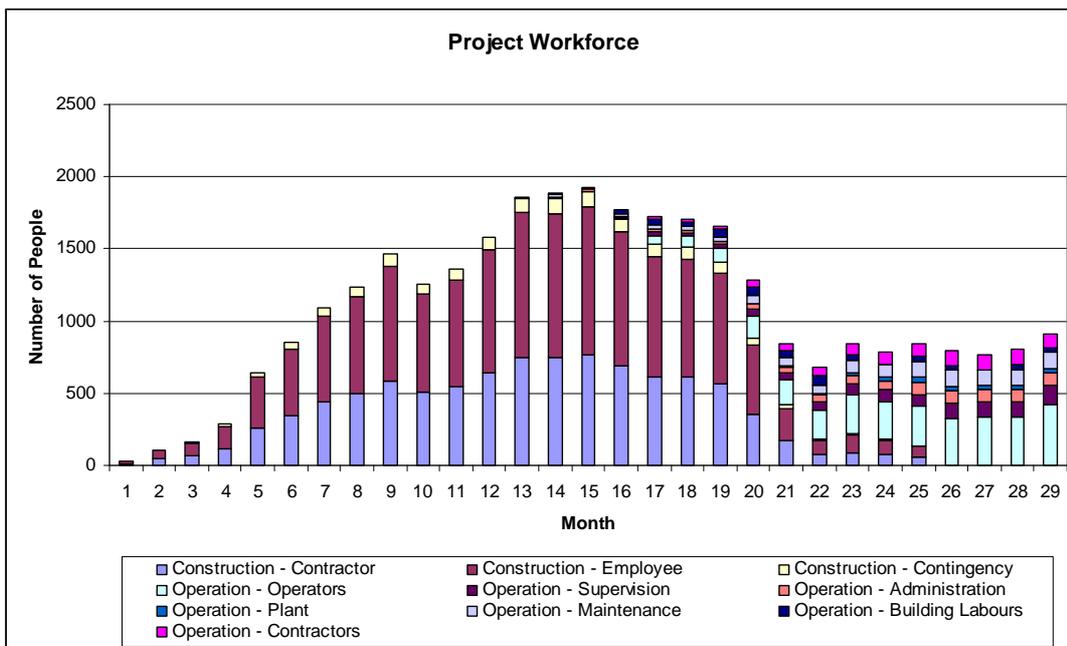


Figure 17.1 Project Workforce



### 17.3.2 Workforce Accommodation

Accommodation for the construction workforce would largely be controlled by the choices and policies of the contractor(s) for this phase of work. The majority of the workforce is expected to be contract and would choose to reside at the temporary accommodation village, known as the Peak Downs Area Accommodation Village. The Peak Downs Accommodation Village is yet to be constructed, but has all necessary approvals to be operated, and is located on the Peak Downs Mining Lease ML1775.

There may be some workers who, should the contractor’s policies allow it, choose to move to the study area or are sourced from the existing population, however it is anticipated that this would be rare and calculations estimate that no more than 5% (60 persons) of the construction workforce currently reside in the Moranbah community. It is anticipated that another 5% (60 persons) would move to Moranbah to work on the project’s construction and choose to live locally. The short-term nature of construction projects often mean workers don’t permanently relocate however, some do take up the opportunity and may seek other work in the community on completion of the construction component of the project.

BMA is planning to provide a variety of accommodation choices for the operational workforce. These choices will provide the greatest opportunity to attract an ongoing workforce with the necessary skills to meet BMA’s operational needs.

Operational workforces may be more likely to currently reside in the study area or choose to move to the study area for the project. For these studies, and based on the workforce trends in other BMA operations in Moranbah, it is calculated that 10% (50 persons) of the workforce will be sourced from existing residents and 20% (100 persons) would choose to move to the community. The remaining workforce members (345 persons) would choose to live elsewhere and take up FIFO type opportunities as shown in Table 17.1. This table relates to the workforce only and does not take into account relatives/family entering the community.

**Table 17.1 Potential operation workforce characteristics**

Total Workforce	FIFO	Existing Community	New to community
	70%	10%	20%
495	345	50	100

### 17.3.3 Current accommodation planning

BMA is working closely with the Isaac Regional Council to develop sustainable housing strategies in the study area and broader region. Housing strategies are based on ensuring additional pressure is not placed on housing supplies as a result of BMA projects. Existing housing issues are being addressed by:

- The development of 25 transit houses and four additional houses by the end of December 2008.
- Up to 100 blocks in Moranbah to be developed, as well as 16 new residences by February 2009.
- Subdividing the north east of Moranbah, with at least 100 residential lots and 200 unit sites.
- The development of an additional 84 allotments in Dysart.
- Concept planning proposed for additional land holdings in Moranbah and Dysart.



BHP Billiton Mitsubishi Alliance

- The development of the first stage of the Goonyella Riverside Mine accommodation village. This facility provides accommodation for 550 fixed term contractors.
- Appendix P – *BMA's Accommodation Update Newsletters* provide more detail on BMA's housing strategy in the short to medium term.

Current accommodation planning includes the development of medium density and semi detached dwellings in the north eastern, central, north western and western areas of Moranbah. Over 1500 housing units would be gradually developed to cater for the increased workforce and their families. In turn this release would assist low to mid income earners to take up residual housing stock. While BMA does not play a direct role in providing affordable housing in the community, its commitment to providing housing for its own business needs reduces demand drivers on housing, decreasing overall demand and increasing affordability. In addition BMA has taken up lots in a Council sub-division, thereby contributing to funds to the subdivision, which is being used to provide affordable housing.

The key to long term accommodation planning and the management of population increases is the sustained development and redevelopment of BMA-owned land for housing development. This development would also be diversified to ensure workforce members have the opportunity to take up detached, semi-detached or unit dwellings, depending on their lifestyle choices and family needs. Previous developments were heavily weighted towards large detached accommodation.

Village accommodation would continue to be an important part of the overall accommodation mix.

#### **17.3.4 Project Close**

The project has an estimated life in excess of 30 years. BMA provides coal in a relatively stable market that is able to manage fluctuations in market supply and demand. BMA interests are managed to promote sustainable businesses and certainty for the communities in which it operates.

Any closure of the project would need to be managed over the long term to allow the community time to adjust. The development of a mine closure plan at the stage of full operation would best understand the project's operating environment and allow strategies to be developed for its eventual closure.

BHP Billiton (BHPB) Community Standard STA.024 requires that input from community stakeholders is incorporated into Life of Asset planning and that a Community Relations Plan is developed and implemented and reviewed annually with stakeholders to ensure that positive impacts are enhanced and negative impacts are mitigated.

BMA has a dedicated Community Investment Team focused on whole-of-mine investment strategies.

#### **17.3.5 Project viability**

While the mining industry has been impacted by the global economic downturn, BMA's assessment of the medium term market outlook remains unchanged, with strong future demand projected. As such, BMA is continuing to progress baseline studies and statutory approvals on the Daunia Mine, Caval Ridge Mine, Goonyella Riverside Mine Expansion and Airport projects.

## 17.4 Existing Social Environment

### 17.4.1 Demographic Characteristics

#### 17.4.1.1 Population

The study area had a recorded population of 7,432 at the 2006 Census, while the regional population was 19,821. In the study area 55.2% of the population were male, which is similar to the proportion in the region at 55.3%. The higher proportion of men in the community is not repeated in the Queensland population where under half (49.6%) of the population is male. The higher number of men in the study area was also evident during the 2001 Census where 55.8% of the population were male.

Between the 2001 and 2006 Census the study area population had increased, in total, by 1,308 people or 21.4%. Of that population increase, there were slightly more men entering the community compared to women (688 males and 620 females).

The region grew by 870 people between 2001 and 2006 or 4.6%. Of this population increase there were considerably more females (857) than males (13) which helped to increase the proportion of women in the population to 44.7%.

While an increase in women in the study area and regional populations between 2001 and 2006 contributed to a more balanced gender profile, a much lower proportion of females were still evident, particularly in comparison to state populations where women accounted for 50.4% of the population. This continued imbalance would likely be attributed to the ongoing growth of traditionally male-dominated mining roles in the area. A comparison study of study area, regional and state populations is provided in Table 17.2.

**Table 17.2 Comparison of Study Area, Region and State populations in 2006 and 2001**

Population	Study Area	Study Area %	Region	Region %	State	State %
<b>2006</b>						
Males	4,105	55.2%	10,963	55.3%	1,935,381	49.6%
Females	3,327	44.8%	8,858	44.7%	1,969,151	50.4%
Total persons	7,432	-	19,821	-	3,904,532	-
<b>2001</b>						
Males	3,417	55.8%	10,950	57.8%	1,775,554	49.5%
Females	2,707	44.2%	8,001	42.2%	1,810,085	50.5%
Total persons	6,124	-	18,951	-	3,585,639	-
<b>Difference</b>						
Males	688	20.1%	13	0.1%	159,827	9.0%
Females	620	22.9%	857	10.7%	159,066	8.8%
Persons	1,308	21.4%	870	4.6%	318,893	8.9%

Source: ABS Census Data 2001 and 2006

According the Office of Economic and Statistical Research, the study area had an estimated resident population of 7,820 and the region featured 21,468 people as at 30 June 2007.



#### **17.4.1.2 Actual Residential Population**

Census data relating to the resident population in the study area may underestimate the number of people that Moranbah and its community infrastructure services rely on, on a daily basis. The nature of the workforce in the study area indicates that there are community members who reside permanently in the town, whether they are working on shift or not, and then a considerable number of people who usually live elsewhere (such as a capital city or regional coastal city) and who spend their working hours in the study area community.

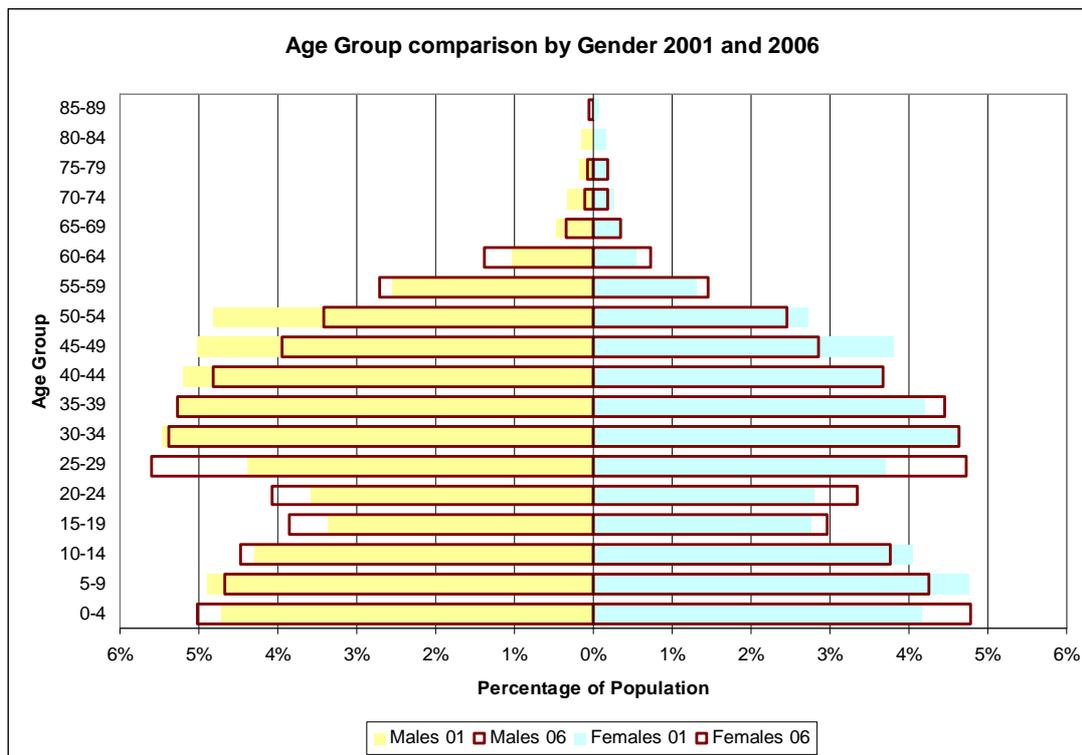
In October 2006, the Full-Time Equivalent population estimates for nine local government areas in the Bowen Basin were released in a report prepared by Planning Information and Forecasting Unit (PIFU). PIFU estimated a full-time equivalent population for Moranbah at the end of June 2006 of 8,664 which included a non-resident worker population of 1,915 persons and resident population of 6,749.

#### **17.4.1.3 Future Population**

The regional population is projected to continue the growth it has experienced since 2001. Population projections from PIFU predict an annual average growth of 2.0% to 2031. The medium series population projection suggests there would be an additional 13,470 people in the region over the next 25 years (539 persons per year) while low series projections indicate growth of 1.6% or 10,330 people by 2031 (413 persons per year). High series estimates show that as many as 696 people per year may enter the region over the next 25 years. In comparison the medium series for Queensland suggests average annual growth of 1.7% between 2006 and 2031.

#### **17.4.1.4 Age Groups**

As discussed previously, the overall population in the study area is male dominant, a trend that continues throughout all age groups in the study area. The largest age group represented are those aged 25 to 29 years (5.6%). As with many rural locations the populations of both genders decrease considerably between 15 and 20 years, as young people move from the area to seek educational or employment opportunities. The population in the study area then increases throughout the key working age groups of 25 to 45 years as shown in Figure 17.2 Study Area Age Group Comparison by Gender 2001 and 2006.



**Figure 17.2 Study Area Age Group Comparison by Gender 2001 and 2006**

Source: ABS Census Data 2001 and 2006

Between the 2001 and 2006 Census there was a large decrease in the male population aged 45 to 49 years (from 5.0% to 3.9%) and 50 to 54 years (4.8 to 3.4%). The high proportion of males begins to decrease slowly until the retirement age of 65 years. The proportion of those aged over 65 decreases dramatically leaving very few older people in the community of either gender. The average age of the population is 35.

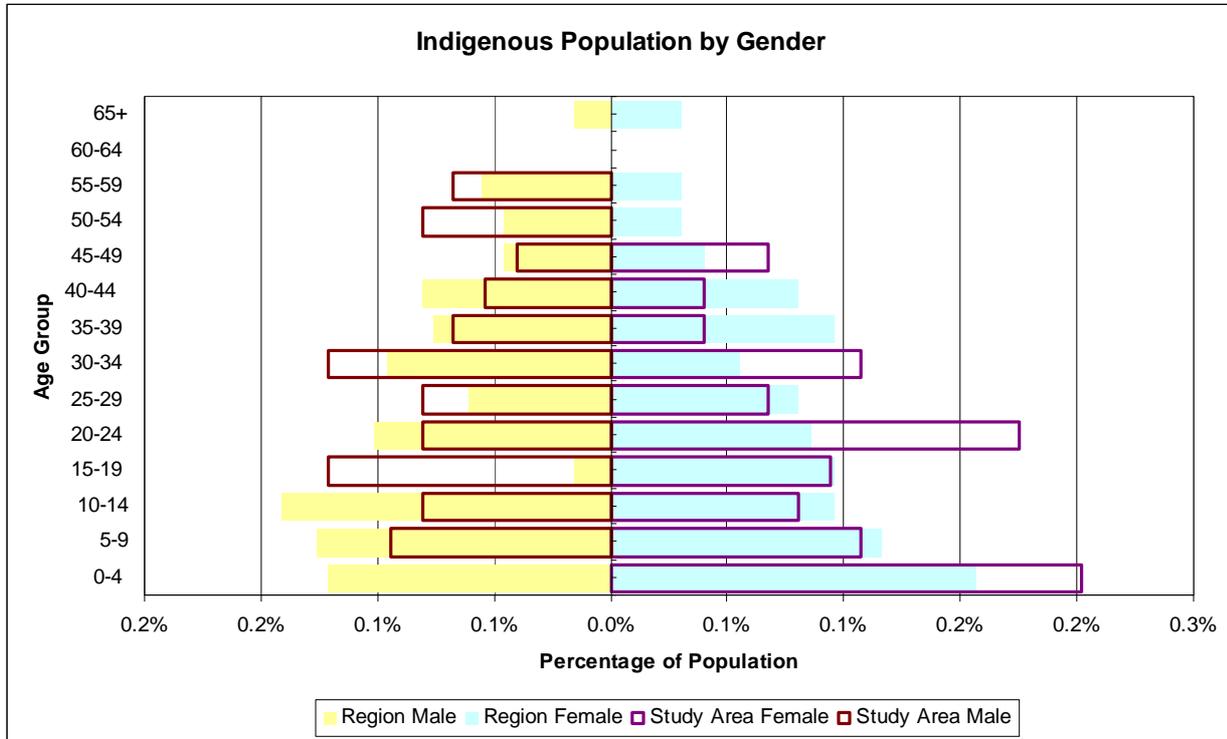
#### 17.4.1.5 Indigenous Community

At the 2006 Census, the Indigenous population in the study area was 139 persons or 1.9% of the total population. In the region, 2.1% of the population identified themselves as Indigenous compared to 3.3% in the state. In the study area the Indigenous population was made up of 66 males and 73 females. There were a number of Indigenous children in the community, with 36 females aged 19 years or under and 22 males. There were 44 males and 37 females aged 20 to 60 years. A comparison between the study area and regional Indigenous population is shown in Figure 17.3.



BHP Billiton Mitsubishi Alliance

Figure 17.3 Indigenous population of the study area and region by gender



Source: ABS Census Data 2006

The mining industry surrounding Moranbah has brought about proactive recruitment programs for Indigenous candidates. A small growth in the Indigenous community over time suggests that these strategies and genuine employment opportunities have been encouraged. At the 2001 Census there were 125 Indigenous community members in the study area, of which 31 were male and aged over 18, and 29 were female.

BMA has a good working relationship with Indigenous groups associated with the project. A formalised engagement strategy focused on training, education and business development opportunities for Indigenous people is in its formative stages of development at BMA. BMA also has representation of the Queensland Resource Council’s Indigenous Affairs Committee, to better advocate the needs of Indigenous communities across the Bowen Basin.

Section 17.5.3 of this chapter, *Potential Impacts and Mitigation –Indigenous Community* details current and proposed activities, supported by BMA, in relation to Indigenous services, education and employment.

**17.4.1.6 Cultural Diversity**

In the study area 86.8% of the population were Australian citizens in 2006, which is a slightly higher proportion than the regional comparison (84.7%), though consistent with state comparisons (86.1%).

Neither the study area nor the region is particularly culturally diverse, with the majority of both populations having been born in Australia. In the study area 83.0% of the population was born in Australia, compared to 81.5% at the regional level and 75.2% at the state level. Table 17.3 shows a breakdown of the population’s country of birth across selected countries and the main languages spoken in the home. The next most



BHP Billiton Mitsubishi Alliance

prominent countries of birth in both the study area and the region were New Zealand and England, which is in keeping with state trends.

**Table 17.3 Comparison of country of birth and language, Census 2006**

Country of Birth	Moranbah	IRC	Qld
Australia	83.0%	81.5%	75.2%
New Zealand	2.9%	2.3%	3.8%
England	1.0%	1.1%	4.1%
South Africa	0.8%	0.8%	0.6%
Language spoken at home	Study Area	Region	State
English only spoken at home	89.9%	87.8%	86.4%
Vietnamese	0.2%	0.1%	0.4%
Italian	0.1%	0.1%	0.6%

Source: ABS Census Data 2006

Section 17.4.3.1 of this chapter, *Potential Impacts and Mitigation – Cultural Diversity* details current and proposed activities, supported by BMA, in relation cultural diversity in the study area and region.

## 17.4.2 Family and Household Characteristics

### 17.4.2.1 Family Characteristics

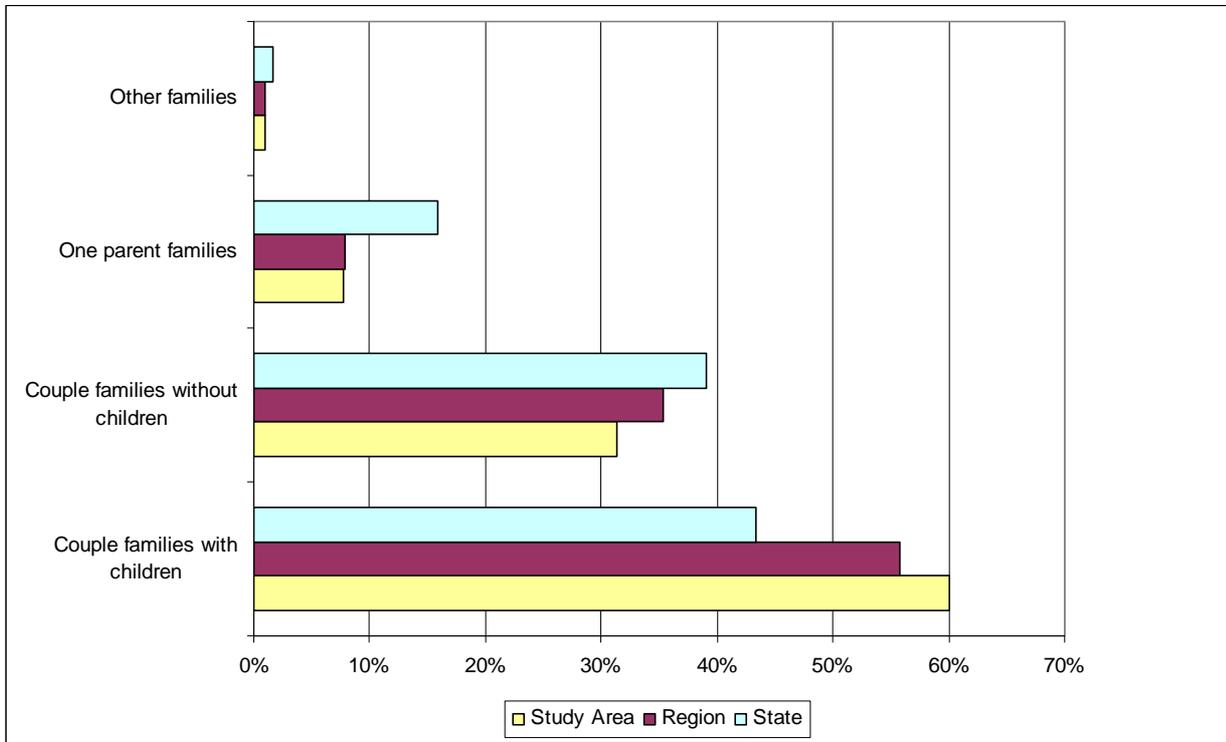
Feedback from BMA's consultation activities indicates that the Moranbah community perceive itself as a family-orientated community. Community feedback also highlighted the suitability of the township for raising children. This view is in keeping with demographic profiles, where 60.0% of the population identified themselves as couple families with children, which was greater than regional and state comparisons of 55.8% and 43.3% respectively. The number of couples without children in the study area and region were below the state proportion of 39.1% (study area: 31.4%, region: 35.3%).

