

Impacts and Mitigation Strategies:

The table below identifies and summarises potential issues, their area of potential impact and benefit and proposed mitigation strategies (both existing and planned). A risk assessment has been conducted using a standard Risk Assessment Matrix (example at the end of the table) which assists in understanding the likelihood and consequences of impacts.

Issue: Accommodation availability and affordability.						
Continued resource industry growth within Moranbah may exacerbate tightened demand for accommodation and decrease housing affordability, particularly for non-mine workers.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		
<p>BMA Existing and planned strategies:</p> <ul style="list-style-type: none"> • BMA is committed to providing suitable accommodation for its workforces. • BMA intends to offer the Caval Ridge Project workforce the opportunity to work under FIFO arrangements which is expected to reduce the demand drivers on accommodation and affordability within the Moranbah community. • BMA continues to engage with the Isaac Regional Council on all matters involving the community, including accommodation needs. • 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. • BMA has ensured it has sufficient land available in Moranbah to meet its accommodation needs for identified growth projects. This land is developed on an ongoing basis, with a strong focus on providing diversified housing options across the BMA accommodation portfolio. • As BMA's current housing portfolio is weighted heavily towards large detached accommodation, its new housing developments will have a 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: <ul style="list-style-type: none"> ○ Emergency housing ○ Improved Government employee accommodation ○ Emergency services accommodation • BMA has, and will continue to engage in commercially realistic agreements, to assist investors in developing rental accommodation. • BMA provides share accommodation for trainees and graduates to enable them to live within the community. • 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. 						

<ul style="list-style-type: none"> 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. BMA's Planning and Development Manager attends the bi-monthly Isaac Regional Council meetings to enable two-way and timely conversations around housing projects and future needs. 					
Consequences:	Ongoing/Manageable	Probability	Moderate, may occur	Comment	High impact

Issue: Existing and potential impacts on temporary and tourist accommodation						
There is existing strong week-day demand for short term, tourist accommodation as a result of cumulative demand from local industry which may be increased as a result of the project.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		
BMA Existing and planned strategies:						
<ul style="list-style-type: none"> BMA has contracts with a number of third party providers to ensure the availability of village accommodation to meet its short-term contractor requirements. Where it is identified that this supply is not sufficient, BMA will provide additional village accommodation. BMA's Eureka Accommodation Village located at Goonyella Riverside Mine is an example of how BMA has proactively established contractor accommodation in order to ease pressure on already stretched accommodation providers. 						
Consequences:	Minor	Probability	Moderate, may occur	Comment	Low impact	

Issue: Unplanned or sudden mine Closure						
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.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓	✓	
BMA existing and planned Strategies:						
<ul style="list-style-type: none"> 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.

Consequences:	High Impact	Probability	Rare	Comment	Low impact
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Issue: Social and Economic reliance on resource operations

The community and local business may become reliant on the mining industry and may experience negative impacts should growth in the region not continue

Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		

BMA existing and planned Strategies:

- BMA encourages activities and investment in the local and regional community that create economic diversity and encourages viability and stability that is not solely dependent on the mining industry.
- BMA supports local businesses and the Regional Council to identify and progress strategies to build diversified economies across the Mackay and Bowen Basin Regions. BMA has representation on the board of the Mackay Whitsunday’s Regional Economic Development Corporation and targets community investment programs to support business development.
- BMA contributes to a three-year Community Development Officer at the Isaac Regional Council through the Community Partnerships Program. This partnership is currently in its second year of operation.
- BMA has recently provided the Blackwater International Coal Centre with funds to engage a Business Development Manager to ensure it remains sustainable beyond BMA’s contribution.
- In FY09 BMA provided funds to childcare centres across Moranbah and Dysart to undertake a business diagnostics service to assist in building capacity and business acumen.
- BMA’s local community donations, sponsorships and partnerships program (guidelines is attached) provides a framework around BMA contributions. Underpinning this program are guidelines to ensure that initiatives and organisations that BMA supports do not become reliant on BMA funding and can ultimately sustain themselves.
- 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.
- 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 times of downturn, 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.					
Consequences:	Ongoing/Manageable	Probability	Unlikely	Comment	Low impact

Issue: Impacts to affected and adjacent property owners						
Construction and operation of the project may impact property owners.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓				
BMA Existing and planned strategies:						
<ul style="list-style-type: none"> BMA monitors impacts on affected and adjacent property owners and their environment and favours regular dialogue and consultation to identify and manage any adverse impacts. 						
Consequences:	Ongoing/Manageable	Probability	Moderate	Comment	Moderate impact	

Issue: Workforce diversity						
Opportunities to provide employment to indigenous community and increase cultural diversity within the workforce.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓	✓	
BMA Existing and planned strategies:						
<ul style="list-style-type: none"> BMA is actively pursuing workplace strategies to increase cultural diversity and will shortly release a Workforce Diversity Strategy. To complement this, the organisation is developing a Settlement and Migration Program due to be rolled out in FY11 to ensure workers from a range of cultures and nationalities are fully supported and integrated into Bowen Basin communities. BMA is developing a formalised engagement strategy focused on training, education and business development opportunities for Indigenous people. Further to this, BMA sites already have Indigenous employment strategies in place. 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. 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: The Goonyella Riverside Mine invested more than \$400,000 in the development of cultural heritage garden to help create awareness around the lifestyle and culture of traditional owners. 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.					
Consequences:	Ongoing/Manageable	Probability	Moderate	Comment	Moderate impact

Issue: Financial Security

The Project will provide above average incomes for its workforce. There are opportunities to encourage positive financial management practices and ensure economic sustainability during non-peak mining conditions.

Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓				

BMA Existing and planned strategies:

- Through its Community Partnerships Program, BMA funds the Salvation Army Money Care program to support the provision of financial advice and support services across Bowen Basin communities.
- BMA has partnered with a local financial services company to encourage good financial management practices by promoting saving strategies, including a structured savings program for apprentices at various mine sites.

Consequences:	Minor concerns	Probability	Moderate	Comment	Low impact
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Issue: Impacts and opportunities for Education

Managed growth within the community which supports tertiary education opportunities and partnerships with service providers as well as increasing availability of traineeships, apprenticeships and encourages skills growth within the community.

Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		

BMA Existing and planned strategies:

- 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 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 opportunities.
- BMA invested \$90,000 in establishing the Mining Industry Skills Centre, which is linked to the Moranbah State 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.

<ul style="list-style-type: none"> In addition, some 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. 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. BMA Sites support and partner with local training providers like the MRAEL to source traineeships and apprentices. 					
Consequences:	Ongoing/Manageable	Probability	Likely	Comment	High Impact

Issue: Increased opportunities for female employment						
Planned growth of mining in the community provides opportunities for women to enter training opportunities including non traditional roles.						
Level of Impact	High	Type of impact:	Neutral if planned	Comment:		
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓	✓	
BMA Existing and planned strategies:						
<ul style="list-style-type: none"> The QMEA and BMA Sites pursue various initiatives for women, including a workshop for female school students on International Women's Day. BMA is also an active member of the Women in Mining and Resources Queensland. In 2008 BMA hosted two leadership development workshops for female employees, helping to retain and develop women in its workforce. To support the attraction and retention of women in the BHPB/BMA workforce BHPB have recently increased paid maternity to 18 weeks. BMA will shortly also release a Workforce Diversity Strategy. 						
Consequences:	Ongoing/Manageable	Probability	Likely	Comment	High Impact	

Issue: Cumulative impact of increased demand on health services						
As operations continue to grow there may be continued demand on local and regional health services.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		
BMA Existing and planned strategies.						
<ul style="list-style-type: none"> 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). BMA also plays a strong advocacy role in helping the community obtain vital Government services. 						

- BMA is currently advocating the need for:
 - an upgraded emergency care centre at the Moranbah Hospital
 - the development of a community services hub in Moranbah, and
 - the redevelopment of the Moranbah hospital (in years five) to cater to the forecast demand of growth.
- 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:
- More than \$40,000 raised for the National Breast Cancer Foundation through Saraji Mine’s Festival 73 activities
- \$70,000 invested in a fatigue management community seminar
- More than \$500,000 invested in the Body Mind and Attitude BMA Festival – a bi-annual community event to promote health and wellbeing
- Many BMA employees raise funds for local, state or national health services and BMA matches those funds contributed through the matched giving program.
- BMA targets its support for community health initiatives based on workforce and community priorities. For example, feedback from the workforce (which is predominantly male) was for BMA to further develop support for Prostate Cancer research, awareness and education. BMA has recently entered into a three year \$100,000 partnership with the Mater Medical Foundation to assist in developing a vaccine for prostate council which is currently in clinical trial state.
- All BMA operations will shortly have site based Occupational Therapists who provide assistance for BMA’s workforce for work and non-work related injuries as well as providing ergonomic assessments and development of health programs at each site. This in turn reduces the excess demand on local services.

Consequences:	Ongoing/Manageable	Probability	Likely	Comment	High Impact
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Issue: Cumulative impact of increased demand on emergency services						
Cumulative impacts of increased demand on emergency services.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		
BMA Existing and planned strategies: <ul style="list-style-type: none"> • BMA will continue to engage closely with emergency services. • 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"> ○ upgraded housing for emergency services workers, and ○ new Moranbah and Nebo Emergency Services Centres. 						
Consequences:	Ongoing/Manageable	Probability	Moderate	Comment	Moderate impact	

Issue: Impacts to residential amenity						
Increase in the cumulative impacts on residential amenity such as dust, noise and vibration						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓				
BMA Existing and planned strategies: <ul style="list-style-type: none"> • As part of the construction and site environmental management plans there will be procedures in place to register and where appropriate to respond to complaints of potential environmental impacts resulting from the Caval Ridge Project. As part of the sites ISO 14001 EMS mitigation measures to address complaints will be implemented and revised as required. this system will include objectives, targets and performance criteria to manage significant environmental impacts within BMA’s control. • 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"> ○ Dust – health impacts and monitoring ○ Noise - monitoring ○ Vibration – monitoring 						

- As part of environmental baseline studies for new mine projects, BMA monitors for dust, noise and vibration.
- BMA is committed to ongoing monitoring and management of these environmental impacts.
- BMA works closely with impacted stakeholders to agree appropriate mitigation measures.

