

# **The development of Moranbah: Stakeholder analysis**

**RESEARCH REPORT No. 3**

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***IMPACTS OF THE COAL MINING EXPANSION ON  
MORANBAH AND ASSOCIATED COMMUNITY***

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## Executive Summary

1. This report utilises stakeholder analysis to explore how the residents of Moranbah, Central Queensland, perceive social and economic impacts related to coal mining, including development options for the township, over the longer term.
2. A boom in coal prices since 2004 has contributed to significant investment in exploration, mine development and related infrastructure, much of which is concentrated in the area around Moranbah. However, reflecting the contemporary trend to atypical work schedules and fly-in/fly-out operations, expansion of mine workforces has far outstripped population growth. Moranbah is thus estimated to have 6,749 permanent residents and 1,915 non-resident workers who commute to the area for the days that they are on-shift and then return to permanent residences elsewhere for their days off.
3. Residents of Moranbah believed that social infrastructure and community services, economic and employment opportunities, and physical infrastructure, local leadership, amenity and environment, and a strong community identity were all positive features of their community. However, these were all under pressure from social and economic changes associated with the mining boom.
4. The boom was seen to have opened up a number of economic and employment opportunities and to have had some positive impact on community development and vitality. Again, however, it was seen also to have generated a number of negative social and economic impacts.
5. Reflecting its heritage as a township established to house mine workers, residents of Moranbah were not generally concerned about the expansion of mining, in and of itself, or about the entry of mine workers into their community.
6. The majority of negative social and economic impacts associated with mining were seen to flow directly or indirectly from three inter-related factors: the introduction of atypical work schedules throughout the mining industry, the shortage of locally available accommodation, and the dramatic expansion of non-resident workforces. Such impacts were seen to include:
  - a. Dramatic inflation in the cost of housing and accommodation. This led, in turn, to significant numbers of people living in sub-standard accommodation, commuting long distances to work, and/or spending an unusually large proportion of their income on accommodation.
  - b. The separation of families who would prefer to live in Moranbah but who were forced to live elsewhere while one partner commuted to Moranbah for the duration of their shift block, placing significant pressure on family relationships.
  - c. Social isolation among workers living in camp accommodation and/or spending large amounts of time commuting. This was believed to be exacerbated by the fatigue that all workers must manage when working 12 hour shifts.
  - d. Increased demand for counselling and other services from men seeking help to cope with living away from their families and friends and to cope with problems such as depression, relationship breakdown, and social isolation.

- e. Increases in alcohol/substance abuse and in family violence.
  - f. Declining capacity of local health, retail and other services to cope with demand.
  - g. Declining visual amenity due to growth in number of houses occupied by multiple temporary residents who did not care for gardens etc.
  - h. Increased risk and incidence of motor vehicle accidents.
7. Other negative impacts of the expansion of mine activity were seen to include:
- a. Increased income disparities between those who worked in the mining sector and those who either worked in less lucrative industries or did not work. This was exacerbated by the high cost of accommodation.
  - b. Shortages of labour in other industries that could not compete with the mining sector on wages. Again, this was exacerbated by the high cost of accommodation.
  - c. Increased dust and vibration.
8. Accepting the centrality of mining to the identity and economy of Moranbah, the major issues identified for the future of Moranbah were:
- a. Management of the large itinerant population and encouragement of more permanent residents.
  - b. Proposals to develop mines in closer proximity to the township and the perception that this would increase dust, vibration and noise pollution.

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## ***1.0 Introduction***

This report is the third in a series about issues associated with rapid growth in the coal industry and subsequent development pressures in Moranbah, Central Queensland. The research project on which these reports are based is entitled *Social and economic impacts of mines on Moranbah and the Mackay region*. It has been conducted by Central Queensland University with funding from the Queensland Department of Local Government, Planning, Sport and Recreation. In Report One statistical data provided by a number of agencies was used to identify potential and constraints for the growth of Moranbah. In Report Two the results of a survey of Moranbah householders' attitudes to coal mining and the development of their community was presented. Subsequent reports will detail the responses to specific tradeoffs about community development, the economic impacts of development, and the relationship to Mackay (the coastal regional city closest to Moranbah). The results of this third report should thus be interpreted in light of the other reports associated with this project.

This report utilises stakeholder analysis to explore how the residents of Moranbah perceive social and economic impacts related to coal mining, including development options for the township, over the longer term. A key focus of this stakeholder analysis was to identify groups that may be disadvantaged by development so that remedial or compensatory strategies can be identified. The report is also concerned with exploring opportunities to increase benefits at a local level; again, from the perspective of those stakeholders affected by development. It is important to recognise – in reporting on how stakeholders perceive the many impacts and opportunities, both positive and negative, associated with mining around Moranbah – that this report will document a number of conflicting and perhaps contestable beliefs and opinions. Nevertheless, it is these beliefs and opinions, together with peoples' values and aspirations, that shape their experience and response to change.