In the study area and the region there were proportionally half the number of one parent families (7.7% and 7.9% respectively) identified in comparison to Queensland (15.9%). A breakdown of family structure for Moranbah, Isaac Regional Council and Queensland in 2006 is shown in Figure 17.4.



BHP Billiton Mitsubishi Alliance

Figure 17.4 Comparison of family characteristics, Census 2006



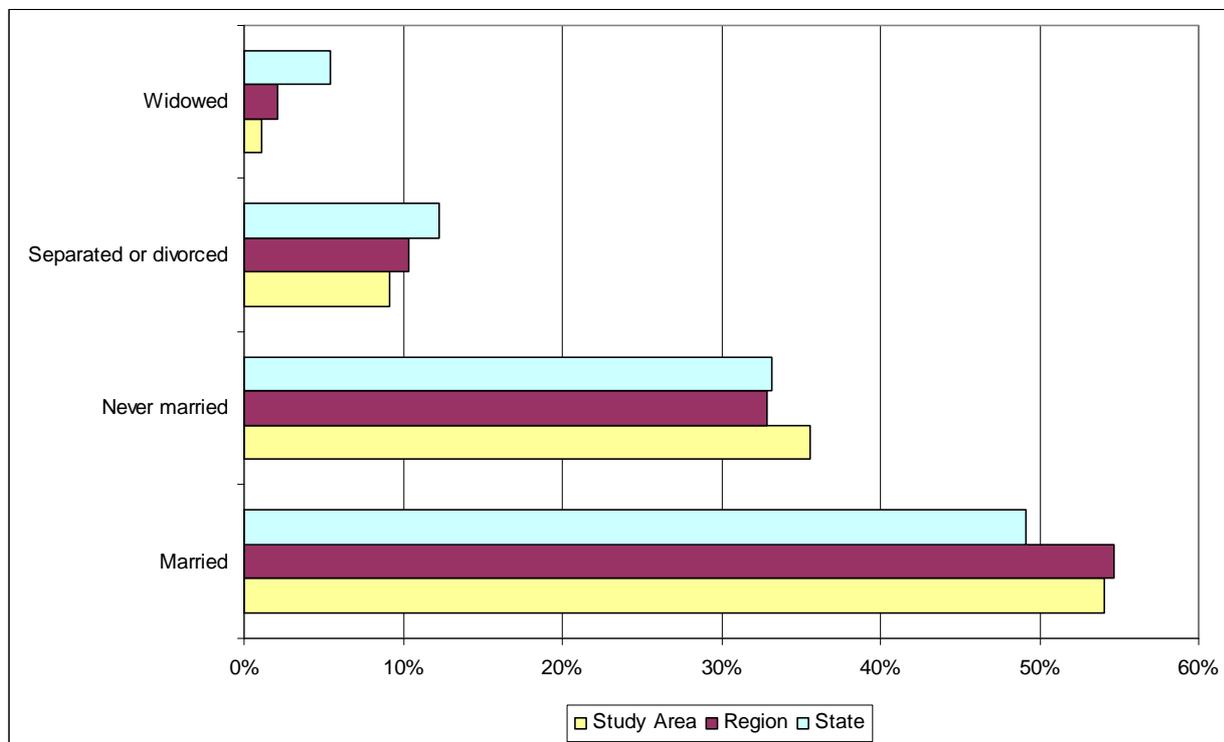
Source: ABS Census Data 2006

Section 17.4.2 of this chapter, *Potential Impacts and Mitigation –Family and Household Characteristics* details current and proposed activities, supported by BMA, in relation to family and household characteristics in the study area and region.

### 17.4.2.2 Relationships

In the study area 54.1% of the population were identified as being married, compared to 54.7% in the region and 49.1% in the state. There were also slightly fewer people in the study area (9.1%) that were identified as being separated or divorced, compared to the region (10.4%). Both were relatively lower than the Queensland trend of 12.3% as shown in Figure 17.5.

**Figure 17.5 Marital Status of population aged over 15 years and over**



Source: ABS Census Data 2006

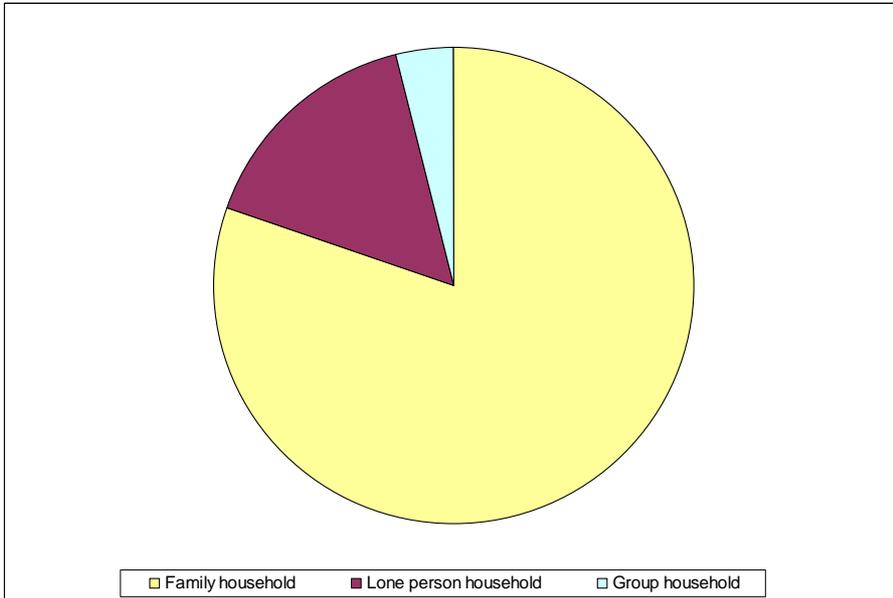
**17.4.2.3 Household Composition**

At the 2006 Census, the majority (72.1%) of households in the study area were identified as Family Households which is less than the region at 77.8%. Both were noticeably greater than the Queensland proportion of family households at 67.1%, as shown in Figure 17.6.

There were considerably less lone person households in the study area with 14.0%, compared to the region at 19.1% and the state at 21.0%. There were slightly more group households in the study area at 3.6% than in the region at 3.1%. In both cases this was less than the state proportion at 4.2%.

Discussions with service providers indicate that there have been recent increases in the number of share households in the study area due to the demand and cost of accommodation. There has historically, been examples of group share accommodation in the study area. This was traditionally associated with young people sharing to decrease individual rental costs and there were often houses where a number of mine apprentices and trainees would share for both financial and social reasons. However, feedback from social service providers identifies households with one or more families, with children, sharing accommodation.

**Figure 17.6 Household characteristics of the study area, Census 2006**



Source: ABS Census Data 2006

#### 17.4.2.4 Income Levels

Weekly individual incomes in the study area indicate Moranbah is a relatively prosperous community. In 2006 18.4% of individuals, over the age of 15, received over \$2,000 each week (over \$100,000 per annum). The proportion of regional population with the same income level was 13.7%. In comparison there is just 2.9% of the state population with a similar weekly income.

The next most common individual income category in the study area and the region were people who received a weekly income of between \$1,600 and \$1,999. The relatively high proportion of people receiving a weekly income in excess of \$1,300 is likely due to the number of persons employed in the mining industry.

While a large proportion of the community earned above average wages there were members of the community who attained lesser incomes. 9.3% of the study area and 9.6% of the regional populations earned between \$400 and \$599 per week. While this is less than the Queensland proportion (14.9%) it is still a relatively large proportion for the community.

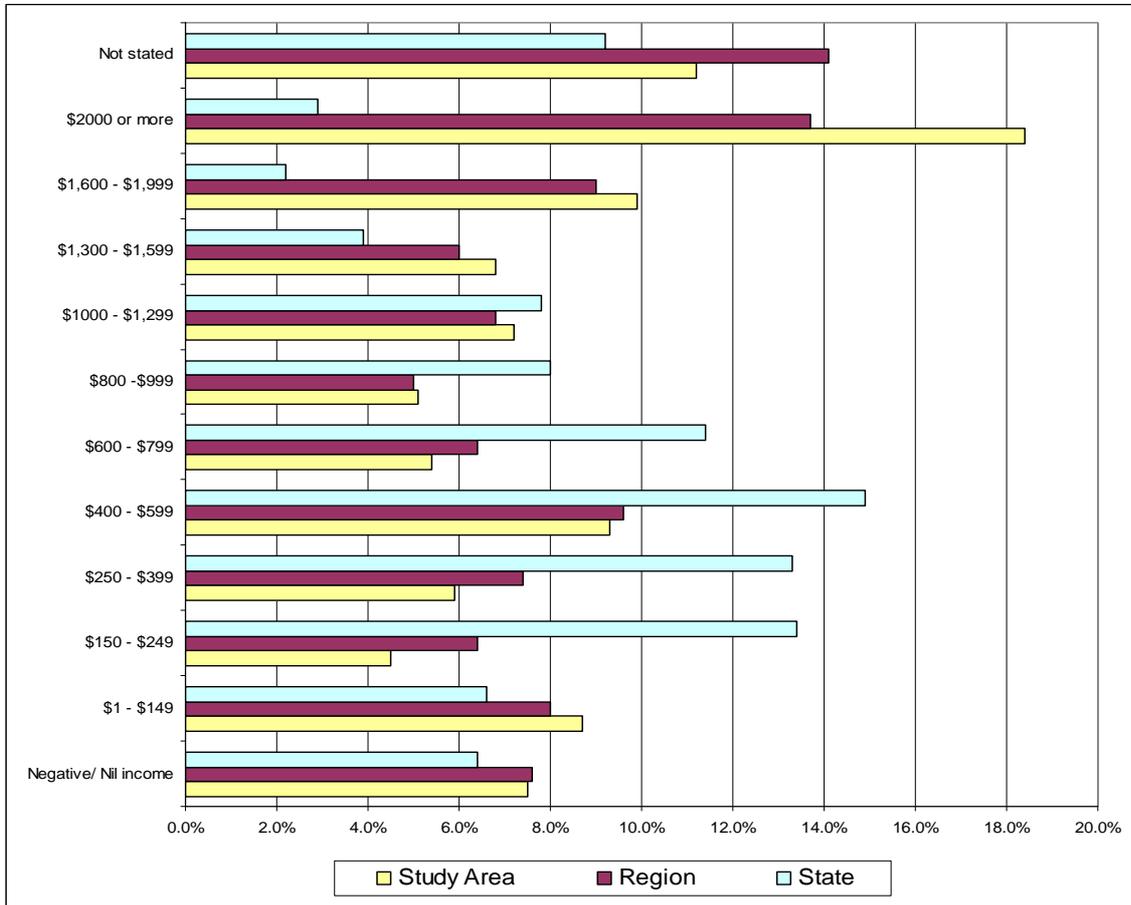
In the study area 7.5% of the population did not earn an income and 7.6% of the regional population did not earn an income, compared to 6.4% in Queensland. This can be attributed to the higher number of single income families supported by higher mine wages.

The median household income for the study area was \$2,436 per week, again considerably higher than the Queensland median of \$1,033. A study of weekly individual incomes in Moranbah, Isaac Regional Council and Queensland for persons aged 15 years and over in the 2006 Census is included in Figure 17.7.



BHP Billiton Mitsubishi Alliance

**Figure 17.7 Weekly individual income in Moranbah, Isaac Regional Council and Queensland for persons aged 15 years and over, 2006**



Source: ABS Census Data 2006

Section 17.4.5.1 of this chapter, *Potential Impacts and Mitigation – Income Levels* details current and proposed activities, supported by BMA, in relation to income levels.

### 17.4.3 Education

#### 17.4.3.1 Kindergarten and Preschool

Kindergarten and preschool facilities in Moranbah are provided by:

- Moranbah Community Kindergarten and Preschool
- Moranbah East State Preschool
- Moranbah State Preschool.

The Moranbah East State Preschool and Moranbah State Preschool are affiliated with the Moranbah East State School and Moranbah State School respectively.



The Moranbah Community Kindergarten and Preschool offers pre-school services for children aged 3.5 to five years. The centre is open two days per week and is licensed to look after 66 children daily or 132 children weekly. At the end of 2008 there was one vacancy in the Thursday/Friday morning group and no vacancies for 2009.

The centre currently employs eight permanent staff (six working with children, one administration assistant and one cleaner). While the centre is not currently short staffed, it was noted during service provider interviews that recruiting skilled workers from outside the area can be difficult with accommodation shortages.

BMA currently supports the provision of childcare services in the study area and the region through:

- Support for the Blackwater PCYC Vacation Care centre in the provision of out-of-school hours and vacation childcare options through the *Community Partnerships Program*.
- BMA's Goonyella Riverside Mine also provides funding for a much needed child care trainee at the Simply Sunshine Child Care Centre in Moranbah. Not only does this funding provide a job opportunity for a local person, but also helps to ease pressures on the centre due to skills shortages in the region.
- Broadmeadow Mine is currently developing a childcare support package around education skills and training for childcare centres.
- BMA provides some accommodation for key community services such as medical services and childcare Directors and workers.

Section 17.4.2 of this chapter, *Potential Impacts and Mitigation – Family Household Characteristics* details current and proposed activities, supported by BMA, in relation to childcare services.

#### **17.4.3.2 Primary and Secondary Education**

There are three schools operating in Moranbah as shown in Table 17.4 . The Moranbah East State School caters for students from Prep Year to Year 7 and has a current enrolment of 552 students. These students are split between 22 classes, which are staffed by 26 teachers (including four support teachers) and seven teacher's aides. The school also employs seven non-teaching staff such as administration and grounds persons. The school has capacity to comfortably cater for a total of 600 students.

Moranbah State High School caters for 518 students in Years 8 to 12. These students are split between 25 classes, varying in size from 18 to 25 students. The school has a teaching staff of 38, in addition to 30 non-teaching staff. While the school can accommodate more than 600 students, this would stretch existing teaching resources and recruitment of additional staff would be necessary.

Moranbah State School has a total enrolment of 535 and welcomes students from Prep year to Year 7. The school employs 45 teachers including eight aides as well as nine non teaching staff. The students are split between 22 classes varying in size from 25 to 28 students. Moranbah State School can accommodate approximately 50 extra students.



**Table 17.4 Education providers in Moranbah**

School	Grades	Enrolments as at December 2008		
		Males	Females	Total
Moranbah East State School	PY-07	305	250	552
Moranbah State High School	08-12	270	248	518
Moranbah State School	PY-07	276	259	535
Total Enrolments		851	757	1605

Source: Qld Ed Schools Directory (5 December 2008)  
<http://education.qld.gov.au/directory/phone/index.html>>

The closest non state school is St Joseph's at Clermont, a Catholic Education School approximately 110km from Moranbah.

The schools report that finding accommodation for new teachers in Moranbah is challenging. This is primarily due to the limited housing available in Moranbah through the subsidised housing scheme offered by the Queensland Department of Housing.

BMA actively supports skills and training opportunities for young people in the region, and invested \$90,000 in establishing the Mining Industry Skills Centre, which is linked to the Moranbah High School. BMA also sponsors the Queensland Minerals and Energy Academy (QMEA), which enables Bowen Basin students to access a broad range of minerals and energy-related learning and career opportunities in the skilled-operator, trades and professional areas.

Other Skills for Growth initiatives for students include a Cadetship, Scholarship and an Engineering Extension Programs.

In addition, BMA actively engages with local schools and has implemented initiatives like Adopt a Teacher, to provide students and teachers with practical, real work projects, and mentoring support.

BMA corporate and individual BMA operational sites also support tertiary scholarships for school leavers, and partner with Bowen Basin schools on a range of other projects including recycling, greenhouse and leadership programs.

Section 17.4.4.2 of this chapter, *Potential Impacts and Mitigation – Education and Training* details current and proposed activities, supported by BMA, in relation to education and training.

### **17.4.3.3 Tertiary Education Providers**

Central Queensland Institute of TAFE has a campus in Moranbah which is associated with Moranbah High School. The campus operates as part of the Mackay Region campus. It has well established links to the mining industry and is well supported by local mining companies.

The nearest university is the Central Queensland University, Mackay Campus. The campus offers courses that follow various streams including business, education, engineering and information technology.



BHP Billiton Mitsubishi Alliance

The James Cook University also has a small campus in Mackay that offers courses in community welfare, social work and nursing (Mackay Whitsunday Regional Economic Development Corporation 2006).

Section 17.5.4 of this chapter, *Potential Impacts and Mitigation – Education and Training* details current and proposed activities, supported by BMA, in relation to education and training.

#### 17.4.3.4 Education Attainment

Year 12 or equivalent was the highest level of education attained in both the study area and region at 41.4% and 34.7% respectively. Both areas were in line with Queensland trends where 41.3% of the population completed Year 12 or higher. As shown in Table 17.5 comparisons in education attainment throughout the study area and the region were similar to state levels.

**Table 17.5 Highest level of schooling completed comparison, Queensland, 2006**

Age Left School	Study area	Region	State
Year 8 and below	3.5%	6.2%	7.4%
Year 9 or equivalent	4.9%	5.6%	5.8%
Year 10 or equivalent	29.0%	30.2%	26.9%
Year 11 or equivalent	10.2%	9.2%	8.2%
Year 12 or equivalent	41.4%	34.7%	41.3%
Did not go to school	0.1%	0.2%	0.5%
Not stated	10.9%	13.9%	9.9%

Source: ABS Census Data 2006

Post-secondary education qualifications have been attained by 55.4% of the study area population, aged 15 years and over, and 55.4% of the population has an advanced Diploma, Diploma or certificate qualification compared to 51.3% in the region and 48.6% in Queensland, as shown in Table 17.6. 17.2% of the study area population over 15 years have obtained a Bachelors Degree compared to 14.4% of the region. Both areas are less than the Queensland proportion of 19.8%.



BHP Billiton Mitsubishi Alliance

**Table 17.6 Highest post-secondary educational qualification held – Moranbah, IRC and Queensland, 2006**

Degree	Study area	Region	State
Postgraduate Degree, Graduate diploma and Graduate certificate	3.3%	2.8%	6.2%
Bachelor Degree	17.2%	14.4%	19.8%
Advanced diploma, diploma and certificate	55.4%	51.3%	48.6%
Not stated/Inadequately described	24.1%	31.5%	25.4%

Source: ABS Census Data 2006

#### 17.4.4 Employment

##### 17.4.4.1 Labour Force

The study area had a greater number of employed people in the labour force (98.3%) compared to Queensland as a whole (95.3%). In 2006 the study area and the region had a lower proportion of unemployed people, 1.7% and 2.1% respectively, than Queensland as a whole (4.7%). This low level of unemployment would be attributed to the significant employment opportunities offered by the mining industry in the region. Table 17.7 shows a comparison of labour force statistics for the study area, region and state in the 2006 Census.

The study area features strong stereotypical gender roles, with the male partner the most likely to be receiving the primary income and the female partner either working part time or not at all. Census data indicates that 47.0% of males in the study area were identified as employed compared to 27.9% of females. A higher number of females (12.7%) worked part-time, compared to males (3.2%). In total, the study area had a total working population of 74.9% compared to 97.9% in the region and 95.3% in the state.

There were very few people unemployed in the study area with only 0.5% of the male population and 0.8% of the female population actively seeking employment.

**Table 17.7 Labour Force Status comparison as at Census 2006**

	Study Area			Region	State
	Males	Females	Total	Total	Total
<b>Employed, worked:</b>					
Full-time(a)	40.4%	13.2%	53.6%	70.3%	61.6%
Part-time	3.2%	12.7%	16.0%	20.4%	27.7%
Employed, away from work(b)	1.8%	1.3%	3.1%	4.0%	3.3%
Hours worked not stated	1.6%	0.6%	2.2%	3.2%	2.6%
<i>Total</i>	47.0%	27.9%	74.9%	97.9%	95.3%
<b>Unemployed, looking for:</b>					
Full-time work	0.4%	0.5%	0.9%	1.5%	1.8%
Part-time work	0.1%	0.3%	0.4%	0.6%	1.2%
<i>Total</i>	0.5%	0.8%	1.3%	2.1%	4.7%
Total labour force	47.5%	28.7%	76.2%		
Not in the labour force	2.5%	12.7%	15.2%		
Labour force status not stated	6.2%	2.4%	8.6%		

Source: ABS Census Data 2006

#### **17.4.4.2 Industries of Employment**

Employment by industry categories for the study area in 2006 are shown in Table 17.8 . A significant proportion of the population (45.6%) were employed in the mining sector, of which two thirds were male. This figure is a slight increase from 2001 when approximately 44.1% of the working population were employed in the mining sector. By comparison, only 1.7% of the working population in the state were employed in the mining sector.

The other significant industries in the study area were retail trade, accommodation and food services, and construction employing 7.3%, 6.6% and 6.5% of the working population respectively. Of the remaining categories, education and training had the highest proportion of employees with 5.2% of residents employed in this sector.