Consequences:	Ongoing/Manageable	Probability	Moderate	Comment	Moderate impact
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Issue: Population changes

Population may experience small permanent increase but greater non-resident workforce. There may be an increase in males within the region which may increase gender disparity. There may be an increase in the number of families moving to the area.

Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓			

BMA Existing and planned strategies:

- 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.
- BMA will continue to monitor immediate population impacts, and cumulative impacts, resulting from expansion and growth projects, through the annual Community Relations Planning process and ongoing growth planning.
- 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.
- 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 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.
- 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 Community Partnerships Program.
- 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.
- From a cumulative perspective BMA will soon commence 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;
- Education, training and skills development for childcare employees, particularly to acquire Group Leader level qualifications - where there is the greatest shortage;
- Affordable accommodation; and
- 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.
- BMA has identified issues with Autism related services and intends to raise the issues with other industries and the Sustainable Resource Communities Leadership Group. In addition to Autism related services BMA financially supports a number of specialist services in Moranbah.

Consequences:	Minor	Probability	Moderate	Comment	Low impact
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Issue: Demand on indigenous services

There are few specific indigenous services within Moranbah.

Level of Impact	Low	Type of impact:	Negative	Comment:		
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓		

- BMA Existing and planned strategies:**
- BMA's Indigenous relations program, which encompasses Native Title and cultural heritage, is managed at a local level by mine site Environmental Departments.
 - BMA is developing a formalised engagement strategy focused on training, education and business development opportunities for Indigenous people.
 - BMA also has representation of the Queensland Resource Council's Indigenous Steering Group, to better advocate for the needs of Indigenous communities across the Bowen Basin.

Consequences:	Minor	Probability	Moderate	Comment	Low impact
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Issue: Community identity and Social Cohesion						
There are few specific indigenous services within Moranbah.						
Level of Impact	High	Type of impact:	Neutral if planned	Comment:		
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
BMA Existing and planned strategies:						
<ul style="list-style-type: none"> • BMA is developing a Communities Strategy to identify and plan for opportunities to invest in the community and refine areas of priority. • BMA intends to offer the Caval Ridge Project workforce the opportunity to work under FIFO arrangements. • BMA is developing a Workforce and Community Cohesion Program to address social and community impacts to ensure cohesion between BMA communities and resident and non-resident workers. • The Program will include non-resident partner support programs. • BMA sites sponsor a number of community and social groups and festivals designed to foster stronger community integration and participation. • BMA has commenced the development of a strategy (incorporating camp sponsorship of local events and buying local) in order to improve the relationship and understanding between the community and non-resident workforce. 						
Consequences:	Ongoing/Manageable	Probability	Moderate	Comment	Moderate Impact	

Issue: Workforce Wellbeing						
Shift work, and in particular FIFO structured employment may impact on workforce relationships which may place demand on community support services in both local and regional areas.						
Area(s) of potential impact or benefit.	Moranbah Town	Moranbah Region	IRC Area	Mackay Region	Queensland	Australia
	✓	✓	✓	✓	✓	
BMA existing and planned Strategies:						
<ul style="list-style-type: none"> • BMA intends to offer the Caval Ridge Project workforce the opportunity to work under FIFO arrangements. • BMA is developing a Workforce and Community Cohesion Program to address social and community impacts to ensure cohesion between BMA communities and resident and non-resident workers. • The Program will include non-resident partner support programs. 						

- A Lifestyle Representative is being introduced into some BMA Accommodation Villages to not only schedule and host a range of healthy lifestyle activities in 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.
- BMA also engages with and supports local crisis management services, such as emergency accommodation, drug and alcohol support groups, and domestic violence support groups.
- BHP Billiton's Employee Assistance Programs (EAP) offer staff assistance with personal and work-related problems that can arise from time to time. Employees have direct access to professional and independent counselling, through a service that is free, voluntary and confidential. Counselling provides objective, skilled assistance with problem solving. Access to these services reduces excess demand on local counseling services

Consequences:	Minor Concerns	Probability	Moderate	Comment	Low Impact
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Example Impact Assessment Matrix:

Likely Consequence
1 – Severe impact – Issues outside the control of mitigation strategies
2 – High impact – High concerns – not able to be managed by mitigation strategies
3 – Ongoing but manageable concerns for community but managed by mitigation
4 – Minor concerns - effectively managed by consultation and mitigation
5 – No concerns – Positive

Probability
A – Almost certain to occur
B – Likely to occur
C – Moderate – possible it may happen
D – Unlikely to occur
E – Rare – very unlikely to occur.

	A	B	C	D	E
1	1	2	4	7	11
2	3	5	8	12	16
3	6	9	13	17	20
4	10	14	18	21	23
5	15	19	22	24	25

1-3	CRITICAL IMPACT
4-10	HIGH IMPACT
11-15	MODERATE IMPACT
16-25	LOW IMPACT