Whilst rapid growth provides economic opportunities, efficient planning is necessary to ensure that Moranbah's infrastructure and service industry providers are appropriately equipped to facilitate this growth; communities and local and state government have to make sure that Moranbah is viable and attractive, as communities are essentially in the position of having to compete for population and businesses because good communication and transport links make it easier for employees and services to be more mobile. This report seeks, therefore, to assist Moranbah Council, State Government, residents and regional businesses to identify and understand the economic and social opportunities currently and potentially associated with coal mining and, in doing so, to underpin the processes of negotiation, planning and decision-making that themselves underpin economically, socially and environmentally sustainable development.

## ***1.1 Background***

As outlined in Report 1 (Rolfe and O'Dea 2007), Moranbah is a key regional centre servicing the mining industry in the northern part of Central Queensland's Bowen Basin. It is located 170km south-west of Mackay within the Belyando Shire.

Moranbah was originally established by Utah Development Company during the construction of the Goonyella-Riverside and Peak Downs mines in the late 1960s and early 1970s. Employment is strongly based on the coal industry (the largest employer in Belyando Shire with 33% of the region's employed labour force) and cattle grazing (11.5%).

Moranbah represents an example of the continued development of the coal industry in Australia, with Mackay being another key centre that services the mines close to Moranbah and receives some of the economic and demographic impacts. A boom in coal prices since 2004 has generated significant additional economic benefits to the State, and contributed to additional investments in exploration, development and infrastructure. Current high levels of growth in the industry are increasing output, spending, employment and population in many regional areas. The Mackay region is expected to benefit from substantial increases in regional income and the boom has also generated a significant increase in activity in Moranbah, with both increases in activity at existing mines and the bulk of the new mining developments in the Bowen Basin taking place close to Moranbah or in the Belyando Shire.

However, shiftwork patterns used at mines within the Bowen Basin have contributed to a situation in which many employees and contractors are based outside of the towns closest to where they work, having little connection with those towns. Thus, Moranbah was estimated in 2006 to have 6,749 permanent residents and 1,915 non-resident workers who commute to the area for the days that they are on-shift and then return to permanent residences elsewhere for their days off (see Rolfe and O'Dea 2007). The accommodation needs of the growing mine workforce have consequently been catered for through the construction of temporary work camps, and there has been limited development of permanent housing and associated infrastructure. Planning is, therefore, necessary to ensure that economic benefits do accrue within the Moranbah economy, both directly and indirectly. Direct impacts can be realised through employment and purchase of goods and services from local businesses. Indirect benefits can result through the flow-on effects of an increase in spending and employment. The critical point to remember when considering the management of these impacts is that mining companies no longer regard themselves as the agencies with primary responsibility for planning and funding the communities in which their workforces are located. As one mine manager interviewed during the course of this research illustrated, companies see this role as neither in their own best interests nor that of the community:

“No company can be a sugar daddy; throw money at a brand-new kindergarten or services in town. We can't afford to build houses all over the place. To me there's a clear lack of desire to throw money at social issues like a million dollars here and a million dollars there to make the town more attractive; that's up to the government. We facilitate and do what we can but I don't see us throwing money at those sort of things any more. We spend money to help the school grow and we'll put money into it but we're not sugar daddies anymore... It creates the wrong culture as well; I come with a chip on my shoulder and bitch to [the company] that this and that is wrong and they have to fix it and I sit on my big fat arse and do nothing... Nobody can differentiate between [mining companies], so you can be the biggest sugar daddy in the world; that's not going to

help you. And we always know that we'll be judged by the worst performer; even if you do a great deal you don't differentiate from the pack... There's other ways of being at the top of the pack now; sustainability index for example... Queensland Resources Council and some of that stuff; try and take those performances with you. Being part of this social stuff, sustainability index, is what we should be doing; you can sell it to stockbrokers in London and analysts who put you in the Futsi sustainability index. Big money; very important ... to be in that."

This last point reflects an increasingly widely held view within the minerals sector that detailed social and economic assessment, combined with stakeholder consultation and participation and corporate social responsibility reporting can lead to improved development outcomes. The Ministerial Council on Mineral and Petroleum Resources (2004: 10) points out that effective engagement has the potential to:

- reduce the risk of delays and costs stemming from social conflict
- ensure compliance with relevant legislative frameworks
- contribute to quicker and smoother permitting and approvals processes, and
- reduce the risk of criticism and resistance from outside parties.