**Table 17.8 Employment by industry category in Moranbah, IRC and Queensland, 2006**

Industry	Study Area				Region	State
	Males	Females	Persons	Total	Total	Total
Agriculture, Forestry and Fishing	60	37	97	2.4%	10.5%	3.4%
Mining	1611	242	1853	45.6%	38.9%	1.7%
Manufacturing	57	20	77	1.9%	2.0%	9.9%
Electricity, Gas, Water and Waste Services	11	3	14	0.3%	0.5%	1.0%
Construction	215	47	262	6.5%	6.4%	9.0%
Wholesale Trade	94	22	116	2.9%	2.0%	3.9%
Retail Trade	65	231	296	7.3%	7.1%	11.6%
Accommodation and Food Services	79	190	269	6.6%	6.1%	7.0%
Transport, Postal and Warehousing	80	54	134	3.3%	3.6%	5.1%
Information Media and Telecommunications	0	11	11	0.3%	0.2%	1.4%
Financial and Insurance Services	0	27	27	0.7%	0.5%	2.9%
Rental, Hiring and Real Estate Services	37	23	60	1.5%	1.0%	2.1%
Professional, Scientific and Technical Services	31	42	73	1.8%	1.3%	5.6%
Administrative and Support Services	15	73	88	2.2%	2.2%	3.1%
Public Administration and Safety	39	47	86	2.1%	2.9%	6.7%
Education and Training	30	180	210	5.2%	5.6%	7.6%
Health Care and Social Assistance	13	141	154	3.8%	3.6%	10.2%
Art and Recreation Services	0	15	15	0.4%	0.2%	1.3%
Other Services	52	69	121	3.0%	2.8%	3.7%
Inadequately Described/Not Stated	58	40	98	2.4%	2.5%	2.7%
<b>Total</b>	<b>2547</b>	<b>1514</b>	<b>4061</b>			

Source: ABS Census Data 2006

#### 17.4.4.3 Employment by Occupation

In 2006, the largest occupational category in the study area was machinery operators and drivers (25.2%) followed by technicians and tradespersons represented by 23.9% of the workforce (Table 17.9). Both of these occupational categories were dominated by males and were also the largest employment categories in the Region. In contrast, the top employment category in Queensland, as a whole, was professionals followed by technicians and tradespersons.



BHP Billiton Mitsubishi Alliance

**Table 17.9 Occupation by sex in Moranbah, Isaac Regional Council and Queensland, 2006**

Occupation	Study Area				Region	State
	Males	Females	Persons	Total		
Managers and Administrators	198	116	314	7.7%	12.8%	12.4%
Professionals	236	240	476	11.7%	9.9%	17.1%
Technicians and Tradespersons	870	101	971	23.9%	20.1%	15.4%
Community and Personal Service Workers	26	163	189	4.7%	4.6%	9.1%
Clerical and Administrative Workers	28	320	348	8.6%	8.3%	14.8%
Sales Workers	36	204	240	5.9%	5.2%	10.4%
Machinery Operators and Drivers	933	91	1024	25.2%	24.95	7.2%
Labourers	177	252	429	10.6%	12.3%	11.9%
Inadequately described/Not stated	46	27	73	1.8%	1.8%	1.8%

Source: ABS Census Data 2006

Section 17.5.5 of this chapter, *Potential Impacts and Mitigation –Employment* and section 17.4.5.2 *Employment Competition* details current and proposed activities, supported by BMA, in relation to employment.

## 17.4.5 Housing and Accommodation

### 17.4.5.1 Dwelling Characteristics

In 2006, detached houses comprised the majority (88.5%) of dwelling types in the study area, as opposed to semi-detached houses or units. This proportion was slightly higher for the region, where separate houses accounted for 90.4% of all dwelling types. State comparison shows a lower number of separate houses at 79.5% as shown in Table 17.10 .

A large proportion of dwellings in the study area and region are identified as other dwellings with 4.8% in both areas. This proportion of 'other dwellings' is considerably more than the number in Queensland (1.5%). This trend may be related to Single Persons Accommodation (SPA) used by mining companies in the area. There were relatively few semi-detached or high density style dwellings in the study area and the region at 2.7% and 1.2% respectively. In comparison 7.7% of the dwellings in the state follow this style.

**Table 17.10 Dwelling type in Moranbah, Isaac and Regional Council and Queensland, 2006**

Dwelling Structure	Study Area		Region	State
	Count	Percentage	Percentage	Percentage
Separate house	1936	88.5%	90.4%	79.5%
Semi-detached, row or terrace house, townhouse	60	2.7%	1.2%	7.7%
Flat, unit or apartment	85	3.9%	3.5%	11.2%
Other dwelling	106	4.8%	4.8%	1.5%

Source: ABS Census Data 2006

#### 17.4.5.2 Dwelling Tenure

In 2006 23.0% of properties in the study area were fully owned compared to 22.7% in the region and 30.4% in the state. The proportion of rental properties in the study area, at 48.4%, was noticeably more than the region (38.7%) and considerably higher than Queensland comparisons (31.1%). This suggests a high degree of transience within the population, resulting from the often short-term and contractor based mining operations as well as real estate speculation from non-resident investors. Table 17.11 provides an outline of the dwelling tenure and type of dwellings in Moranbah at 2006 Census.

**Table 17.11 Dwelling and tenure types in Moranbah, 2006**

TENURE TYPE - OCCUPIED PRIVATE DWELLINGS	Study Area		Region	State
	Count	Percentage	Percentage	Percentage
Fully owned	560	23.0%	22.7%	30.40%
Being purchased (includes being purchased under rent/buy scheme)	493	20.3%	11.6%	31.40%
Rented (includes rent-free)	1,178	48.4%	38.7%	30.00%
Other tenure type	30	1.2%	1.4%	1.00%
Not stated	175	7.2%	8.4%	7.30%
LANDLORD TYPE - OCCUPIED PRIVATE DWELLINGS BEING RENTED (including rent free accommodation)				
Real estate agent	170	14.4%	9.8%	49.90%
State or Territory housing authority	92	7.8%	5.5%	10.70%
Other landlord type	878	74.5%	77.8%	36.30%
Landlord type not stated	41	3.5%	6.9%	3.20%

Source: ABS Census Data 2006



A significant proportion of the rented dwellings (74.5%) were through landlords described as other landlord type, comprising dwellings being rented through a residential park (including caravan parks), employer-government or employers (private). This is in line with regional comparisons of 77.8%, however both are significantly higher than state proportions at 36.3%. The disparity between the study area and the state may indicate the high level of employer-provided housing in the mining industry, as well as the informal rental agreements, which are prevalent in regional locations.

### **17.4.5.3 Residential accommodation**

Consistent population growth in the study area, in recent years, has created strong demand for properties and supply has been limited by a number of factors including development constraints, affordability, job security and investor interest. Where housing is available, it has become expensive to rent and purchase, making it inaccessible to people on low and moderate incomes.

Based on discussions with service providers, the population seeking housing in the study area can be grouped into three categories:

- Community members who have moved or are hoping to move to the study area to work in the mining industry, thus having a higher income.
- Property investors seeking rental return/capital gain.
- Community members on low or moderate incomes, often in service provision industries.

Rental availability in Moranbah is limited and expensive in comparison to other communities in Queensland. Median rental prices in Moranbah have increased significantly with the average rental property increasing from \$150 per week in 2001 to \$1,000 per week by December 2008 (Figure 17.8, Figure 17.9 and Figure 17.10). However, desktop property search results found six properties advertised for sale in the week beginning 15 December 2008 with rental prices between \$1200 and \$1800 per week.

While the 2006 Census identifies the median Moranbah rent as \$68 this figure is not representative of true rental prices. Rather, this figure could be more representative of the amount tenants are paying to their employer, which in some cases for mining employees, is a subsidised rental rate. Figures from the Rental Tenancy Authority for the September to December Quarter 2008 show median rental prices as \$1,000 per week. Some individual properties were renting in excess of \$1,500 per week (Figure 17.10).

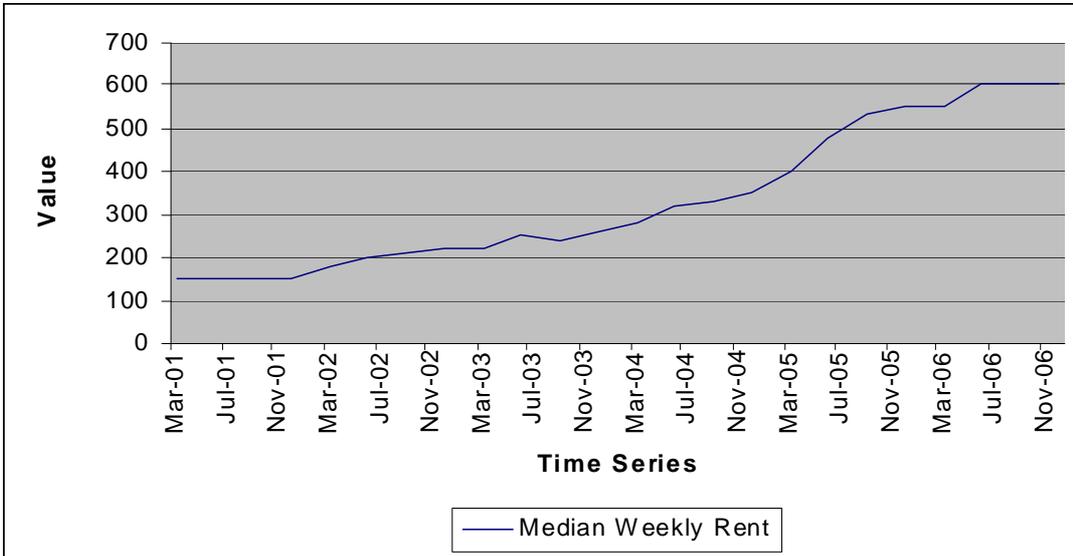
Many properties advertised for sale included information on tenants (particularly if they were rented by a mining company) and the rental rate being charged. This highlighted the high rental yields that have been attainable due to the demand for properties in the study area, and the high incomes of those wishing to rent them.

More recent property listings (March 2009) indicate there has been an increase in rental property availability and affordability, with 21 properties for rent between \$750 and \$1,400 per week. This increase in availability and affordability may be indicative of seasonal impacts, however anecdotal evidence from local providers indicates there has been some easing in rental demands over the last three months (to March 2009), which may be attributable to the impacts of the global economic crisis on the mining industry.



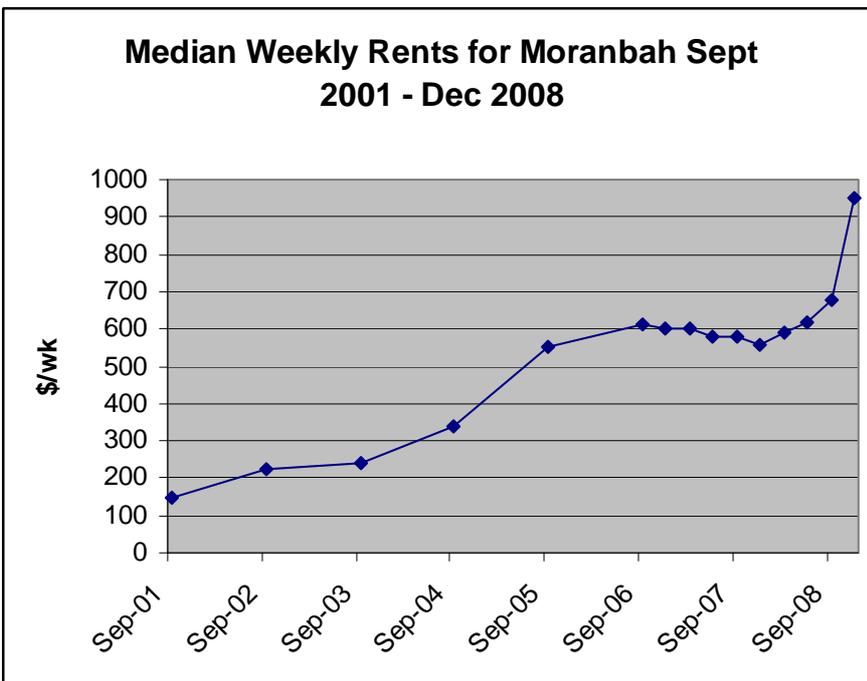
BHP Billiton Mitsubishi Alliance

Figure 17.8 Median Rental Prices – Moranbah 2001 - 2006



Source: Rolfe 2007

Figure 17.9 Median Weekly rents for Moranbah Sept 2001 – Dec 2008



Source: RTA

Median sale prices in the township of Moranbah between 1990 and 2008 are shown in Figure 17.10. From this figure it can be seen that prior to 2002, the price of a house in Moranbah was on average less than \$50,000. By 2003, however the average house price in Moranbah had increased to \$100,000, and to

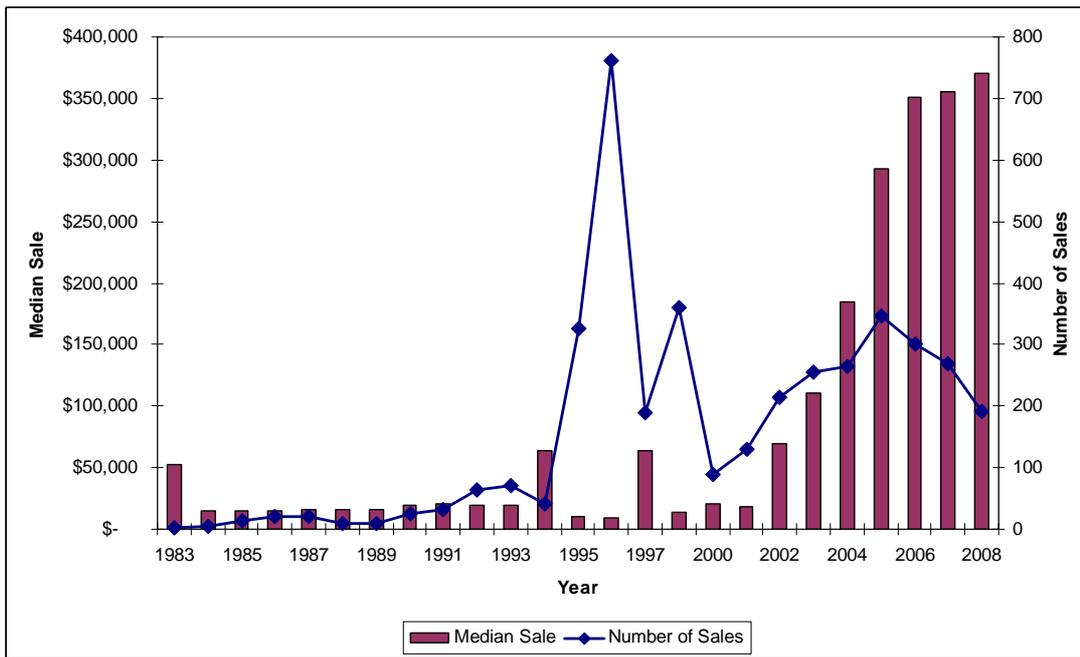


BHP Billiton Mitsubishi Alliance

between \$300,000 and \$350,000 by 2006. In November 2008 the median house price in Moranbah was \$430,000.

Moranbah experienced a drop in median house prices between 1995 and 1996 coupled with a large increase in sales. Anecdotal advice suggests that in the mid-1990s there was a sell-off of mining company owned properties at below market prices. This would account for the high spike in sales and extremely low median sale price shown in Figure 17.10.

Figure 17.10 Median Price of Moranbah dwellings and number of sales 1983 to 2008



Source: RP Data

As at March 2009, the median price had dropped by 4.7% off the largest recorded median of \$430,000 from November 2008, as highlighted in Figure 17.10.



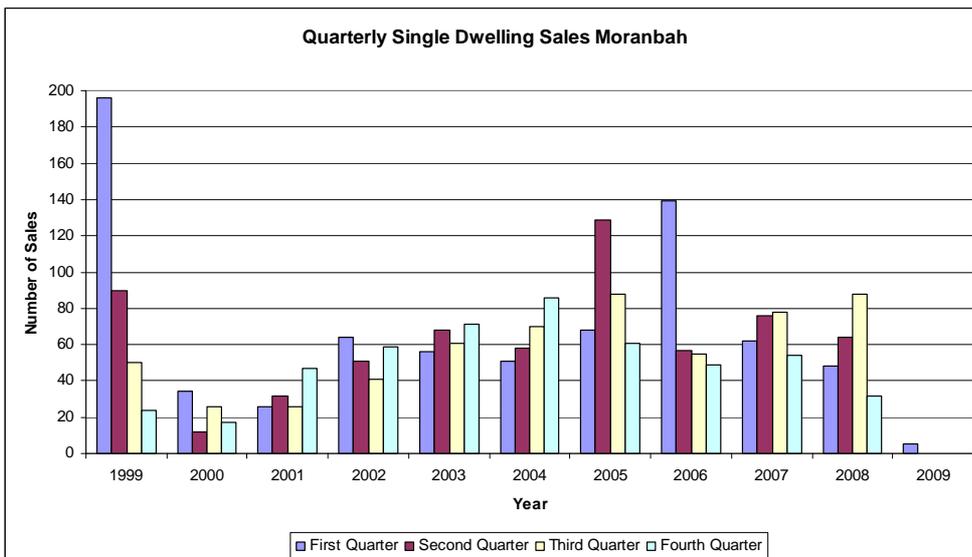
BHP Billiton Mitsubishi Alliance

**Table 17.12 Median price for house sales in Moranbah, February 2008 – January 2009:**

Month	Median
January 2009	\$ 410,000
December 2008	\$ 407,500
November 2008	\$ 430,000
October 2008	\$ 363,500
September 2008	\$ 371,000
August 2008	\$ 365,000
July 2008	\$ 375,000
June 2008	\$ 377,000
May 2008	\$ 347,500
April 2008	\$ 345,000
March 2008	\$ 360,000
February 2008	\$ 350,000

Source: Property Sales Data

While the last and first quarters are often seasonally impacted, there was a significant drop in the number of properties sold in the last quarter of 2008 when compared to previous years, including total quarterly sales of just 32 compared to 54 and 49 for the same period in 2007 and 2006 respectively as shown in Figure 17.11. There were just five recorded sales in January of 2009. Moranbah Property listings indicate that there are 79 properties currently available (March 2009) for sale listed between \$360,000 and \$715,000. This decline in property sales may be attributed to impacts of the global financial crisis.



Source: Property Sales Data

**Figure 17.11 Number of Single Dwelling Sales in Moranbah (Quarterly)**



A lack of housing availability and affordability has, in recent times, made it increasingly difficult for people on low and moderate incomes to attain accommodation. Local service providers have indicated that the high cost of housing is affecting those on even comparatively high incomes, on a state level basis, with more than half of the people seeking crisis housing accommodation from Emergency and Long-term Accommodation in Moranbah Incorporated (ELAM Inc.) earning in excess of \$45,000 per annum. It is reported that this is forcing people to either “leave their job and move from Moranbah altogether or live in often overcrowded and less than desirable conditions in order to make ends meet” (ELAM Inc. representative).

High house prices and high rents and strong demand would normally stimulate construction of more housing however this cycle is not occurring in the study area. There are a number of factors that are likely to be contributing to ongoing supply issues such as land constraints due to surrounding mining leases, building approvals processes and the availability of builders and other trades people in the area.

While there has been an increase in house prices across Australia which has led to a decrease in affordability, in 2006 the Office of Economic and Statistics *Index of retail prices in Queensland Regional Centres* showed the most expensive centre for housing was Moranbah, where the cost of housing was 95.5% more expensive than Brisbane.

Dwelling characteristics in the study area indicate there is a low level of townhouse or unit style accommodation options available. While this is typical of many regional locations, for the study area in particular it may contribute to the housing affordability issues identified by the community and service providers during consultation.

Property searches suggest there is a large supply of three-bedroom houses available in the study area with over 60% of the properties advertised for sale (search 23 January 2009) having three-bedrooms. Larger houses of four or five bedrooms are less common and tend to be more expensive. Service providers note for these larger houses are often rented on a by-room basis due to the high demand for accommodation in the region.

The lack of diversity in available housing options can impact housing affordability and limits opportunities for community members with different needs and incomes to enter the housing market. Entry level properties are typically smaller and therefore less expensive. Property studies indicate the majority of dwellings currently available for sale are three-bedroom, single bathroom, separate houses priced over \$400,000.

BMA has a dedicated Housing Manager who works closely with local councils and development planning committees to share responsibility in easing pressure on housing demand, which has traditionally driven up the costs of housing and rent.

BMA also helps to relieve pressure on local government budgets by funding special rates and paying for headwork charges, thereby freeing up Government funds for investment in affordable housing.

Section 17.5.6 of this chapter, *Potential Impacts and Mitigation –Housing and Accommodation* details current and proposed activities, supported by BMA, in relation to housing supply and affordability.



### 17.4.6 Enterprise and Economy

Overall, coal mining contributed \$30.5b in sales and service income to Queensland in 2006/2007 which was a 4.0% increase on the previous year. Within the study area a significant proportion of the community works in the mining industry or within a business that services the mines.

Overall the town of Moranbah could be seen as prosperous with good opportunities available for employment and enterprise however, there are key issues reported to be affecting business in the area including:

- Competition for employees from higher paying mining roles.
- Impact of high rents on business owners, their businesses and employees.
- Money earned locally not being spent locally.
- These issues have lead to the loss of some business and services in the study area including the closure of the Moranbah cinemas. However, the town and its businesses continue to move forward, with two new businesses operating in early 2009.
- In the 2008 financial year, BMA supported local councils and governments by way of a \$14.8 million investment in:
  - Council rates
  - Special levies
  - Subsidies and allocations, including the maintenance of local roads and airports and for other council infrastructure, facilities and water.

During the same period, BMA paid close to \$400 million in coal royalties to the Queensland Government.

BMA coal royalties paid to the Queensland Government increased significantly in recent years, as highlighted in Table 17.13 .

**Table 17.13 BMA coal royalties paid to the Queensland Government Q1FY08 compared to Q1FY09**

BMA Royalties		\$	\$/T
Q1 FY08	(Jul-Sep 07)	94,712,373	6.79
Q1 FY09	(Jul-Sep 08)	363,999,848	24.46

In the 2008 financial year BMA's commitment to its host communities also included:

- \$3.25 million over the 2007 and 2008 financial years for legacy Landmark projects including the Blackwater International Coal Centre and the Dysart Multipurpose Sports Centre;
- \$925,000 for Skills for Growth to support a wide ranging approach to attract and retain skills in key mining areas through education and training initiatives; and
- \$4.7 million for local site initiatives.

Through the BHP Billiton Matched Giving program, BMA staff, through payroll giving, cash donations, volunteering and fundraising activities, donated more than \$1.9million to not-for-profit organisations (across the study area, region, state and nation) in the 2008 financial year.



BHP Billiton Mitsubishi Alliance

Section 17.5.7 of this chapter, *Potential Impacts and Mitigation – Enterprise and Economy* details current and proposed activities, supported by BMA, in relation to the local and regional economies. Chapter 18 of this EIS, Economic Assessment, also details the economic benefits to the region.

#### 17.4.6.1 Business and Services

Among regional towns Moranbah has a relatively good variety of businesses and services operating in the community with other businesses/services, based in the region, regularly visiting the township. Services and facilities available include:

- Moranbah Shopping Centre;
- newsagents;
- supermarket;
- post office;
- car hire;
- airport;
- beauticians;
- bakery;
- butcher;
- hairdressers;
- furniture and electrical store;
- restaurants;
- cafes;
- hotels/motels;
- shoe and clothing shops;
- industrial services;
- pharmacy;
- RACQ;
- veterinarian;
- accountants;
- banks/building societies;
- bus service;
- computers;
- courthouse/government agents;
- gift stores;
- music store;
- plumbers;
- pubs and bars;
- produce stores;
- florist;
- hardware;
- community radio station;
- mechanical repairs; and
- service stations.

Feedback during consultation has suggested that, while money may be earned in the study area, purchases are often made in the region. This is both relevant to the non-resident workforce but also the local community who may travel to Mackay and other areas particularly for retail purchases.

Many of the businesses actively work together to encourage the community to shop locally and advertisements in the local community newsletter shows programs and competitions to encourage local business.



## **17.4.7 Community Infrastructure, Health and Services**

### **17.4.7.1 General Health**

There are generally good health facilities available in the study area considering its rural location and population, and these facilities are generally under steady demand. There are three offices for General Practitioners in the town including a medical centre which operates with two doctors (eight consulting rooms and two treatment rooms) that provides a variety of health services including a 24 hour emergency service. The service also provides paramedic services to local mines. A dentist is located in the town along with an optometrist, pathology and x-ray service. The local medical centre indicates there is capacity to cope with increases in the population.

Queensland Health is represented on BMA's Growth Projects Community Reference Group, which meets regularly to discuss the growth projects, and their impacts, in detail. Government agencies representatives, related to tropical health, have also been involved in BMA's growth project site visits.

Section 17.5.8.4 of this chapter, *Potential Impacts and Mitigation –Health Services* details current and proposed activities, supported by BMA, in relation to general health.

### **17.4.7.2 Hospitals**

There is a 16 bed hospital in Moranbah. The hospital provides services including: acute nursing care, x-ray and medical imaging, outpatient services and physiotherapy.

Patients who require treatment beyond these services are sent to Townsville or Mackay base hospitals. At the regional level the nearest major hospital is the Mackay Base Hospital which is approximately 200 km from Moranbah. There is also Townsville Hospital which is located approximately 600 km from Moranbah.

The Moranbah hospital is supported by the Royal Flying Doctors Service and the RACQ flight in transporting patients to Townsville, Mackay and Rockhampton. BMA is a proud financial supporter of the Royal Flying Doctors Service and the RACQ CQ helicopter rescue service. On occasions it may be necessary for one or two staff members, along with associated equipment, to accompany patients during emergency transfers. Road transport staff are also called in to assist in patient transfers.

The hospital also offers a centre for community and child health, social work, a child protection liaison officer, school based youth health, alcohol, tobacco and other drug counselling, speech pathology and a community mental health service. There are currently no obstetric or surgical services available at the Moranbah Hospital.

There is a midwifery clinic operated by the hospital however deliveries are normally conducted in Mackay. Antenatal classes have recently commenced to help local families prepare for birth.

Common injuries or emergencies dealt with by the Moranbah Base Hospital include trauma and injury as a result of vehicle accidents and construction injuries, fractures and crush injuries.

BMA and other mining companies also contribute to the capacity of the community to meet demands of emergency situations through resources from their Mine Rescue Teams and other emergency response capability. Additionally, BMA employees are supported to participate as volunteers in local fire services.



Consultation with the local community indicated a general concern about the adequacy and availability of health services in the region particularly for older community members or those with special medical needs.

The Moranbah hospital currently has one Speech Language Pathologist who services Clermont, Dysart, Glenden, Middlemount as well as Moranbah. The Speech Language Pathologist provides services to adults and children from birth to five years of age. Once children begin school they have the option of accessing a Queensland Education Speech Language Pathologist who services numerous districts.

Section 17.5.8.2 of this chapter, *Potential Impacts and Mitigation – Emergency Services* details current and proposed activities, supported by BMA, in relation to health, hospitals and emergency services.

#### **17.4.7.3 Allied Health Services and Specialists**

Specialist services which are based in Moranbah include a radiography service, occupational therapist and diabetic educator. There are minimal specialists based permanently in Moranbah, so a number of specialists regularly visit the town. These specialists include an obstetrician who visits the hospital once every two months for consultations and procedures, a part-time physiotherapist and a full-time counsellor.

#### **17.4.7.4 Community Support Services**

A number of community support services operate in the study area and region and are funded from both private and public sources. Community support services available include (but are not limited to):

- Moranbah & District Support Services (MDSS)
- Emergency and Long-term Accommodation in Moranbah (ELAM)
- Alcohol, Tobacco and Other Drug Services (ATODS)
- Moranbah Community Health
- Disability Services Queensland
- Domestic Violence Resource Centre
- Catholic Church Caring Shop
- Hinterland Community Care
- Life Line Community Care
- The Salvation Army Family Store.

MDSS provides a variety of services to the study area community, including counselling, emergency relief and support during domestic crisis. The service also holds welcome morning tea's for new members of the community and manages the compilation and distribution of the local community newsletter. The service is primarily funded by the Department of Communities. MDSS is represented on BMA's community reference group.

ELAM Inc. provides housing and support for low income families and individuals and can help the community access crisis accommodation, support counselling or referrals to support services. ELAM Inc. also manages long term community housing that is accessible through the Department of Housing, acts as a Centrelink agency and provides a Youth Development Officer that is funded through Department of Communities and



the BMA community partnerships program. ELAM is also represented on BMA's community reference group.

The local area coordinator for Disability Services is based in Dysart and operates in Moranbah and surrounding communities providing support and services to individuals and their families living with disability. The Autism Spectrum Disorder (ASD) Coalfields Support Group also meets monthly in the region. Service providers have noted that the income and flexibility offered through mine employment may attract families to the region. The high wages mean that families can prosper on single incomes and enable a primary carer to support children with disabilities.

Moranbah Community Health provides counselling services as well as child health care and alcohol and drug counselling. Moranbah Community Health programs, such as *Be More Active Moranbah* have been supported by BMA funding through the community partnerships program.

A number of support other groups operate in the region, including the Diabetes Support Group, Moranbah Cancer Support Group and the Australian Breastfeeding Association.

During discussions with community service providers there were a number of key issues highlighted. There was consensus across all interviews that demand on their services was continuing to grow and that housing availability and affordability were key issues for the community. There was also general feedback that while services could expand if properly funded, to cope with growth, recruiting suitable staff would be difficult.

To help overcome these issues, BMA currently subsidises rental properties for some medical staff, and also part-funds the wages of some doctors in the region.

Section 17.5.8.1 of this chapter, *Potential Impacts and Mitigation –Community Services* details current and proposed activities, supported by BMA, in relation to community services.

#### **17.4.7.5 Domestic Violence**

As part of research titled "Intimate partner abuse of women in the Bowen Basin and Mackay Region of Central Queensland," the Queensland Centre for Domestic and Family Violence Research interviewed more than 500 women in the broader region. The study found that women who have a partner in the mining industry are more likely to experience social psychological abuse.

The findings of the research are yet to be publicly released, although an article on ABC online reported that the problem could stem from the male partner working away from home. The Centre's director noted in the article that "women who are partnered to a man working in the mining industry were nearly two times more likely than other women to experience social psychological abuse" and that "if the women were living in Mackay they reported a rate of violence three-and-a-half times higher than women in Mackay not partnered to a man in the mining industry".

Local service providers such as ELAM Inc. and MDSS are able to assist those who are experiencing domestic abuse and support is also available from the Domestic Violence Resource Centre. There is a general concern from social service providers that existing social factors such as the high cost of living, dependence on single incomes, high accommodation costs and the level of regional isolation, contribute to increased risks of domestic violence and may also prevent partners from seeking out their services.



BMA offers EAP services to its employees, a free and confidential counselling service to support staff during difficult times. BMA also provides funding for the families of those employees who form part of DIDO/FIFO workforces, by funding children's programs in the Mackay and Sarina communities through the Community Partnerships Program.

BMA participates in government and inter-agency steering groups across our host communities to ensure BMA is up to date on issues impacting on vulnerable groups. Involvement in these steering groups helps the Community Investment team to identify programs that are most in need of funding or resources, to better support the needs of vulnerable groups. Based on this information, BMA and its operational sites invest funds across a range of activities, including the likes of the Moranbah and District Support Services, which runs a Domestic Violence Awareness week program, and ELAM, which offers emergency accommodation for victims of domestic violence.

Section 17.5.8.1 of this chapter, *Potential Impacts and Mitigation –Community Services* details current and proposed activities, supported by BMA, in relation to domestic violence.

#### **17.4.7.6 Youth Services and Support**

The MDSS provides access to counselling services for young people in the local community. ELAM Inc. offers a Youth Development Officer position and facilitates the Moranbah Youth Action group which is made up of young people aged 12 to 18 who plan and run events and activities for young people in the study area community.

Moranbah State High School and Moranbah State School also employ school guidance workers or counsellors to address concerns and issues of the students. Discussions with these service providers highlighted the impacts currently being experienced by young people in the study area. The majority of issues identified related to the family dynamics and the balance of family and work commitments particularly for those whose parents work on shift.

BMA also funds dedicated youth workers across Moranbah, Dysart and Blackwater to help support youth services. To ensure continued support for youth in the Bowen Basin, BMA has just renewed this funding agreement with the Queensland Government's Department of Communities.

The service providers also indicated that the financial problems experienced by families in relation to high rental and mortgage costs are also having a significant impact on students in Moranbah, particularly for those children whose families are going through separation or divorce.

There is a trend for some families to move from one area to another to seek alternate mining work. This has more of a negative impact on children when they approach their teen years and have already established important friendships. The children often feel they have no input into the decision to move and resent moving schools and changing social circles on a frequent basis. This can have a disrupting affect on their schooling.

There are a number of recreational, leisure and sporting facilities on offer to youth in the area. See section 17.2.7.13 for details.



Although there are recreational activities in the area, these activities can be expensive, in particular for lower income families. The recent closure of the local cinema has impacted the recreational opportunities for some young people in the community. A Toy Library also operates in the region, available to playgroup children.

BMA funds a number of initiatives across the Bowen Basin, aimed at providing improved facilities for youth in the region:

- A key category of BMA's Community Partnerships Program (CPP) is youth and recreation, as well as youth arts and cultural development programs (see Appendix S, BMA's CPP Fact Sheet, for more information).
- BMA is currently pursuing the development of additional recreational facilities better to support youth. In Moranbah, this commitment includes funding a business case and feasibility study for the redevelopment of the Greg Cruickshank Aquatic Centre through BMA's Landmark Projects Program. In Dysart, BMA has invested over \$2 million towards the development of a multipurpose sports facility.
- BMA invests around \$925,000 per annum in its Skills for Growth Strategy, which supports apprenticeships and scholarships for primary and secondary school students, as well as work experience options.
- BMA actively supports skills and training opportunities for young people in the region, and invested \$90,000 in establishing the Mining Industry Skills Centre, which is linked to the Moranbah High School.
- BMA sponsors the Queensland Minerals and Energy Academy (QMEA), which enables Bowen Basin students to access a broad range of minerals and energy-related learning and career opportunities in the skilled-operator, trades and professional areas.
- Other Skills for Growth initiatives for students include a Cadetship program and an Engineering Extension Program.

In addition, BMA actively engages with local schools and has implemented initiatives like Adopt a Teacher, to provide students and teachers with practical, real work projects, and mentoring support.

BMA corporate and individual BMA operational sites also support tertiary scholarships for school leavers, and partner with Bowen Basin schools on a range of other projects including recycling, greenhouse and leadership programs.

Section 17.5.2 of this chapter, Potential Impacts and Mitigation –Family and Household Characteristics and section 17.4.4, Potential Impacts and Mitigation –Education and Training, details current and proposed activities, supported by BMA, in relation to youth services and support.

#### **17.4.7.7 Aged Care Facilities**

There are limited aged care facilities available in Moranbah. There are nine Council/Community Housing one-bedroom units available for elderly and low-income pensioners in Moranbah. The closest facilities are in Clermont or Mackay.



Hinterland Home and Community Care provides a range of community services that assist elderly people in their own homes. Homecare nurses are employed by the hospital on a rotational basis to assist elderly residents.

Discussions with community service providers suggests that the lack of aged care facilities in the local area could be preventing older members of families moving to the area to be close to relatives. In 2008, Moranbah & District Support Services Association Inc undertook a community aged care survey which featured 112 responses from local community members of various ages. The key outcomes of the survey indicated that there was a general lack of accommodation and services (particularly related to health and well-being) for the aged which lead to a level of uncertainty for residents about what their options are as they age and came closer to retirement.

There are also a range of recreational and leisure activities available for elderly in the region. See section 17.2.7.14 for details.

#### **17.4.7.8 Day Care Centres**

Two day care centres currently operate in Moranbah, being Simply Sunshine Child Care Centre and Altitude, in addition to one home-based child care centre, the Blue River Family Day Care.

The Simply Sunshine Child Care Centre caters for children from infancy to 12 years of age offering long day care, before and after school care, casual care, outside kindergarten hour care, pupil-free days, rotating shifts and vocational care. The facility is open from 6am to 6pm and is licensed to take 74 children. The centre currently employs 28 staff (including administration staff) and offers casual days for children on the waiting list if regular children are sick or on holidays. BMA's Goonyella Riverside Mine funds a childcare trainee, who was recruited locally, at the Simply Sunshine Child Care Centre.

The Altitude Day Care Centre, which opened in mid July 2008, currently caters for children from birth to six years. The centre may expand its services to include an after-school program in the future. The centre is open from 7.00am to 6.00pm but has the flexibility to open between 5.00am and 7.00pm if the need arises.

At present there are approximately 90 children enrolled at the centre. This equates to about 40% of the centre's capacity. The centre has been open since mid July 2008 and does not currently have a waiting list and timeframes for parents who may go on the waiting list. There are 20 staff employed at the Altitude Day Care Centre and additional group leaders will be required once the centre nears capacity. The Altitude Day Care Centre would like to recruit staff from the local community where possible, but due to the lack of trained people in Moranbah proves difficult. The lack of affordable accommodation was noted as a key issue in attracting qualified people to the area.

The Blue River Family Day Care provides home-based childcare in the Mackay, Pioneer Valley and Moranbah areas. Additional child care services are also offered through the Moranbah Neighbourhood Centre, Gorgeous Grubs playgroup and Mini Miners playgroup.

The lack of availability of before and after school care was highlighted as a major issue in the Moranbah community by local youth service providers. Parents are often required to rely on their teenage children to look after younger siblings.



BMA's Broadmeadow Mine is currently developing a childcare support package around education skills and training for Moranbah childcare centres.

Interviews with local service providers noted that BMA are working to improve childcare facilities and before and after school care facilities in Moranbah. From a cumulative perspective BMA will investigate the development of a childcare needs analysis to identify priority childcare needs for our Bowen Basin communities. The childcare needs analysis will help to inform priority areas for utilisation of the \$2 million allocated for childcare infrastructure upgrades in Moranbah from the \$27 million brought forward from the Sustainable Resource Communities Fund.

Section 17.5.2 of this chapter, *Potential Impacts and Mitigation –Family and Household Characteristics* details current and proposed activities, supported by BMA, in relation to childcare.

#### **17.4.7.9 Police Service**

The study area is serviced by the Moranbah Police Station which is staffed by ten full time police officers and one part time staff member. Recruitment is relatively stable with staff often transferring to the station on request.

Most callouts are related to traffic accidents, domestic disputes and drunk and disorderly behaviour. Police have noted an increase in these events over the last few years. They are currently fully staffed with some concerns that an increase in population could stretch them to capacity. The police services are currently in the process of trying to increase their staffing numbers.

Section 17.4.13.3 of this chapter, *Potential Impacts and Mitigation –Social order and Community Safety* details current and proposed activities, supported by BMA, in relation to community safety.

#### **17.4.7.10 Ambulance Service**

The Queensland Ambulance Service operates in the study area. This ambulance service covers the area from Dysart, halfway to Clermont and to Coppabella. In addition to emergency services the ambulance service also provides assistance for the Central Queensland Rescue Helicopter and patient transport from the Moranbah Hospital to Mackay.

There are three ambulance stations operating in the area that are each staffed by one crew (consisting of two staff members) per day. Station hours are from 8am to 5/6pm with emergency availability from 5/6pm to 8am. The Moranbah Ambulance Service uses three vehicles. All vehicles are equipped with recent technology, including defibrillators and GPS devices.

Minimum staffing at the station is two people with another two on call. The service is currently experiencing staffing shortages with only two officers at the station on most occasions. While an application for another four permanent staff has been made, the price of housing (both rental and purchase) in the study area is affecting the recruitment of emergency services personnel.

BMA and other mining companies also contribute to the capacity of the community to meet demands of emergency situations through resources from their Mine Rescue Teams, donation of equipment and other emergency response capability.



BHP Billiton Mitsubishi Alliance

Section 17.5.8.2 of this chapter, *Potential Impacts and Mitigation –Emergency Services* details current and proposed activities, supported by BMA, in relation to emergency services.

#### 17.4.7.11 Fire Service

The Queensland Fire and Rescue Service (QFRS) operate in Moranbah and the surrounding areas through 18 auxiliary fire-fighters (two fire vehicles) that are called via pager to attend any emergency response situation. Currently the QFRS's main emergency response workload relates to road crash situations. The Area Director of QFRS has indicated any increase in the population would inevitably increase vehicles on the road and this is where the main workload for the QFRS or response would probably be initially. Response to mine sites is by request only, as mining companies are bound by their own legislation.

At this point in time the QFRS has no intention to recruit more staff. BMA employees are supported to participate as volunteers in local fire services.

#### 17.4.7.12 Churches

The majority of the study area community identifies themselves as Catholic, while many follow no set religion and others identify as Anglican as shown in Table 17.14. There are opportunities for many of the community to worship with six churches in the community including:

- Moranbah Assembly of God Church
- Moranbah Christian Fellowship Church
- St Francis Anglican Church
- St Joseph the Worker Catholic Church
- Uniting Church North Coalfields Region.

**Table 17.14 Religion of the community as at Census 2006**

Religion	Study Area	Study Area	Region	State
Catholic	2,074	27.9%	26.1%	24.0%
No Religion	1,481	19.9%	17.2%	18.6%
Anglican	1,392	18.7%	20.3%	20.4%
Uniting Church	682	9.2%	9.8%	7.2%
Presbyterian and Reformed	202	2.7%	3.2%	3.7%

Source: ABS Census Data 2006

Both Catholic and Anglican churches provide religious services and additional pastoral care for the community.

The Catholic Church conducts regular masses. The church provides assistance to elderly people in Moranbah and surrounding areas and also provides some counselling, but generally refers people to professional counselling services. The Anglican Church provides spiritual and pastoral services to the Moranbah area and surrounds.



BHP Billiton Mitsubishi Alliance

#### **17.4.7.13 Recreational, leisure, and sporting facilities**

The township of Moranbah is well serviced in terms of recreational and sporting clubs appealing to all ages. These clubs and activities include:

- Bridge Club
- Pioneer and District All Breeds Performance Horse Club
- BMX Club
- Scouts Moranbah
- Country Music Club
- Toy Library
- Friends of the Library
- Queensland Country Women's Association
- Gentle Craft Club
- Moranbah Gymnasium
- Guides Australia
- Tennis Courts
- Gymnastics Moranbah
- Hockey Fields
- Lions Club and Lioness
- Netball Courts;
- Moranbah Arts Council
- Australian Rules Football Fields
- Moranbah Boxing and Sporting Club
- Rugby League Fields
- Moranbah Dance Centre
- Golf Course
- Moranbah Hawks Junior Soccer Club
- Moranbah Ladies Golf
- Moranbah Highlanders Swimming Club
- Moranbah Line Dancing
- Moranbah Off Road Club
- Moranbah Scrapper's Circle
- Moranbah Photography Club
- Moranbah Speedway
- Moranbah Pistol Club
- Moranbah Worker's Squash and Volleyball

There has traditionally been a good participation rate in many of these activities, however there has been a decline in participation in some of these groups over the last few years, probably associated with the increase in 12-hour shifts and DIDO/FIFO workforces. The high proportion of couples with children in the community requires facilities and activities for youth and families.

BMA's landmark projects program is also advancing industry and government funding for the upgrade of the Moranbah Aquatic Centre, with BMA sponsoring the concept, design and business case, as well as the development of a Dysart Multi-purpose Sport and Recreation Facility.

Section 17.5.8.5 of this chapter, *Potential Impacts and Mitigation –Recreational, leisure and sporting facilities* details current and proposed activities, supported by BMA, in relation to recreation facilities.



#### **17.4.7.14 Transport and Mobility and Road Safety**

Public transport to and in Moranbah is relatively limited. Until recently there was a direct air service from Brisbane to Moranbah Airport run by regional airline, Mac Air. This service has recently been liquidated and has ceased to operate the route between Brisbane and Moranbah. An alternate service or replacement carrier is yet to be identified. As at March 2009, BMA is operating a temporary private charter air service, with Qantaslink, for BMA employees and contractors.

There is a bus service that runs once a week. There is a two-hour commute between Moranbah and Mackay and there is no direct passenger train service to Moranbah. A private taxi service operates in Moranbah. Discussions with service providers indicate the lack of public transport may contribute to people driving under the influence. Transport implications are addressed in Section 13 of this EIS.

#### **17.4.8 Culture, Heritage and Tourism**

##### **17.4.8.1 Heritage and History**

Moranbah is a purpose built mining town which has grown into a busy and vibrant community. The town was developed in 1971 by the Utah Development Company (now known as BMA) to house the workforce of the Goonyella Mine and later the Peak Downs Mine. The town saw rapid expansion throughout the 1970s and 1980s and houses were built for workers and their families. Some peaks and troughs in the resource sector has seen the population fluctuate, however, there has been steady growth over the last decade.

##### **17.4.8.2 Places of Interest**

Moranbah tends to be a stop over on a journey rather than a destination. It has a number of sites that are aimed at tourism however there is no main attraction. Visitors to the town are generally visiting for work, investment or family reasons. However, partnership initiatives have seen a specific investment in tourism and places of interest in recent years.

BMA is working with the local councils, state government and industry in the development of *The Mining Trail*, a touring route through the Mackay-Isaac region between Clermont and Mackay accompanying the passage by rail of the region's coal exports from the hinterland mines to the export terminals of Hay Point and Dalrymple Bay. The intention of *The Mining Trail* is to attract tourists from the Bruce Highway and Great Inland Way.

*The Mining Trail* will take tourists through picturesque scenery, historic towns such as Nebo and Clermont and mining towns such as Moranbah and Dysart. It will also promote artistic and cultural heritage sites, and feature the Homevale National Park, Mac Murals, Lake Elphinstone and the Theresa Creek Dam.

BMA financially supported the development of the Blackwater International Coal Centre, in the southern Bowen Basin, which has been a unique edition to the Blackwater community, combining education, tourism and much needed facilities for locals, as well as providing insight into the Australian coal industry.

Section 17.5.9 of this chapter, *Potential Impacts and Mitigation – Culture, Heritage and Tourism* details current and proposed activities, supported by BMA, in relation to culture, heritage and tourism.



### **17.4.8.3 Holiday and Short Term Accommodation**

Temporary accommodation in Moranbah is available, though often under high demand.

There are eight hotels/motels and two caravan parks which cater for a variety of needs including backpackers.

The high demand is less often due to tourism but rather as a result of the demand from the mining community and affiliated contractors and services. The demand for accommodation in general has also meant that many of the rooms available are permanently booked out to cater for this.

A survey by the PIFU section of the Department of Local Government, Planning, Sport and Recreation in June 2006 found that the total average short-term room availability in the former Belyando Shire was 198. At the time of the survey, the former Belyando Shire indicated occupancy rates of 94% with over 78% of occupants comprising non-resident workers on a longer-term basis. Short-term occupancy accounted for less than 16% of total occupancy rates.

The MAC Services Group Limited, which supplies accommodation to the coal mining, construction, resources and tourism industries, also has an accommodation village in Moranbah. It features 889 rooms that are usually fully occupied. All are single rooms with en-suites and cater for mine employees, and staff working at the accommodation village. There is some capacity for the employees of companies associated with the mines, such as plumbers, electricians and construction workers, to stay in local accommodation villages while they are working on-site, reducing the demand on local short-term accommodation.

The high demand for temporary accommodation in the study area may provide new business and enterprise opportunities as well as potential growth and expansion potential for existing accommodation providers.

### **17.4.9 Community Values, Lifestyle and Amenity**

#### **17.4.9.1 Socio-Economic Advantage/Disadvantage**

The Socio-Economic Index for Areas (SEIFA) consists of four indexes developed by the ABS. Each index summarises a different aspect of the socio-economic conditions of the Australian population using a combination of variables from the Census of Population and Housing. It provides an understanding of the key attributes which may reflect the advantage or disadvantage experienced by communities.

SEIFA indexes are assigned to areas, not to individuals. They indicate the collective socio-economic status of the people living in an area based on attributes such as low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations and other variables that reflect disadvantage rather than advantage.

High scores on the Index of Relative Socio-Economic Disadvantage occur when the area has few families of low income and few people with little training and in unskilled occupations. It is important to understand that a high score here reflects lack of disadvantage rather than high advantage.

As shown in Table 17.15 the study area is ranked at 1576 out of 1897 suburbs in Queensland indicating a lack of disadvantage in the area.



BHP Billiton Mitsubishi Alliance

**Table 17.15 Figure of Socio-Economic Index for Areas (SEIFA), Index of Relative Socio-Economic Disadvantage Comparisons for Census 2006.**

2006 (LGA)	Score	Ranking in Australia			Ranking in State or Territory			
		Rank	Deciles/ ranking	Percentile	State	Rank	Deciles/ ranking	Percentile
Nebo (S)	991	521	8	78	QLD	137	9	87
Broadsound (S)	1001	541	9	81	QLD	143	10	91
Belyando (S)	1025	575	9	87	QLD	152	10	97
Brisbane (C)	1063	611	10	92	QLD	157	10	100
2006 State Suburb name (SSC)	Score	Ranking in Australia			Ranking in State or Territory			
		Rank	Deciles/ ranking	Percentile	State	Rank	Deciles/ ranking	State Percentile
Moranbah	1047	6566	8	80	QLD	1576	9	84

Source: ABS SEIFA Index

#### 17.4.9.2 Community Identity

BMA's community engagement process enabled the community to voice what they believe identifies them as a community. Through community feedback forms and face-to-face discussions at BMA's mobile information displays, members identified what they liked and disliked about their lifestyle, their community and the environment in which they live and work. Feedback from the community indicated the study area is strongly linked to the mining industry and this provides a level of community connectedness. The community enjoys the opportunity to earn a good income while being close to their families and pursuing active leisure activities outside of work.

The disadvantages of living in the area included limited shopping facilities, the high cost of living, and shortages of housing and accommodation. The community was generally optimistic with many community members expressing that there was great opportunity in the growth of mining in the region and that families who come to live in the area are likely to enjoy a lifestyle that offers a sense of community, family atmosphere, employment opportunities, and positive social amenity through the certainty and security that came with industry growth. Community members have indicated they are relatively positive about the future of mining in the area, despite the economic downturn.

BMA conducts regular *Community Perception Surveys* across the Bowen Basin, Mackay and Sarina communities to capture sentiment towards BMA's contribution to its host communities and any community concerns. In 2008 the survey was conducted by the University of Queensland's Centre for Social Responsibility in Mining (CSRMI) and captured feedback from more than 600 residents. More than 90 percent of those surveyed had heard about BMA.

The *2008 Community Perception Survey* findings highlighted that BMA's commitment to community engagement and investment activities contributed significantly towards BMA's positive reputation. Overall the study found that, "BMA has a high profile in the communities and an enviable reputation. The company



*is seen as a good employer, a good corporate citizen and genuinely concerned about the welfare of the communities affected by its business.”*

Three quarters of survey respondents said that BMA had made a positive contribution to their community, mainly through the provision of employment and support for community groups and the local economy.

Overall respondents rated BMA highly across six performance areas of workplace safety, involvement with the local community, as an employer, workforce diversity, trustworthiness and protection of the local environment. BMA rated highest (77%) for its approach to health and safety.

The top three BMA-supported community programs identified by respondents were site-specific sponsorships, CQ Helicopter Rescue (through BMA's Community Partnerships Program (CPP)) and the PCYC Blackwater Vacation Care (also through CPP). Respondents were also aware of contributions such as the Matched Giving Program, one-off events such as flood relief and BMA contributions to charity fundraising, road safety, disability programs, town beautification projects, youth workers (CPP) and in helping Aboriginal communities.

The survey found that 84 percent of respondents living in BMA's host communities were generally satisfied with their communities, and the benefits of living in small rural towns such as convenience, safety, friendliness and family friendly lifestyle, were cited as the major reason for their satisfaction.

Respondents offered recommended actions to assist community liveability, including:

- Improving entertainment and recreational facilities
- Providing for and attracting more services and businesses, and
- Improving transport and infrastructure.

Section 17.5.10 of this chapter, *Potential Impacts and Mitigation –Community Values, Lifestyle and Amenity* details current and proposed activities, supported by BMA, in relation to community values, lifestyle and amenity.

### **17.4.9.3 Social Connections**

There are good opportunities for social connections to be developed in the community. MDSS compile a fortnightly community newsletter that advertises community events. The service also organises a women's breakfast to encourage community connection, welcome packs for those new to the community and a welcome morning tea.

Public areas and events such as parks and children's play areas, the weekly Lion's Markets, annual festivals (such as Saraji Mine's Festival '73 and Norwich Park's Day at the Park), community fun runs and the Moranbah Aquatic Centre, all provide opportunities for the community to connect.

Community connections are often best displayed during times of adversity, such as the 2008 floods across Emerald and Mackay, in which the community banded together to raise funds, provide support services and help neighbours and businesses in the flood relief efforts.



Section 17.5.10.2 of this chapter, *Potential Impacts and Mitigation –Social Connections* details current and proposed activities, supported by BMA, in relation to community connectedness

#### **17.4.9.4 Residential Amenity**

In the context of this assessment, residential amenity is discussed to understand what draws people to live in the study area community. Income and opportunity may drive tenure in a community however there is a level of residential amenity that encourages the continuation of residence.

While predominantly a mining town, the community in the study area enjoys the benefits of a rural lifestyle without the isolation that can often be found in smaller communities. The education, shopping, recreation and entertainment opportunities offered in Moranbah would normally be found in a centre with a much larger population.

For many employees living in the study area, mine sites are as little as 30 minutes commute. For many workers residing in the study area there is the benefit of being able to come home to their families each night.

Throughout BMA's community engagement process concerns were noted about impacts from dust, noise and vibration from nearby mines. Coal dust is a particular concern due to perceptions of health impacts on the young or those with health concerns such as hay fever and asthma.

Section 17.5.10 of this chapter, *Potential Impacts and Mitigation –Community Values, Lifestyle and Amenity* details current and proposed activities, supported by BMA, in relation to residential amenity.

#### **17.4.9.5 Social order and community safety**

The community has a general perception that their town is safe, however there is some concern around the activities of non-resident workforce staying in accommodation villages close to the community.

Behaviour on-site at the temporary accommodation village would be monitored, and BMA would consider best options for monitoring on-site village behaviour, reporting issues back to BMA management, devising healthy lifestyle eating and recreational activities, encouraging against a drinking culture, and exploring opportunities for village residents to better contribute to local communities.

BMA's has a zero tolerance policy in place relating to drugs and alcohol for its employees, across all sites, while on shift. BMA employs independent consultants to randomly and regularly test employees for the consumption of drugs or alcohol. This policy discourages against heavy drinking and drug use.

Section 17.5.10.3 of this chapter, *Potential Impacts and Mitigation –Social order and community safety* details current and proposed activities, supported by BMA, in relation to community safety.

### **17.5 Potential Impacts and Mitigation**

The existing environment – a review:

The study area and region feature a variety of social infrastructure and services including a range of educational and recreational facilities. This is also supported by a strong local economy and a growing base of local businesses. The community values and social connections also encourage families to live and work



in the Moranbah community. Industry expansion has led to some gaps social infrastructure, which the government and industry can help to mitigate against.

The section that follows aims to provide a calculated assessment of the potential social impacts that may result from the project construction, operation and closure. Management and mitigation measures are also described to ensure negative impacts on the study area and region are reduced and positive impacts are maximised. Suggested mitigation strategies are included in each section to address any potential impacts.

Appendix P provides an overview diagram that presents a summary overview of the potential impacts of the project and whether they affect the local, regional or both communities. The likely level of impact on the local and regional communities is relative to the success of mitigation strategies and opportunities for community benefit that are optimised.

The section also highlights the investment and support BMA is already making in Bowen Basin and Central Queensland communities. In the 2008 financial year alone BMA invested \$22 million through its community investment programs which include regional infrastructure support, community partnerships, regional facilities and education. In addition to this, matched contributions by the BHP Billiton Matched Giving Program, saw BMA employees invest more than \$1.9 million to 219 not-for-profit organisations (in the local study area, region, state and nationally). BMA employees donate to their charities of choice through payroll giving and cash donations, volunteering and fundraising.

Appendix P (including *BMA's 2008 Community Investment Report*) details the extent of BMA's community support and investment in 2008

### **17.5.1 Demographic Characteristics**

The demographic character of the study area is likely to experience slight changes as a result of project construction and operation, while at a regional level these changes are likely to be more limited.

Any increase in permanent residents in the community would relate to the individual choices made by the construction and operational workforce. Approximately 5% of the construction workforce and 20% of the operational workforce are expected to move to the community permanently. BMA is committed to providing accommodation and service support to allow for and encourage these choices.

#### **17.5.1.1 Construction**

The project would require a peak workforce of 1200 people. It is anticipated that 90% of the construction workforce would be accommodated in the on-site village and 5% would already reside in the study area. Considering the shortage of accommodation, the construction timeframe and the quality of village accommodation, it is estimated that less than 5% of the project construction workforce would move to the study area and remain permanently. This is equivalent to a 0.8% increase to the Moranbah population.

It is unlikely that the regional demographic profile would change during the construction period as transience may occur from within the area. Given the current economic downturn and the perceived lack of employment security, regional workers may seek employment during project construction and may seek long term opportunities during operation.



It is anticipated that workforce members who relocate to the area, and the transient workforce accommodated in the on-site village, would follow existing demographic profiles of mine construction workforces. The workforce would predominantly be made up of males aged between 20-44 year olds. Roles, qualifications and incomes would be proportionally similar to existing mine workforces found in the study area. At the local level this will result in a slight increase to the ratio of men to women. At a regional level this demographic change is not likely to be significant.

There would be a slight increase in women and young people if families move to the area with construction workers, however, based on the factors outlined it is unlikely that these changes would be significant.

### **17.5.1.2 Operation**

The operational workforce for the project is estimated to be around 500 people. Due to the project life and its proximity to Moranbah it is likely that some of the operational workforce would relocate to Moranbah. It is estimated that 20% or 100 workforce members would move permanently to the project area, and would potentially be accompanied by their families. It is anticipated that a further 10% or 50 of the workforce would be sourced from the local community.

For these studies, and based on the workforce trends in other BMA operations in Moranbah, it was calculated that 10% of the new workforce will be single, 30% would be part of a couple and 60% would be part of a couple with children. The average Australian household size in 2011 is projected to be 2.5 people. Using this average and the potential workforce numbers that are expected to move to the area and their predicted relationship and family status, it can be assumed that approximately 216 people would take up residence in Moranbah. It is important to note however, that the existing housing shortage may restrict the ability of families to relocate to the area. There is also potential for the displacement of existing low and mid income earners from the study area due to elevated property prices. It is likely that over time the average incomes in the study area would increase through long term wage growth.

Any migration to the study area as a result of the project is not expected to deviate from existing demographic profiles. It is expected that existing proportions associated with age and occupation would likely remain stable. It is highly likely, due to the existing trends in the resource industry, that the majority of new workforce would be male. This would reinforce the existing gender balances in the study area.

The non resident population is expected to rise significantly, with an influx of 345 people. It is anticipated that the majority of these people would be accommodated at a village in Moranbah during their shifts, and return to their residence away from Moranbah on rostered days off. The proposed redevelopment of the Moranbah airport would mean that a high percentage of the project workforce would reside in areas outside of the immediate region. Workforce members may be sourced from Central Queensland, South East Queensland and possibly interstate.

Overall, project operation is not likely to result in any significant direct impacts to the demographic profile of the region. It should be noted that population increases associated with the project and other BMA projects are in line with high series yearly population increases provided by PIFU.

**Mitigation:** A proactive monitoring program would ensure effective management of population changes in the study area and region. Workforce planning would be in keeping with monitoring processes. Staged



growth would enable transient workforces to move from one project to another with minimal changes in population or demographic profiles.

Long range monitoring would assist service providers and government agencies to make informed decisions about community support in the study area and region and help to determine the effectiveness of BMA and government agency mitigation strategies. This program would extend beyond resident workforces and their families to consider DIDO/FIFO workforce profiles and needs. It is suggested that half yearly audits are conducted with DIDO/FIFO workforces. Cumulative impacts brought about through mine development and expansion surrounding Moranbah would also be included in ongoing monitoring. Performance indicators for this monitoring would be provided in the SIP with actions triggered at pre-determined levels.

While it is anticipated that the project would continue to reflect the current gender demographics in the region, BMA is committed to workforce diversity. BMA has engaged a dedicated senior advisor in women's employment to develop strategies and workforce flexibility options to attract and retain female workforce members. This focus also extends to the recruitment of Indigenous people and people with disabilities. A key outcome of this appointment is a diversified workforce.

BMA would continue to provide housing and services for the project workforce to minimise adverse impacts on the local community as detailed in this assessment.

### **17.5.2 Family and Household Characteristics**

Family and household characteristics in the study area and region are not expected to noticeably change as a direct result of the project although the project will provide a significant proportion of dwellings that are semi-detached or units to cater for changed demand from a workforce experiencing generational change. This will also address the current imbalance in housing type compared to the wider Queensland community. During construction, a temporary contractor workforce would see an increase in single persons mostly living in village accommodation or in temporary house accommodation in Moranbah. During operation, it is expected that those in the mine workforce that choose to live in the study area would follow existing community trends (couple families with young children).

The majority of the construction and operation workforces are expected to participate in DIDO/FIFO employment, leading to an increase in the non resident population. Service providers and community members have raised concerns about the impact of transient workforces on social services and community profiles. Statistical data provided by the ABS does not account for transient employees, their demographic profile or service needs. The potential impacts of this transient workforce include:

- Increased demand for temporary accommodation and housing, where these workers are not housed on the mine site.
- Increased demand on community services including health and emergency services.
- Increased demand for goods and services provision.

An increase in transient population may bring about impacts that may not be considered in the provision of housing and human services. The lack of accurate and current demographic information can hinder the ability of services to plan for and provide facilities and support to the community. Lifestyles and community values may also be affected, to some extent, by changes in the demographic profile.



**Mitigation:** BMA would seek to work closely with PIFU, in providing its confidential workforce planning and employee forecasting numbers, to allow for closer population monitoring and planning.

BMA is committed to continuing its support and contribution towards youth, education and recreation programs including the Community Partnerships Program which invests \$1M across the categories of:

- Economic development and business skills training
- Community development and welfare
- Community safety, sport wellbeing and recreation
- Environment and sustainable development
- Arts, entertainment and cultural development
- Youth development and leadership.

Through its *Landmark Program* BMA is currently pursuing the development of additional recreational facilities for our communities, to better support youth and community connectedness, including the redevelopment of the Greg Cruikshank Aquatic Centre and the development of a multi-purpose sports centre in Dysart.

Enhancing regional liveability is an important target for BMA. BMA has taken a strong advocacy role on behalf of the Bowen Basin Mayors Group to ensure Bowen Basin communities receive a fair share of the \$100M committed Sustainable Resource Communities Fund commensurate with the percentage of coal royalties from the region.

BMA provides support for local facilities by providing incentives (such as subsidised memberships) for employees, including those in its DIDO/FIFO workforce, to use local sporting and community recreation facilities. Where such facilities are not provided within the community, or in close proximity to its proposed developments, BMA will provide appropriate recreation facilities in its accommodation villages to maintain a healthy lifestyle for DIDO/FIFO employees.

BMA offers an Employee Assistance Program to its employees, a free and confidential counselling service to support staff during difficult times. BMA also provides funding for the families of those employees who form part of DIDO/FIFO workforces, by funding children's programs in the Mackay and Sarina communities through the Community Partnerships Program.

BMA participates in government and inter-agency steering groups across our host communities to ensure BMA is up to date on issues impacting on vulnerable groups. Involvement in these steering groups helps the Community Investment team to identify programs that are most in need of funding or resources, to better support the needs of vulnerable groups. Based on this information, BMA and its operational sites invest funds across a range of activities, including the likes of the Moranbah and District Support Services, which runs a Domestic Violence Awareness week program, and ELAM, which offers emergency accommodation for victims of domestic violence.



Across the region, BMA supports a number of childcare initiatives, including:

- Support for the Blackwater PCYC Vacation Care centre in the provision of out-of-school hours and vacation childcare options through the *Community Partnerships Program*.
- BMA's Goonyella Riverside Mine also provides funding for a much needed child care trainee at the Simply Sunshine Child Care Centre in Moranbah. Not only does this funding provide a job opportunity for a local person, but also helps to ease pressures on the centre due to skills shortages in the region.
- Broadmeadow Mine is currently developing a childcare support package around education skills and training for childcare centres.
- BMA provides some accommodation for key community services such as medical services and childcare Directors and workers.

From a cumulative perspective BMA will investigate the development of a childcare needs analysis to identify priority childcare needs for our Bowen Basin communities, particularly for the Moranbah community over the next five years. BMA will work in partnership with the Department of Education, Training and the Arts to identify priorities across the following areas:

- Hard infrastructure – upgrades and new facilities for kindergartens, before and after school care and childcare.
- Retrofitting of people's homes to compliance standards in order to increase Family Day Care availability.
- Education, training and skills development for childcare employees, particularly to acquire Group Leader level qualifications - where there is the greatest shortage.
- Affordable accommodation.
- Business skills diagnostics for the not-for-profit sector to assist in building capacity and business acumen.

The childcare needs analysis will help to inform priority areas for utilisation of the \$2 million allocated for childcare infrastructure upgrades in Moranbah from the \$27 million brought forward from the Sustainable Resource Communities Fund.

### **17.5.3 Indigenous Community**

Demographic profiling and consultation with service providers and the community did not indicate that the existing Indigenous population in the study area were considered a vulnerable group. Issues that generally indicate vulnerability, such as a lack of appropriate health and social services, poor family stability, a lack of employment and education opportunities or low income, were not identified as an issue for this group. Indigenous members of the community have generally moved as individuals or as families to seek employment in existing mining operations.

However the project has the potential to reduce the focus on Indigenous needs and social requirements through an increase in population. Key issues may include:

- Reduced availability of affordable housing resulting in economic displacement.
- Reduced access to relevant community services.



- Reduced access to cultural outlets.
- Decreased access to employment and training opportunities.

It is unlikely that these impacts would present a significant issue for the Indigenous community or the support they seek. However some individuals may need support through the project development.

There is potential for project construction and operation to result in a small increase in the size of the Indigenous population in the study area. This increase is not likely to result in any significant direct impact to the region.

The limited availability of specific Indigenous health, education and employment services in the study area may discourage some local in-migration for Indigenous workers. However, discussions with community service providers indicate that the existing facilities adequately service the existing Indigenous community members.

**Mitigation:** The local Indigenous community has been actively engaged through the feasibility and planning stages of the project. Cultural heritage surveys continue to be a key step in engaging with Indigenous representatives. BMA would continue to maintain its engagement program with the Indigenous community throughout mine life.

An Indigenous engagement plan could also be outlined through the SIP process and incorporated into overarching community engagement strategies.

BMA's existing Indigenous relations program, which encompasses Native Title and cultural heritage, is managed at a local level by mine site environmental departments.

The project also offers an opportunity for BMA to formalise Indigenous engagement strategies which focus on training, education and business development and to develop programs to encourage employment, training and enterprise opportunities for the Indigenous population.

These programs could be made available to Indigenous persons who are directly employed by the project, and also to those who live in the local community, through the participation of community service providers.

Financial support for Indigenous and cultural heritage programs that are already donated through BMA's operational sites would continue. For example, South Walker Creek Mine works closely with Traditional Owners in setting up a community program for recovering fossil finds on the mine site.

BMA will continue to leverage its representation of the Queensland Resource Council's Indigenous Affairs Committee, to better advocate for the needs of Indigenous communities across the Bowen Basin.

### **17.5.3.1 Cultural Diversity**

The study area community is not considered to be culturally diverse with 84% of the community born in Australia, followed by English and New Zealand born residents. It is unlikely that either construction or operation would noticeably alter the existing levels of cultural diversity in the study area or region long term.



**Mitigation:** Through the project BMA would promote employment opportunities across many cultures and nationalities, working towards increased cultural diversity in the study area community and the region.

BMA operates a web-based recruitment service which assists applicants to apply for advertised positions.

This service ensures local, state; national and internationally based applicants can access employment information and provide resumes on line. The ongoing maintenance of this service would ensure that, where possible, prospective workforce members from culturally diverse backgrounds can apply for and access BMA employment.

BMA is committed to workforce diversity and has such has appointed a dedicated senior advisor in women's employment to develop strategies and workforce flexibility options to attract and retain female workforce members. This focus also extends to the recruitment of people from a variety of cultural backgrounds, including Indigenous people and people with disabilities. A key outcome of this appointment is a diversified workforce.

### **17.5.3.2 Current land use and affected property owners**

The project is likely to impact on those who currently own properties affected by the project, as well as residents on properties that are currently leased from BMA.

The majority of the land required for the project is currently owned by BMA; however agreements for compensation for land use or land purchases are underway for land that is not owned by BMA.

BMA is negotiating directly with property owners on purchase and/or leasing arrangements and the details of these negotiations are regarded as confidential and cannot be included in this report. Three of the affected properties are used for livestock, primarily cattle grazing; one is used for training personnel for the mining industry and village accommodation. Of the four directly affected properties, three properties are occupied by residents. One property is identified as being affected by the proposed rail infrastructure. One property is currently under lease from BMA to a tenant who operates an animal boarding facility on the property.

The directly and indirectly affected property owners living near the project are likely to be affected by issues relating to noise, dust and vibration from mine operations. Directly affected property owners may also be affected by visual disturbances including night lights and mining infrastructure. One affected property owner would be affected by property severance which may make moving stock difficult. Affected property owners also noted a number of concerns including:



- Availability of underground and surface water for livestock.
- Impacts on feelings of safety and security.
- Changes to local amenity.
- Impacts of coal dust on the quality of pasture and beef.
- Quality of lifestyles as a result of noise and dust.
- Management of the railway service roads and gates.
- Safety of people and stock surrounding the railway.
- Health affects on people and livestock as a result of the project.

Newsletters were posted to five indirectly affected property owners within 2 km of the project site as part of the community consultation program. Two of these property owners requested meetings to discuss the project. The likely impacts for indirectly affected property owners include the impact of noise, dust and vibration on their properties and lifestyle, and safety.

The loss of the animal boarding facility from one of the affected properties is likely, and BMA is currently working with the lessee to develop alternate accommodation options. The loss of the boarding kennel is expected to cause issues for local residents who use the facilities while they holiday. This would restrict recreational opportunities if community members cannot place their animals locally when they go on holiday.

**Mitigation:** BMA monitors impacts on affected property owners and their environment and favours regular dialogue and consultation to identify and manage any adverse impacts. While complaints-based environmental controls would be put in place, BMA would prefer to continue open discussion with property owners about their operations, potential impacts and proactive solutions. Advanced monitoring would also assist BMA to determine potential issues before property owners are affected.

## **17.5.4 Education and Training**

### **17.5.4.1 Education**

In the longer-term it is expected that project development would enhance the education and training facilities and services at both a local and regional level.

Service providers confirm there is sufficient capacity available through current education facilities at all levels (primary and secondary) to absorb a potential growth in population as a result of workforce and family migration. In some cases this growth is considered necessary to justify the continued operation of some facilities and services to the existing community.

In the existing demographic profile there is an identified loss of young people from the community. This group, aged 15-24 years, leave the community (either as individuals or with their families) to pursue education opportunities that exist elsewhere. This may be from a perceived lack of quality education, the desire to pursue private senior education or particular streams of tertiary education.



**Mitigation:** BMA would continue to support and develop relationships with local primary, secondary and tertiary/vocational education and training providers to develop mutually beneficial partnerships. Existing partnerships include, but are not limited to:

- BMA funds three youth workers across the Bowen Basin in Moranbah, Dysart and Blackwater. To ensure continued support for youth in the Bowen Basin, BMA has renewed this funding agreement with the Queensland Government's Department of Communities.
- BMA invests around \$925,000 per annum in its Skills for Growth Strategy, which supports apprenticeships and scholarships for primary and secondary school students, as well as work experience options.
- BMA actively supports skills and training opportunities for young people in the region, and invested \$90,000 in establishing the Mining Industry Skills Centre, which is linked to the Moranbah High School.
- BMA sponsors the Queensland Minerals and Energy Academy (QMEA), which enables Bowen Basin students to access a broad range of minerals and energy-related learning and career opportunities in the skilled-operator, trades and professional areas.
- Other Skills for Growth initiatives for students include a Cadetship program and an Engineering Extension Program.
- BMA's Broadmeadow Mine is currently developing a childcare support package around education skills and training for childcare centres.

In addition, BMA actively engages with local schools and has implemented initiatives like Adopt a Teacher, to provide students and teachers with practical, real work projects, and mentoring support.

Individual BMA sites also support tertiary scholarships for school leavers, and partner with Bowen Basin schools on a range of other projects including recycling, greenhouse and leadership programs.

Across the Bowen Basin, BMA has implemented strategies to support and develop relationships with local tertiary providers.

This includes engineering partnerships with Central Queensland University and the University of Queensland, and support for Vocational Education Providers.

BMA would continue to work with education providers in the region to better understand the requirements of those seeking education services.

#### **17.5.4.2 Training Opportunities**

There is likely to be increased demand for the provision of training services in the region as a result of the project during construction and operational phases. Vocational training providers in the region have indicated that the coal industry was a key driver of regional training requirements. With the increase in available positions in the project and overall growth of BMA projects it is likely to create further demand.

**Mitigation:** BMA sites currently support and partner with local training providers to source traineeships and apprentices (see section 17.4.5.1). BMA would continue to provide support and develop relationships with training providers to develop mutually beneficial partnerships. The consideration of women for non-



traditional mining roles is also recommended to ensure future opportunities for women in the industry. BMA has a dedicated resource to build capacity in this area (see 17.4.2.2).

### **17.5.5 Employment**

Employment opportunities are expected to increase throughout the region. During construction the project would be predominantly a contract workforce made up of 1200 personnel. Once operational, the project would offer long term employment opportunities for approximately 495 people.

The construction contractor would be responsible for the recruitment of the construction workforce and while it is expected that some of that workforce would be sourced locally, it is likely that the majority would travel to the study area from outside the region.

The operational workforce would likely be sourced from a variety of local, regional, state and inter-state industries including persons from BMA's existing operations seeking change or promotion through the project.

While the mining industry has been impacted by the global economic downturn, BMA's assessment of the medium term market outlook remains unchanged, with strong future demand projected. The recent economic downturn may encourage regionally-based workforces to seek contract work with the project. The project start up would also be in line with completion of other projects in the area which would allow for a natural progression of workforces to the project.

**Mitigation:** BMA would encourage construction contractors to provide local employment opportunities as part of the tender process. BMA would also actively promote local employment opportunities for the operational workforce, which may include advertising roles in the local community. Existing and planned training programs would also gather workforces from regional areas.

In the current downturn, BMA is working proactively with the Queensland Resources Council, state and local governments and the Sustainable Resource Communities' Fund, to identify social and economic community infrastructure projects that can be brought forward to help absorb workers retrenched from regional mines. This in turn minimises the impact on the community and ensures that workers are readily available in the region to enable BMA to quickly respond to a market upswing, minimising the lag between improved market demand and supply.

BMA supports all levels of government in addressing the impacts of industry fluctuations. In times of downturn BMA ensures, as much as possible, that workers are recruited locally.

In March 2009, BMA took part in a series of *Community Support Days*, which will bring together financial and community support services; industry and government agencies to provide information for retrenched mine workers, about the services and employment opportunities available to them.

#### **17.5.5.1 Income Levels**

The people of Moranbah, in general, earn wages well above the national averages. It is likely that project construction and operation workforces who choose to live within or away from the community would continue



to benefit in this way. It is expected that these wages would be consistent across the construction and operation period, depending on contract conditions.

Salary data for the Queensland mining sector shows that salaries typically range from \$75,000 - \$175,000. Table 17.16 shows a sample of these roles and typical salary expectations gathered from a recent salary survey by a recruitment company.

**Table 17.16 Selection of mining roles and current Queensland Salary Range**

Role	Salary Range (\$)
Open Pit Supervisor	110,000-140,000
Maintenance Superintendent	135,000 – 175,000
Dump Truck Operator	75,000 – 105,000
Excavator Operator	90,000 – 120,000
Maintenance Supervisor	95,000 – 125,000
Mechanical Fitter	80,000 – 95,000
Mechanical Engineer (Mid level – 3 to 7 years)	90,000 – 125,000
Boiler maker / Welder	85,000 – 95,000
Leading Hand	95,000 – 115,000
Electrician	90,000 – 110,000

Source: Hays Resource and Mining 2008 Salary Survey

The majority of the project workforce during the construction and operating phases are expected to be non-resident, which may see the majority of the income earned through the project invested outside the study area.

However an increase in the number of resident workers (estimated to be 60 persons during construction and 150 persons during operation) is likely to result in further increases to the local economy.

This in turn has the potential to further increase wage spreads within the study area. The significance of this impact is difficult to quantify due to the lack of up-to-date demographic information on income levels in the study area.

It is likely that with a small increase in high income earners residing in the study area, low income earners may be impacted by further pressures on local rental prices. The potential for new mining families to pay higher rents or purchase property may reduce opportunities for low income families to access and maintain rental accommodation.

**Mitigation:** BMA would continue to invest in community development and welfare programs, as well as economic development and business skills training initiatives, through its *Community Partnership Program* to build community capacity and employment opportunities across a range of sectors.

BMA also currently supports The Salvation Army's *Moneycare program*, which supports communities and individuals through difficult financial times. The program offers free and confidential financial counselling services and helps individuals to alleviate suffering, avoid bankruptcy and improve financial literacy.



### **17.5.5.2 Employment Competition**

Demand for non-mining staff may continue to impact the sustainability of some local businesses and contribute to the prosperity of others. Increases in population may exacerbate existing staffing pressures. As more people move into the community seeking employment in the project there is likely to be increased availability of workers seeking casual work, however some may stay only until they secure their desired position with the local mines and the increased income that comes with it.

While a predominantly DIDO/FIFO workforce will still provide economic benefits to local businesses, it may also limit the number of available non-mine workers, as partners and relatives often work in businesses in their home towns.

While the high incomes earned in the mines often reduces the need for dual incomes, there are opportunities for the growth of skills, social connections, personal esteem and sense of community vitality where community members and partners work locally and further encourage the existing shop local approach.

Some local businesses would continue to flourish or remain stable in a potential economic down turn, particularly those businesses offering competitive wages and working conditions. The community depends as much on residents and local business for its prosperity as it does the mining industry. It is the contribution by local business and the availability of local shops and services that often encourages new families to move to the study area.

**Mitigation:** BMA (in partnership with local employers and service providers) would continue to work with local business organisations and with the partners of their workforce to provide training, support, advocacy and encouragement.

BMA is currently auditing its operational sites and the accommodation villages that house BMA contractors and staff, to determine existing practices with regard to buying local and investing in local businesses. The audit outcomes are expected to highlight key areas for improvement with regards to local procurement, as well as facilitate discussions with local business owners about preferred supplier opportunities.

BMA is supporting the appointment of a Hinterland Economic Development Manager, through its *Community Partnerships Program*, to support local business and assist skills development and economic diversity in the region.

### **17.5.6 Housing and Accommodation**

Growth in the resource sector has reduced the availability and affordability of housing in the region. There is potential for the project to further exacerbate these impacts.

The total construction phase workforce is estimated to be 1,200 persons. Provision is being made to accommodate these personnel in a construction village on site although potentially up to 60 current Moranbah residents may be recruited for 1,120 people to work on a DIDO/FIFO contract. Of this DIDO/FIFO workforce an estimated 20 people may choose to seek temporary accommodation in the study area rather than in the construction accommodation village.



The requirement for accommodation during project operation would reduce to an estimated 500 personnel. Housing requirements for these personnel is predicted to comprise: 50 local personnel; 100 new permanent residents (not including their partners and families) and 345 people housed in project accommodation. There is not expected to be non-resident personnel seeking temporary accommodation in the local community during operation.

**Table 17.17 Indicative accommodation requirements**

Phase	Total Workforce	Local personnel	New permanent residents	Non-resident – Village accommodation	Non-resident personnel – short term
Construction	1200	60	0	1120	20
Operation	495	50	100	345	0

There is already strong demand for temporary and tourist accommodation in the study area with little surplus available. Many rooms are currently occupied on a long term basis by non-resident mine workers. Future non-resident personnel would place additional demand on temporary and tourist accommodation. While there is not expected to be any direct requirement to house either construction or operation workforces in this way there may be a small number of the workforce who will choose to use these facilities out of preference rather than requirement.

It is more likely that there will be indirect increased pressure on these temporary and tourist accommodation services from the ancillary services that are sometimes required – such as external contractors, from both this project and others. This would continue to restrict the accommodation of non-mine related visitors such as tourists.

Operational personnel would be accommodated in a purpose-built accommodation village in Moranbah, as well as housing provided through BMA’s housing strategy.

There is a practice in the mining industry to pay subsidies to employees to help cover rental costs and to encourage them to reside in the local community. Discussions with service providers indicate that, rather than assisting housing affordability, the subsidised rents have instead led to profiteering and adversely impacted overall affordability for the non-mining community.

**Mitigation:** BMA would continue to engage with the community, local government and service agencies on all matters involving accommodation needs and is committed to providing houses for its own business needs to reduce demand drivers and increase affordability.

BMA has ensured that it has sufficient land available in the study area to meet the accommodation needs of its identified growth projects. BMA would also continue its role of working in a support and advocacy role in supporting local service providers to attract funds and resources (for example through the Sustainable Resource Communities Fund) to assist with emergency housing and the accommodation of service providers.

BMA currently provides rental subsidies for some critical service providers, such as childcare workers and medical staff, to continue to attract service personnel to the region. BMA would continue to assess this



need, based on feedback about skills shortages from government agencies, local council and the community.

Where feasible, the majority of short-term contractors or visitors to the project would be accommodated in village accommodation. It is anticipated that any growth in both residential and village accommodation in the study area will continue to decrease the existing pressure on short term accommodation providers. It is also likely to reduce the demand for detached housing, which provides more opportunities for service workers to rent these houses.

See Appendix P (including *BMA's Accommodation Update newsletters*) for detail that is provided to the community about BMA's housing strategy.

### **17.5.7 Enterprise and Economy**

The project would provide significant economic stimulus at the local, regional, state and national level through increased demand for goods and services.

At the local level economic benefits of the project include:

- Mine employees and their families who spend locally.
- The project purchasing goods from local businesses and services.
- A proportion of community benefit payments which promote spending on local infrastructure.
- The taxes and rates paid to the local government.

Local enterprise is expected to benefit financially from the construction and operation of the project. There has been a ongoing expansion of business and industry in the community and this is expected to continue as BMA's activities in the region increase.

There is expected to be continued demand on hotels, motels and other accommodation providers in the area as well as restaurants, bars and other hospitality outlets. With strong current demand, it is expected that any increased capacity would be quickly absorbed.

It is likely the local and regional communities would derive economic benefits from the net increase in the population in the local and regional areas, due to the project. Any increases in population can work towards providing economies of scale for local businesses, which encourages growth and the balancing of expenses. Sustainability and long term economic viability and stability in the local and regional communities is dependant on establishing and maintaining economic diversity that is not solely focused on the mining industry.

**Mitigation:** BMA would continue to work with local government, state government and economic development organisations to develop and encourage investment in the local and regional community to create a diverse local economy that is not solely dependant on the mining industry.

There is an ongoing concern for local businesses that the community does not shop locally and they are facing ongoing concerns about patronage. The community has anecdotally commented that the non-



resident workforce only spends their money in a limited number of establishments and the bulk of their expenditure is done in regional stores closer to their residences.

BMA will continue to review its operational sites and the accommodation villages that house BMA contractors and staff, to determine existing practices with regard to buying local and investing in local businesses. The audit outcomes are expected to highlight key areas for continuous improvement with regard to local procurement, as well as facilitate discussions with local business owners about preferred supplier opportunities.

BMA is supporting the appointment of a Hinterland Economic Development Manager, through its *Community Partnerships Program*, to support local business and assist skills development and economic diversity in the region.

BMA will continue to inject funds in economic development, business skills training, and community development and welfare, through its *Community Partnerships Program*, which contributes \$1M annually towards local business, community programs and social needs initiatives.

## **17.5.8 Community Infrastructure and Services**

### **17.5.8.1 Community Services**

There would likely be some increased demand for the community services offered in the study area, and to a lesser extent in the region. While the project would be directly responsible for a proportion of this demand it is more likely that the cumulative demands of projects in the region would continue to place pressure on community services.

Childcare provision would be a key determinant in the availability of non-working partners, and there have been reported difficulties in accessing suitably qualified staff, due the lack of housing in the region. BMA would continue to provide targeted support to this sector to help ensure high-quality; affordable, flexible childcare is available.

**Mitigation:** BMA currently attends inter-agency meetings in the region and local council meetings, which helps to keep it up-dated on service provision pressures. BMA also engages with local service providers through community consultation activities and its Community Reference Group meetings. This engagement would continue and help to shape future community investment strategies.

The survey found that 84 percent of respondents living in BMA's host communities were generally satisfied with their communities, and the benefits of living in small rural towns such as convenience, safety, friendliness and 'family friendly' lifestyle, were cited as the major reason for their satisfaction.

Respondents offered recommended actions to assist community liveability, including:

- Improving entertainment and recreational facilities
- Providing for and attracting more services and businesses, and
- Improving transport and infrastructure.



- BMA will continue to listen to its host communities, to determine social services requirements, and conduct regular Perception Surveys to help direct its community investment spend to priority areas. BMA will also continue to offer a confidential staff counselling service, helping to relieve pressures on these services in the community.

Through the \$100M Sustainable Resource Communities Fund, BMA is advocating the need for the development of a community services hub in Moranbah.

BMA supports the focus on recreational facilities at the existing MAC Coppabella Accommodation Village. There are a range of recreational facilities and activities on offer to mitigate against a drinking culture - for example, lap pool and tennis court currently being developed, walking and running tracks, 24 hour gym, library, BBQ and social areas, and lots of green space. The wet mess also has restricted hours - opening midday and last drinks at 9.30pm. The split of men and women at the village is as high as 80% men, 20% women, which also creates a living environment focused on mutual respect. BMA would advocate for this lifestyle-focused approach at all accommodation villages.

BMA also offers EAP services to its employees, a free and confidential counselling service to support staff during difficult times.

BMA provides funding for the families of those employees who form part of DIDO/FIFO workforces, by funding children's programs in the Mackay and Sarina communities through the Community Partnerships Program.

BMA participates in government and inter-agency steering groups across our host communities to ensure BMA is up to date on issues impacting on vulnerable groups.

Involvement in these steering groups helps the Community Investment team to identify programs that are most in need of funding or resources, to better support the needs of vulnerable groups. Based on this information, BMA and its operational sites invest funds across a range of activities, including the likes of the Moranbah and District Support Services, which runs a Domestic Violence Awareness week program, and ELAM, which offers emergency accommodation for victims of domestic violence.

### **17.5.8.2 Emergency Services**

There is expected to be limited impacts on Emergency Services in the study area and region as a direct result of the project. The Area Director of QFRS has indicated that any increase in the population would inevitably increase vehicles on the road and this is where the main workload for the QFRS or response would likely be.

BMA is bound by the Coal Mining Safety and Health Act & Regulation. This requires BMA to have emergency capabilities based on site and a fire standard operating procedure, thereby relieving pressures on community emergency services.

With relation to the project, BMA will have a fire tender that is fully equipped with fire fighting equipment, foam injection and on board rescue equipment. The site will also be equipped with a Self Contained Breathing Apparatus and other equipment required for vertical rescue, general rescue and emergency management. A paramedic service will be on site during construction and operation.



BMA contributes to the capacity of the community to meet demands of emergency situations through resources from their Mine Rescue Teams and other emergency response capability. Additionally, employees are supported to participate as volunteers in local fire services.

BMA plays an advocacy role in helping the community obtain additional government services, through the \$100 million Sustainable Resource Communities Partnership Fund including funding for emergency services. BMA is advocating for:

- Upgraded housing for emergency services workers
- New Moranbah and Nebo Emergency Services Centres
- An upgraded emergency centre at the Moranbah Hospital.

Feedback from the ambulance service suggests that there is adequate potential to cover the growth of the community as a result of the project and indicated the potential to improve partnerships with the QAS and the BMA.

Through the Community Partnerships Program (CPP) BMA funds the Central Queensland Helicopter Rescue Service, helping to provide emergency medical care.

Fire services in the study area and region are unlikely to be affected as a direct result of the project, however there may be opportunities for BMA to engage with the QFRS to develop the project's Emergency Response Action Plan. BMA employees are supported to participate as volunteers in local fire services.

Further details on managing risk and Hazard is included in Section 19 of this EIS.

### **17.5.8.3 Police Services**

There may be increased demand on local police services as Moranbah's resident and non-resident population continues to grow. Increases in population may impact on police resourcing requirements and the ability for police officers to manage increased needs for law enforcement. Population growth may lead to an increase in road incidents and disruptions to social order.

Mitigation: BMA will continue to work closely with the local and regional police services to inform them of project milestones or phases, and to assist with their staff and resource planning. BMA will undertake to implement the Social Order and Community Safety mitigation strategies in 17.5.10.3.

### **17.5.8.4 Health Services**

There is expected to be some increase in demand for general health services from the project, however the greatest impacts would be related to the cumulative impacts of mining growth in the region.

Overall the regional health service indicates that they often struggle for support. This would be further impacted by DIDO/FIFO workforces who rely on local health services when they are in the area. Any increase in population (resident or transient) should encourage further government investment in health care resources in the study area, in particular through the provision of more general practitioners and maternity services as an example.

BMA plays a strong advocacy role to encourage Government to provide health and emergency services



**Mitigation:** Acknowledging that the provision of health services is predominately a government responsibility, BMA would continue its working partnerships and support of local health service providers.

BMA is bound by the Coal Mining Safety and Health Act & Regulation. This requires BMA to have emergency capabilities based on site and a fire standard operating procedure, thereby relieving pressures on community emergency services.

With relation to the project, BMA will have a Fire Tender that is fully equipped with fire fighting equipment, foam injection and on board rescue equipment. The site will also be equipped with a Self Contained Breathing Apparatus and other equipment required for vertical rescue, and general rescue and emergency management. A paramedic service will be on site during construction and operation.

Through the Sustainable Resource Communities Fund, BMA is currently advocating the need for:

- An upgraded emergency centre at the Moranbah Hospital.
- The development of a community services hub in Moranbah.
- The redevelopment of the Moranbah hospital (in five years).
- BMA currently supports some medical staff in the broader region by way of wages or subsidised rental properties. BMA also supports community wellbeing through its *Community Partnerships Program*.

#### **17.5.8.5 Recreational, leisure, and sporting facilities**

It is unlikely that recreation, leisure and sporting facilities will experience major changes during the construction phase as a direct result of the project. The existing downturn in participation rates may continue, however this would not be as a direct result of the project.

The operation phase may see an increase in the number of activities available and participation in the study area as the population increases and more families move into the region.

**Mitigation:** BMA will continue to provide financial support for local recreation groups and encourage participation in activities where possible.

BMA currently supports the development or redevelopment of sporting and recreational facilities through its *Community Partnerships Program* (\$1million invested annually) and its *Landmark Projects*. In 2007/8, BMA part-funded a Master Plan for the redevelopment of the Greg Cruickshank Aquatic Centre in Moranbah and invested \$2 million towards the development of a Dysart Multi-purpose Sport and Recreational Facility.

In addition to this, matched contributions by the BHP Billiton Matched Giving Program, saw BMA employees invest more than \$1.9 million to 219 not-for-profit organisations (in the local study area, region, state and nationally). BMA employees donate to their charities of choice through payroll giving and cash donations, volunteering and fundraising.

A key category of BMA's Community Partnerships Program is Community Safety, Sport, Wellbeing and Recreation, which sees BMA invest directly in programs and facilities that promote health and wellbeing in the community. BMA operational sites also invest funds directly into local sporting groups, community sporting competitions and charity fun runs.



#### **17.5.8.6 Impacts on Transport, Roads and Road Safety**

There is the potential for the project to directly impact roads in the study area. Transport implications are addressed in Section 13 of this EIS.

#### **17.5.9 Culture, Heritage and Tourism**

There is expected to be little, if any direct impact on culture, heritage and tourism aspects of either the study area or the region. Local short-term accommodation is expected to continue to experience high demand as a result of the cumulative impacts of mining growth in the study area, which may limit room availability for travellers and tourists.

**Mitigation:** It is suggested that, where feasible, the majority of short-term contractors or visitors to the project are accommodated in village accommodation. It is anticipated that any growth in both residential and village accommodation in the study area would continue to lessen the pressure on short term accommodation providers.

BMA will continue to promote and support cultural activities within the community through its *Community Partnerships Program* and local and state government initiatives, such as *The Mining Trail*.

#### **17.5.10 Community Values, Lifestyle and Amenity**

The project is not expected to adversely alter the values and lifestyle that the community shares. The local community has been significantly shaped by the development of the mining sector in the past 35 years. Thus project development and an expansion in the mining sector is consistent with historic events.

In general the community has positive opinions on the growth of the mining industry, including the project. In Moranbah; however, there has been feedback that this growth needs to be proactively managed by the mining companies and government authorities to protect the area's environmental and social values.

Through BMA's community engagement program, some community members expressed a preference for a mine development that encourages a resident workforce rather than DIDO/FIFO. At the same time, other community members indicated that they preferred a DIDO/FIFO workforce, as it reduces housing pressures in the study area, and a FIFO workforce also reduces traffic and the number of fatigued drivers on the roads.

Feedback from the workforce indicated DIDO/FIFO is an important and attractive recruitment strategy as it is generally in line with workforce preferences for living in coastal regions and larger townships to support preferred lifestyles, partner's careers and family education needs.

BMA will continue to monitor community values and lifestyle preferences through ongoing community consultation activities related to its growth projects, as well as the regular BMA Community Perceptions Survey.

##### **17.5.10.1 Residential amenity**

Perceptions about the project's impacts may differ from the actual likely impact.

Through BMA's community consultation process, some members of the community have raised concerns about the proximity of the Mine to Moranbah's main residential area. However, while the northern boundary



of the mining lease is 6km from the township of Moranbah, the majority of mining activity will take place closer to the centre of the mining lease, some 16 km away from Moranbah.

While the study area's residential amenity could be impacted by way of increased noise, dust, vibration, and potential impacts to visual amenity, the thresholds for the mine would be defined and managed through the relevant environmental management plans.

Mitigation: BMA would continue to be a good neighbour and actively monitor impacts to the study area's residential amenity through sensitive receivers and environmental management plans. BMA will also continue to make information available to the public about its processes for monitoring and mitigating against dust, noise and vibration associated with mining projects (see Appendix E for BMA's latest Environmental Monitoring Community Fact Sheet).

BMA would also proactively discuss the project, including relevant environmental issues with neighbours and the broader community, and mitigate against issues, or compensate neighbours, as necessary. This proactive approach would help to monitor and address issues early before thresholds are met or exceeded.

#### **17.5.10.2 Social Connections**

Those who choose to move to the community to pursue employment opportunities in the project are likely to be welcomed by existing residents. The community is generally supportive of mining activities and those who choose to reside in their community. However, for most employees permanent resettlement to the study area is not likely to be an option, and significant resettlement assistance would be required from BMA.

There is likely to be continued disconnection between the study area residents and the non-resident workforce in the community. Non-residents are less likely to participate in community affairs and development. There is likely to be impacts on the non-resident workforce who may experience a level of disconnection with their families due to the time away. Equally, there is the chance that the worker's partner and family may feel a level of isolation associated with a DIDO/FIFO shift.

**Mitigation:** There are opportunities to develop better interaction between community members and those who are new to the study area or who choose to be non-resident workers. This may include the development of a settlement program to assist people moving to the area to integrate with the existing community. This would be beneficial to not only assist new recruits to settle with their families and create social connections, but may also assist with staff retention. Community days to help integrate non-resident workers and their families within the community would also work towards improving social connections.

To help improve family relationships BMA would seek opportunities to partner with and support services that provide support to families in crisis, particularly domestic violence and to provide training programs and counselling internally to staff in crisis to prevent escalation of issues. This would be at a regional level. BMA currently offers EAP services to its employees, a free and confidential counselling service to support staff during difficult times.

Involvement in inter-agency steering groups across our host communities ensures that BMA is up-to-date on issues impacting on social connections within the community. Involvement in these steering groups helps the Community Investment team to identify programs that are most in need of funding or resources, to better



support the needs of marginalised groups. Based on this information, BMA and its operational sites invest funds across a range of activities, including the likes of the Moranbah and District Support Services, which runs a Domestic Violence Awareness week program, and ELAM, which offers emergency accommodation for victims of domestic violence.

BMA would also investigate opportunities for a working partnership with a suitable service provider to establish an online network/forum for the partners of mine workers who work DIDO/FIFO to offer social connection, support, encouragement and access to support and services for families. This would also help non-resident workers to connect with their families during their rostered shifts. BMA currently provides funding for the families of those employees who form part of DIDO/FIFO workforces, by funding children's programs in the Mackay and Sarina communities through the Community Partnerships Program.

BMA would also evaluate and consider continued investment in community-based activities and festivals, such as Saraji Mine's Festival '73, Norwich Park's Day in the Park, and other whole-of community activities.

Through the Community Partnerships Program, BMA has, for a number of years, financially supported Rock FM, a not-for-profit and community-run radio station in Moranbah, to help better connect the local community. BMA's financial support enables the station to employ a programming and database manager who also supervises a training program for visually impaired volunteers. Rock FM's focus on local news, community announcements and entertainment tailored for Moranbah, as well as dedicated training programs for people with disabilities, helps to connect the community – cutting across age, culture and social backgrounds. BMA employees are also diversifying their skills and taking up volunteering opportunities available at Rock FM, with ten employees producing and presenting live shows.

BMA would also continue to pursue funds for the upgrade or development of community sports and recreational facilities such as the Moranbah Aquatic Centre and the Dysart Multi-Purpose Sports and Recreation Facility.

### **17.5.10.3 Social Order and Community Safety**

Non-resident workforces in particular, are often perceived by communities to be responsible for disturbances to social order and community safety.

Discussions with local services, including the Moranbah police, indicate the study area is experiencing a growing level of misconduct in the community which is often related to the non-resident workforce. Much of the negative behaviour is said to be a direct result of alcohol consumption.

**Mitigation:** To manage the cumulative impacts of the negative behaviour in the wider community it may be necessary to develop an agreed code of conduct amongst the various mining companies in the study area, potentially with input from government service providers and the Queensland Resources Council.

There may be opportunities for BMA to work with local service providers to both provide education and information to their workforces in how to manage shift work. BMA would also promote counselling contacts for the families of non-resident workforces, in addition to the confidential counselling services already offered to BMA staff.



Social order and community safety policies would be implemented in a similar fashion to existing Occupational Health and Safety (OH&S) policies. BMA and its contractors maintain low-tolerance standards towards those who exhibit behaviours that are socially unacceptable (such as drunk and disorderly conduct) or those whose behaviour is at risk of harming others. Any company or contract workforce would be made aware of the policies and procedures that are in place and the consequences of not meeting expectations.

The provision of an advertised contact point for the community and other mine staff would also assist the implementation of policies and procedures. This would enable the community to report any anti-social behaviour, should it occur. Anonymity would be provided to encourage discussion of behaviour without retaliation.

Behaviour on-site at the Peak Downs Area Accommodation Village would be monitored, and BMA would consider best options for monitoring on-site village behaviour, reporting issues back to BMA management, devising healthy lifestyle eating and recreational activities, encouraging against a drinking culture, and exploring opportunities for village residents to better contribute to local communities.

BMA's has a zero tolerance policy in place relating to drugs and alcohol for its employees, across all sites, while on shift. BMA employs independent consultants to randomly and regularly test employees for the consumption of drugs or alcohol. This policy discourages against heavy drinking and drug use.

#### **17.5.11 Cumulative impacts and Overarching Mitigation strategies**

Cumulative impacts have been considered as part of this social impact assessment and identified where relevant.

The project construction and operation would contribute to cumulative impacts through increased pressures on emergency services, health care and housing. Perceptions related to cumulative environmental issues associated with noise dust and vibration may also create concern for the community when combined with other nearby mining operations. Increased road traffic and the use of heavy vehicles on the Peak Downs Highway may also create additional impacts on the community, locally and regionally (details of increase vehicle numbers can be found in Section 13 of this EIS). Actual cumulative impacts and mitigation strategies associated with noise, dust, vibration and traffic are outlined in Section 20 of this EIS.

There has been increased government support for the management of cumulative impacts of mining on the Bowen Basin. In January 2009, Premier Anna Bligh announced \$27 million funding for projects within resource communities, including 15 projects in the Bowen Basin that will receive state government funding under the Sustainable Resource Communities Policy. In the study BMA is advocating that funding be provided for the expansion of childcare capacity and health staff accommodation and an upgrade of the Moranbah Emergency Services Centre.

The Queensland Government has also set ambitious targets through its *Toward Q2, Tomorrow's Queensland Plan*, which is to be achieved in partnership with industry and the community. BMA intends to play a part, along with other mining companies, in the Northern Bowen Basin and Mackay region, assisting the Queensland Government reaching its target of *Queensland being Australia's strongest economy, with infrastructure that anticipates growth*.



The Queensland Government's *Coal Infrastructure Program of Actions 2008* also identified the need to undertake industry-wide strategic planning for future growth in coal demand and production. In response, the Coal Infrastructure Taskforce is developing the Queensland Coal Infrastructure Strategic Plan for the provision of infrastructure to meet the coal industry's need to 2028. In line with this, BMA is lobbying for a Government funded regional economic and social infrastructure master planning exercise encompassing the Northern Bowen Basin and Mackay, taking into account the strong medium and long-term coal industry growth outlook. The aim of the exercise is to ensure that industry growth opportunities across the Northern Bowen Basin and Mackay are taken advantage of in a timely manner in a way that effectively facilitates growth and allows it to be managed in terms of its impacts.

BMA will continue to play a part in industry and government initiatives aimed at monitoring and managing the cumulative impacts of growth across the region.

#### **17.5.11.1 Social Impact Plans**

At this time there is no legislative requirement to produce a social impact plan (SIP). However, BMA will continue to identify mitigating strategies in partnership with government and other mining companies relating to the cumulative impacts of mining. This will be an important focus of the Sustainable Resource Communities Partnership and Leadership Groups, for which BMA has nominated to be involved.

#### **17.5.11.2 Social Indicators**

The management of social impacts, both positive and negative, could be improved by developing a range of qualitative and quantitative social indicators. Indicators could be developed using Government-generated quantitative data and supplemented with BMA-specific qualitative data. BMA's qualitative data could be shared with Government via the Sustainable Resource Communities Leadership Group.

These indicators could provide the framework from which future social impact management strategies are developed, in monitoring, auditing and managing impacts and benefits, and encouraging more sustainable communities. These indicators could:

- measure changes to the existing social baseline
- provide a measure of progress when working towards a desired outcome
- maximise opportunities for positive benefits in the community
- act as an early warning system for emerging issues
- identify effects that are wider-reaching than initially anticipated
- be diverse in the groups, individuals and impacts that are monitored.

While it is considered a Government responsibility to collect and collate social data, BMA could complement this data through ongoing consultation with project stakeholders. Social data (qualitative and quantitative) could also involve a review of social indicators used by other mining operations, national and international authorities on social impact monitoring, as well as local and regional government agencies.

Social indicators should be easy to interpret and monitor, and should be easily understood and valued by the community and stakeholders. The data required to assess indicators should be readily available and be measurable, quantifiable and reliable. The social indicators need to be relevant to the local and regional



communities, and must be in line with stakeholder identified values and aspirations for their communities. Importantly, the measurement of key social indicators should not mask or inhibit emerging or previously unidentified issues.

While agreed social indicators are best determined through ongoing consultation with stakeholders and the community, the range of indicators could include:

- Population: Population growth or loss, mobility, distribution, demography, ethnicity, and household characteristics
- Employment and training: Labour force participation, employment by industry, unemployment rates and characteristics (eg. gender, ethnicity, age etc), job creation.
- Income: equity, demand for income support and social assistance/government benefits
- Community cohesion: workforce integration, participation in community activities, volunteering rates, community values
- Education: School retention and participation rates, higher education support and opportunity
- Community safety: crime rates, community perceptions, police liaison and call outs
- Community health: demand on local services, demand on counselling including drug, alcohol and domestic violence services
- Accommodation and affordability: number of available properties for rent or purchase, median rents and sales, local ownership

### **17.5.12 Community Relations**

BMA's Community Investment and Community Consultation team will facilitate community and stakeholder contact and community feedback associated with the project, its construction or operation, and its cumulative impact when combined with other projects in the area. These teams will also work closely with the mine workforce, facilitating health and education programs and would actively engage with local and regional service providers. This activity may help to contribute to the identification of social issues early and prevent issue escalation.

### **17.5.13 Summary**

Overall the project is expected to have few direct social impacts on the study area however; it is likely to contribute to the cumulative impacts of mining on the community on a local and regional level. The most significant impacts of the project will be related to accommodation supply and affordability, and the increased demand for community services, often as a result of the tight residential property market.

An overview of the potential impacts and suggested mitigation strategies are provided below in Table 17.18, as well as information on BMA's current or proposed strategies to tackle potential impacts. The existing strategies would be applicable to the project as well as to BMA's existing operations. The table includes a matrix of the key stakeholders whose involvement would benefit the suggested activity.



The overview table considers:

- Potential impacts of the project
- The type of impact (positive, negative or neutral)
- Whether it will be of high, medium or low affect on the local and regional community.

BMA is committed to making a real difference in their communities by addressing key social challenges, the cumulative impacts of mining, and making a tangible commitment to improve liveability.

In the 2008 financial year, BMA supported local councils and governments by way of a \$14.8 million investment in:

- Council rates
- Special levies
- Subsidies and allocations, including the maintenance of local roads and airports and for other council infrastructure, facilities and water.

During the same period, BMA paid close to \$400 million in coal royalties to the Queensland Government.

BMA coal royalties paid to the Queensland Government increased significantly in recent years, as highlighted in Table 17.18.

**Table 17.18 BMA coal royalties paid to the Queensland Government, Q1FY 08 compared to Q1 FY09:**

BMA Royalties		\$	\$/T
Q1 FY08	(Jul-Sep 07)	94,712,373	6.79
Q1 FY09	(Jul-Sep 08)	363,999,848	24.46

In the 2008 financial year BMA's commitment to its host communities also included:

- \$3.25 million over the 2007 and 2008 financial years for legacy Landmark projects including the Blackwater International Coal Centre and the Dysart Multipurpose Sports Centre.
- \$925,000 for Skills for Growth to support a wide ranging approach to attract and retain skills in key mining areas through education and training initiatives.
- \$4.7 million for local site initiatives.

Through the BHP Billiton Matched Giving program, BMA staff, through payroll giving, cash donations, volunteering and fundraising activities, donated more than \$1.9million to not-for-profit organisations (across the study area, region, state and nation) in the 2008 financial year

BMA will continue to forge positive relationships with the community and all levels of government, enabling truly effective partnerships through shared responsibilities and benefits.

**Table 17.19 Issues overview, suggested mitigation and existing or proposed BMA strategies**

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
<b>Overall Project</b>								
Impacts to affected property owners		↓		An engagement strategy which focuses on developing agreed mitigation measures that ameliorate unacceptable impacts from the mining operations.	<ul style="list-style-type: none"> <li>BMA monitors impacts on affected property owners and their environment and favours regular dialogue and consultation to identify and manage any adverse impacts.</li> </ul>	●		
Impacts to adjacent property owners			↓	An engagement strategy which focuses on developing agreed mitigation measures that ameliorate unacceptable impacts from the mining operations.	<ul style="list-style-type: none"> <li>BMA monitors impacts on affected property owners and their environment and favours regular dialogue and consultation to identify and manage any adverse impacts.</li> </ul>	●		
Closure of the project would need to be managed over the long term to allow the community time to adjust.	→			The development of a mine closure plan at the stage of full operation would be advisable to best understand the project's operating environment and allow strategies to be developed for its eventual closure.	<ul style="list-style-type: none"> <li>BHP Billiton (BHPB) Community Standard STA.024 requires that input from community stakeholders is incorporated into Life of Asset planning and that a Community Relations Plan is developed and implemented and reviewed annually with stakeholders to ensure that positive impacts are enhanced and negative impacts are mitigated..</li> <li>BMA has a dedicated Community Investment Team focused on whole-</li> </ul>	●	●	



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					of-mine investment strategies in our communities.			
The community is relatively reliant on the mining industry and may experience negative impacts should growth in the region not continue.	↓			Active monitoring of potential negative industry impacts and open dialogue with industry and government regarding cumulative impacts	<ul style="list-style-type: none"> <li>▪ BMA supports the Mackay Whitsundays Regional Economic Development Corporation (MWREDC) and the Isaac Shire Council to investigate and pursue industry development and diversification opportunities for the northern Bowen Basin and Mackay.</li> <li>▪ BMA's Vice President Commercial Relations is a Board member of MWREDC.</li> <li>▪ In times of downturn (like the present), BMA works proactively with the Queensland Resources Council, state and local governments to identify social and economic community infrastructure projects that can be brought forward to help absorb workers retrenched from regional mines. This in turn minimises the impact on the community and ensures that workers are readily available in the region to enable BMA to quickly respond to a market upswing, minimising the lag between improved market demand and supply.</li> <li>▪ BMA supports all levels of government</li> </ul>			

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					in addressing the impacts of industry fluctuations.			
<b>Demographic Characteristics</b>								
Population may experience small permanent increase but greater non-resident workforce			↑	Continued partnerships with local and state governments and service providers to monitor any sudden or prolonged increase in demand on community services and infrastructure. A proactive housing and accommodation strategy.	<ul style="list-style-type: none"> <li>BMA will look to form a closer working relationship with PIFU, to provide confidential forecasting and workforce number projections to allow for more informed planning.</li> <li>Effective workforce planning aligned to staged or tiered growth projects, enables non-resident workers to transition from one project to another. This ensures, as much as is practical, that workplace and community impacts from the non-resident workforce are minimised.</li> </ul>	●	○	○
Increases in male, non-resident workforces would increase existing gender disparity.			↓	Present opportunities in policy and operation to encourage women into non traditional mining roles.	<ul style="list-style-type: none"> <li>BMA is committed to workforce diversity. The engagement of women is identified as an opportunity for the organisation. BMA has engaged a dedicated Senior Advisor Women's Employment to develop strategies and workforce flexibility options to increase BMA's representation of women and other underrepresented groups such as Indigenous and disabled workers.</li> </ul>			

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
Opportunities to provide employment to Indigenous community and increase cultural diversity within the workforce.		↑		Present opportunities in policy and operation to encourage Indigenous employment, training and enterprise opportunities within the community and the mine workforce.	<ul style="list-style-type: none"> <li>▪ BMA is developing a formalised engagement strategy focused on training, education and business development opportunities for Indigenous people.</li> <li>▪ Through its involvement in the QRC's Indigenous Affairs Committee, BMA is part of an industry-wide effort to increase Indigenous employment in the resources sector (QRC and state government memorandum of understanding).</li> <li>▪ Further to this, BMA sites already have Indigenous employment strategies in place.</li> <li>▪ During the pre-feasibility and planning stages of new projects BMA engages Indigenous contractors to undertake cultural heritage surveys, and as mentioned earlier, there is a strategy under development to engage more Indigenous specialists either as employees or contractors.</li> <li>▪ There have been a range of recent initiatives carried out to continue to build the strong working relationship between the Bowen Basin traditional owners and BMA:               <ul style="list-style-type: none"> <li>▸ The Goonyella Riverside Mine</li> </ul> </li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>invested more than \$400,000 in the development of cultural heritage garden to help create awareness around the lifestyle and culture of traditional owners.</p> <ul style="list-style-type: none"> <li>▶ South Walker Creek Mine invested more than \$138,000 in the Bidgerley Learning Centre as part of the cultural heritage management agreement between BMA and the Barada Barna Kabalbara and Yetimarla (BBKY) people.</li> </ul>			
Some increased demand on Indigenous community services			↓	Work in partnership with any Indigenous community service providers to facilitate transition into the community	<ul style="list-style-type: none"> <li>▪ BMA's Indigenous relations program, which encompasses Native Title and cultural heritage, is managed at a local level by mine site Environmental Departments.</li> <li>▪ BMA is developing a formalised engagement strategy focused on training, education and business development opportunities for Indigenous people.</li> <li>▪ BMA also has representation of the Queensland Resource Council's</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>Indigenous Affairs Committee, to better advocate for the needs of Indigenous communities across the Bowen Basin.</p> <ul style="list-style-type: none"> <li>Through its involvement in the QRC's Indigenous Affairs Committee, BMA is part of an industry-wide effort to increase Indigenous employment in the resources sector (QRC and state government memorandum of understanding).</li> </ul>			
Opportunities to provide employment across many cultures and nationalities and increase cultural diversity.			↑	Employment policies in place that do not discourage applications by those with different backgrounds.	<ul style="list-style-type: none"> <li>BMA is actively pursuing workplace strategies to increase cultural diversity. To complement this, the organisation is investigating the development of a Settlement and Migration Program to ensure workers from a range of cultures and nationalities are fully supported and integrated into Bowen Basin communities.</li> </ul>	●		
<b>Family and Household Characteristics</b>								
Small increases in the number of families within the community			↑	Continued BMA investment to encourage youth education and recreation programs.	<ul style="list-style-type: none"> <li>A key category of the BMA Community Partnerships Program is youth and recreation. As such, BMA currently funds three youth workers across the Bowen Basin in Moranbah, Dysart and</li> </ul>	●	●	



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>Blackwater through its Community Partnerships Program. To ensure continued support for youth in the Bowen Basin, BMA has just renewed this funding agreement with the Queensland Government's Department of Communities.</p> <ul style="list-style-type: none"> <li>▪ BMA is currently pursuing the development of additional recreational facilities for our communities to support youth - in Moranbah this includes the redevelopment of the Greg Cruikshank Aquatic Centre through BMA's Landmark Program.</li> <li>▪ Enhancing regional liveability is an important target for BMA. BMA has taken a strong advocacy role on behalf of the Bowen Basin Mayors Group to ensure Bowen Basin communities receive a fair share of the \$100M committed Sustainable Resource Communities Fund to commensurate with the percentage of coal royalties from the region.</li> <li>▪ From a cumulative perspective BMA will investigate the development of a childcare needs analysis to identify priority childcare needs for our Bowen Basin communities, particularly for the</li> </ul>			



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>Moranbah community over the next five years. BMA will work in partnership with the Department of Education, Training and the Arts to identify priorities across the following areas:</p> <ul style="list-style-type: none"> <li>▪ Hard infrastructure – upgrades and new facilities for kindergartens, before and after school care and childcare;</li> <li>▪ Retrofitting of people’s homes to compliance standards in order to increase Family Day Care availability;</li> <li>▪ Education, training and skills development for childcare employees, particularly to acquire Group Leader level qualifications - where there is the greatest shortage;</li> <li>▪ Affordable accommodation; and</li> <li>▪ Business skills diagnostics for the not-for-profit sector to assist in building capacity and business acumen.</li> <li>▪ The childcare needs analysis will help to inform priority areas for utilisation of the \$2 million allocated for childcare infrastructure upgrades in Moranbah from the \$27 million brought forward from the Sustainable Resource Communities Fund.</li> </ul>			



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
High income levels are provided however, management of these may not be sustainable		↑		Partnerships with financial advice and advocacy organisations are recommended.	<ul style="list-style-type: none"> <li>Through its <i>Community Partnerships Program</i>, BMA funds the Salvation Army Money Care program to support the provision of financial advice and support services across Bowen Basin communities.</li> </ul>	●		● Lifeline
<b>Education and Employment</b>								
Primary and Secondary Education - Managed growth within the study area provides stability and ongoing viability.			↑	Provide support and relationships with local schools to develop mutually beneficial partnerships.	<ul style="list-style-type: none"> <li>BMA invests around \$925,000 per annum in its <i>Skills for Growth Strategy</i> which supports apprenticeships and scholarships for primary and secondary school students, as well as work experience opportunities.</li> <li>BMA invested \$90,000 in establishing the Mining Industry Skills Centre, which is linked to the Moranbah State High School.</li> <li>BMA sponsors the Queensland Minerals and Energy Academy (QMEA), which enables Bowen Basin students to access a broad range of minerals and energy-related learning and career opportunities in the skilled-operator, trades and professional areas.</li> <li>Other <i>Skills for Growth</i> initiatives for students include a Cadetship Program and an Engineering Extension</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>Program.</p> <ul style="list-style-type: none"> <li>In addition BMA Sites actively engage with local schools and have implemented initiatives like Adopt a Teacher, to provide students and teachers with practical, real world projects, and mentoring support.</li> <li>Individual BMA Sites also support tertiary scholarships for local school leavers and partner with Bowen Basin schools on a range of other projects including recycling, greenhouse and leadership programs.</li> </ul>			
Tertiary Education - Managed growth within the study area provides ongoing viability.		↑		Provide support and develop relationships with local tertiary providers to develop mutually beneficial partnerships.	<ul style="list-style-type: none"> <li>Across the Bowen Basin, BMA has implemented strategies to support and develop relationships with local tertiary providers. This includes engineering partnerships with Central Queensland University and the University of Queensland, and support for Vocational Education Providers.</li> <li>Broadmeadow Mine is currently developing a childcare support package around education skills and training for childcare centres.</li> </ul>	●		
Increased opportunities for traineeships, apprenticeships and		↑		Continued support for skills development in the region.	<ul style="list-style-type: none"> <li>BMA Sites support and partner with local training providers like the MRAEL to source traineeships and</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
building skills in the community.					apprentices.			
Provides opportunities for women to enter training opportunities in non traditional roles.		↑		Ongoing encouragement of young females into mining opportunities is also recommended.	<ul style="list-style-type: none"> <li>The QMEA and BMA Sites pursue various initiatives for women, including a workshop for female school students on International Women's Day.</li> <li>Further strategies will be developed through the dedicated Senior Advisor Women's Employment position.</li> <li>BMA is also an active member of the Women in Mining and Resources Queensland.</li> <li>In 2008 BMA hosted two leadership development workshops for female employees, helping to retain and develop women in its workforce.</li> </ul>	●		
Sourcing construction workforce from the local community			↑	Policies and intentions related to the provision of local employment opportunities could be considered as part of any tender process for a construction contractor.	<ul style="list-style-type: none"> <li>BMA looks to recruit locally, where possible, which not only secures jobs for locals but eases pressures on housing and accommodation.</li> </ul>	●		
Sourcing operational workforce from the local community		↑		Advertising of positions available within the local community may encourage local employment.	<ul style="list-style-type: none"> <li>BMA looks to recruit locally, where possible, which not only secures jobs for locals but eases pressures on housing and accommodation.</li> </ul>	●		
Local employers may find it difficult to recruit as a result of	↓			Support, training and encouragement to the non working partners to participate in the local workforce. Provide assistance and support to	<ul style="list-style-type: none"> <li>BMA supports economic development and business skills training through its <i>Community Partnerships Program</i></li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
competition from the mines and the incomes that can be earned.				the provision of high quality, flexible childcare within the community.	(approx \$1M invested annually). <ul style="list-style-type: none"> <li>BMA will continue to work with government and local communities to determine childcare needs.</li> </ul>			
<b>Housing and Accommodation</b>								
Increased demand on housing within the study area and region	↓			<p>Ongoing consultation and engagement with local and government authorities to manage the impacts associated with housing availability and affordability to proactively meet future needs.</p> <p>Working with Council in the development of land for subdivision and sale</p> <p>Ensure that village accommodation meets demand.</p> <p>Ensure a variety of housing styles are considered to cater for the different members of the workforce and community.</p>	<ul style="list-style-type: none"> <li>BMA continues to engage with the Isaac Regional Council on all matters involving the community, including accommodation needs.</li> <li>While BMA does not play a direct role in providing affordable housing in the community, its commitment to providing housing for its own business needs reduces demand drivers on housing, therefore decreasing demand and increasing affordability.</li> <li>BMA has ensured it has sufficient land available in Moranbah to meet its accommodation needs for identified growth projects.</li> <li>This land is developed on an ongoing basis, with a strong focus on providing diversified housing options across the BMA accommodation portfolio.</li> <li>As BMA's current housing portfolio is weighted heavily towards large detached accommodation, its new housing developments will have a</li> </ul>	●		



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>stronger focus on semi-detached and medium density accommodation. BMA plays an important advocacy role with Local and State Government and industry, in helping to attract funds and additional resources for affordable and emergency housing to the region through the \$100M SRC fund. BMA's advocacy efforts are focused on attracting funds and resources for:</p> <ul style="list-style-type: none"> <li>▶ Emergency housing</li> <li>▶ Improved Government employee accommodation</li> <li>▶ Emergency services accommodation</li> </ul> <ul style="list-style-type: none"> <li>▪ BMA distributes regular housing updates to residents in Moranbah and Dysart to keep the community up-to-date on the company's efforts in reducing the strain on the housing and accommodation markets.</li> <li>▪ BMA's Housing Manager attends the monthly Isaac Regional Council meetings to enable two-way and timely conversations around housing projects and future needs.</li> </ul>			
Lack of housing affordability within the		↓		Work with council towards improved housing affordability	<ul style="list-style-type: none"> <li>▪ BMA works closely with third party providers and local government to</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
region					<p>ensure supply of developed land to the community.</p> <ul style="list-style-type: none"> <li>BMA has, and will continue to engage in commercially realistic agreements, to assist investors in developing rental accommodation.</li> <li>BMA provides share accommodation for trainees and graduates to enable them to live within the community.</li> <li>BMA, through contributions to local government in both special rates and payment of headwork charges, helps to relieve pressure on local government budgets, therefore freeing up funds to invest in affordable housing.</li> </ul>			
Impacts on temporary and tourist accommodation		↓		Where feasible, the majority of short-term contractors or visitors to the project could be accommodated in village accommodation	<ul style="list-style-type: none"> <li>BMA has contracts with a number of third party providers to ensure the availability of village accommodation to meet its short-term contractor requirements.</li> </ul>	●		
<b>Enterprise and Economy</b>								
Over reliance of local businesses on the mining industry		↑		Encourage activities and investment in the local and regional community that create economic diversity and encourages viability and stability that is not solely dependant on the mining industry.	<ul style="list-style-type: none"> <li>Through partnerships with local government, state government and Economic Development Organisations.</li> <li>Economic development and business</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					skills training is a key category of BMA's Community Partnerships Program			
<b>Community Infrastructure, Health and Services</b>								
Cumulative impact of increased demand on health services		↓		Working partnerships and support of local service providers.	<ul style="list-style-type: none"> <li>▪ Acknowledging that the provision of health services is predominately a government responsibility, BMA financially supports the provision of local doctor and dentist services across the Bowen Basin in communities of need (Dysart and Blackwater).</li> <li>▪ BMA also plays a strong advocacy role in helping the community obtain vital government services.</li> <li>▪ BMA is currently advocating the need for:               <ul style="list-style-type: none"> <li>○ An upgraded emergency care centre at the Moranbah Hospital</li> <li>○ The development of a community services hub in Moranbah, and</li> <li>○ The redevelopment of the Moranbah hospital (in years five) to cater to the forecast demand of growth.</li> </ul> </li> </ul>	●		



BHP Billiton Mitsubishi Alliance

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<ul style="list-style-type: none"> <li>▪ BMA Sites are proactive in investing in local health initiatives as part of the \$4.7M invested locally by Sites in 2008. Local health investments include:               <ul style="list-style-type: none"> <li>▸ More than \$40,000 raised for the National Breast Cancer Foundation through Saraji Mine's Festival 73 activities</li> <li>▸ \$70,000 invested in a fatigue management community seminar</li> <li>▸ More than \$70,000 invested in the Body Mind and Attitude BMA Festival – a bi-annual community event to promote health and wellbeing</li> </ul> </li> <li>▪ Many BMA employees raise funds for local, state or national health services and BMA matches those funds contributed through the matched giving program.</li> </ul>			
Cumulative impacts of increased demand on emergency services.		↓		Working partnerships and support of local service providers.	<ul style="list-style-type: none"> <li>▪ BMA plays an advocacy role to encourage Government to provide much needed emergency services. Current services being pursued through the \$100M Sustainable Resource Communities Fund include:               <ul style="list-style-type: none"> <li>▸ Upgraded housing for emergency</li> </ul> </li> </ul>			

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<p>services workers, and</p> <ul style="list-style-type: none"> <li>▶ New Moranbah and Nebo Emergency Services Centres.</li> </ul>			
<b>Culture, Heritage and Tourism</b>								
Availability to short-term and tourist accommodation would likely be main impact				<p>Ensure a variety of housing styles are considered to cater for the different members of the workforce and community to decrease the impact on accommodation.</p> <p>Encourage the development of tourism opportunities within the region.</p>	<ul style="list-style-type: none"> <li>▪ BMA encourages the development of tourism opportunities across the Bowen Basin through its membership on the Mining Tourism Trials committee and the development of additional regional tourism product - around \$2 million to fund the recently launched Blackwater International Coal Centre.</li> <li>▪ BMA's proposed new airport project would also support access to Moranbah and surrounds, as a tourist destination.</li> </ul>	●		
<b>Community Values, Lifestyle and Amenity</b>								
Community Identity				<p>Integration of non-resident mine workforce through community events.</p>	<ul style="list-style-type: none"> <li>▪ BMA sites sponsor a number of community and social groups and festivals designed to foster stronger community integration and participation.</li> <li>▪ BMA is investigating the development of an integration strategy (incorporating camp sponsorship of local events and buying local) in order</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					to improve the relationship and understanding between the community and non-resident workforce.			
Impacts to social connections for new workforce			↓	Introduction of a settlement program to assist people moving to the community area to integrate with into the community.	<ul style="list-style-type: none"> <li>BMA is currently investigating a Settlement Program.</li> </ul>	●		
Increase in the cumulative impacts on residential amenity such as dust, noise and vibration		↓		<p>A commitment that BMA will continue to be a good neighbour and actively monitor impacts to the study area's residential amenity.</p> <p>BMA to continue to provide information to the community on the process of monitoring noise, dust and vibration.</p>	<ul style="list-style-type: none"> <li>Community consultation activities recognised a need for information and education around mining and associated impacts on dust, noise and vibration, and as such, BMA has produced and distributed a range of environmental fact sheets focused on: <ul style="list-style-type: none"> <li>Dust – health impacts and monitoring</li> <li>Noise - monitoring</li> <li>Vibration – monitoring</li> </ul> </li> <li>As part of environmental baseline studies for new mine projects, BMA monitors for dust, noise and vibration.</li> <li>BMA is committed to ongoing monitoring and management of these environmental impacts.</li> <li>BMA works closely with impacted stakeholders to agree appropriate mitigation measures – for example, in some instances this has seen the</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					installation of air-conditioning installed in homes or schools.			
Impact on relationships of DIDO/FIFO workforce. Shift work can cause stress on relationships and exacerbate existing problems which places pressure on community services within the region.	↓			Partnerships and support of services that provide support to families in crisis, particularly domestic violence. Training programs and counselling available internally for staff in crisis to prevent escalation of issues Investigate opportunities for a working partnership with a suitable service provider to establish an online network/forum for the partners of mine workers who work DIDO/FIFO to offer social connection, support, encouragement and access to support and services for families.	<ul style="list-style-type: none"> <li>▪ A Lifestyle Representative is being considered for introduction into some BMA accommodation villages to not only schedule and host a range of healthy lifestyle activities at the accommodation village, but also to help the village residents better integrate with the local communities, encourage local purchasing and investment, and to keep across potential community and/or village issues and workplace stress.</li> <li>▪ BMA also engages with and supports local crisis management services, such as emergency accommodation, drug and alcohol support groups, and domestic violence support groups.</li> </ul>	●		
Ability for the community report negative behaviour.	↓			The provision of an advertised contact point for the community and other mine staff is encouraged (with a level of anonymity) to encourage discussion of negative behaviour.	<ul style="list-style-type: none"> <li>▪ BMA's community engagement team has community feedback lines in place for the public, for the purpose of raising concerns and providing feedback: <ul style="list-style-type: none"> <li>○ A 1800 telephone number which is manned during business hours</li> <li>○ An community feedback</li> </ul> </li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					email address			
<b>Health Services</b>								
Increased demand on health services as population increases			↓	Work closely with local health providers to ensure that services are not put under extreme pressure.	<p>BMA is bound by the Coal Mining Safety and Health Act &amp; Regulation. This requires BMA to have emergency capabilities based on site and a fire standard operating procedure, thereby relieving pressures on community emergency services.</p> <p>With relation to the project, BMA will have a Fire Tender that is fully equipped with fire fighting equipment, foam injection and on board rescue equipment. The site will also be equipped with a Self Contained Breathing Apparatus and other equipment required for vertical rescue, and general rescue and emergency management. A paramedic service will be on site during construction and operation.</p> <p>Through the Sustainable Resource Communities Fund, BMA is currently advocating the need for:</p> <ul style="list-style-type: none"> <li>An upgraded emergency centre at the Moranbah Hospital;</li> </ul>	●		

Impact Summary	Level and nature of impact			Potential/Suggested Strategies	BMA strategies currently existing or proposed to ensure	Matrix of Stakeholder Action and Involvement		
	High	Med	Low			BMA	Local and State Govt	Service Providers
					<ul style="list-style-type: none"> <li>■ The development of a community services hub in Moranbah; and</li> <li>■ The redevelopment of the Moranbah hospital (in five years).</li> <li>■ BMA currently supports some medial staff in the region by way of wages or subsidised rental properties. BMA also supports community wellbeing through its <i>Community Partnerships Program</i>, including Queensland Health's community programs.</li> </ul>			

Note: Level of impact indicates whether it is High, Medium or Low level impacts.

⬆ Identifies as a positive Impact ⬇ is a negative impact and ➡ indicates neutral impact or little to no change to existing conditions.