According to social impact assessors, widespread stakeholder participation is also necessary to assess potential impacts accurately due to the impact of affected peoples' own perceptions and aspirations on project outcomes (Burdge and Robertson 1998; Coakes 1999; Vanclay 2000). Despite this, there is generally little assessment of the impact of mines on particular communities. In Queensland, there are requirements for proponents of major projects to develop an Impact Assessment Statement (IAS) or Environmental Impact Statement (EIS) prior to development as a part of the approvals process. Although the assessment of potential social and economic impacts is included as a key requirement in the IAS (EIS) process, there are a number of potential limitations with this approach. These were summarised by Rolfe, Lockie and Ivanova (2005) as:

- (a) Impact assessments are typically only conducted for major new projects, and subsequent changes or expansions of existing projects are not covered,

**EPA comments on similar statements are:**

When an application for a mining project is submitted, the EPA makes a statutory "assessment level decision" to decide if an EIS will be required.

The essential difference between an EP Act EIS and non-EIS assessment process is that the EIS process provides additional opportunities for public input. An EIS allows anyone to provide comment and assist in the assessment of the proposal at the draft terms of reference (TOR) and draft EIS stages, in addition to the draft EA (mining) stage. The draft EA (mining) stage is common to all but the code-compliant applications. It allows anyone to object to the conditions included in the draft EA (mining), including a lack of conditions, and to have their objection heard and decided by the Land and Resources Tribunal.

There is a systematic approach to making assessment level decisions for mines, whether at green-field sites or expansions of existing operations. All applications for non-standard mining projects go before the Coordinated Assessment Committee of the EPA, which has the responsibility under sections 162 and 246 of the EP Act to make the statutory assessment level decision. The Coordinated Assessment Committee (the Committee) includes representatives from all divisions of the EPA and QPWS. The EPA advises these representatives are very senior and have experience in deciding the potential level of environmental harm (including social, economic, aesthetic and cultural aspects) and whether, for



existing operations, it is likely to be significantly increased. To ensure consistency, the Committee is required by law to consider the standard criteria in Schedule 3 of the EP Act. The EPA has published indicative EIS trigger criteria (such as the mining of 2 million tonnes per year of coal or ore) to provide guidance for all stakeholders on the types of projects that would require an EIS, but they are not restrictive or absolute, and ultimately the decision is made on consideration of the standard criteria in the EP Act.

- (b) Impact assessments are only conducted at the beginning of a project, and there are currently no mechanisms to conduct follow-up assessments,

**EPA Comments on similar statements are:**

An EIS and associated assessment report is used to generate an environmental management plan (EM plan), which is required by the EP Act to include, among other things, a description of the adverse and beneficial impacts of the mining activities and the environmental protection commitments as identified in the EIS. Those commitments then form the basis for the environmental authority under which a project operates. The proponent must also provide a Plan of Operations (based on the proposal that was assessed in the EIS) that includes an action plan for implementing the EM plan. The Plan of Operations and EM plan are working documents that can be amended if circumstances are found not to fit those predicted in the EIS. Furthermore, the Plan of Operations is regularly reviewed and resubmitted, and the EPA has a proactive compliance inspection program. So, in a very real sense, there is some follow-up monitoring of the findings of an EIS.

However, monitoring the EPA conducts is targeted at ensuring the ongoing mining is being conducted in compliance with the conditions of the environmental authority. Because the EP Act constrains the EPA's jurisdiction to the mining lease, the Agency's role in follow-up monitoring is limited to activities directly associated with the mining lease. There is no statutory mechanism for the monitoring of social and economic impacts indirectly associated with mining activity, such as on housing, which the legislation leaves to the routine governance of State and Local Authorities. Consequently, the perception that there is lack of follow-up monitoring arises from a limited knowledge of the constraints and intents of current legislation.

- (c) There are no follow-up evaluations or assessments to test the accuracy of predictions or modelling contained in an impact assessment, and

*As above*

- (d) There are a number of other variables influencing economic and social impacts (eg. changes in demographics, technology, commodity prices and employment relations) that can impact on local and regional communities, and which are not covered in an impact assessment process.

The issue of particular relevance here is the general neglect in assessment, reflected in the first point above, of the cumulative impacts of successive waves of development. This series of reports addresses this somewhat by focussing on the impacts of growth within the coal industry on a particular community rather than on the impacts of a particular mine or other project.

## **2.0 Methodology**

### **2.1 Social impact assessment (SIA)**

Social Impact Assessment is concerned with all issues that affect people, directly or indirectly, as a consequence of development or other planned interventions. According to Vanclay (2003: 6):

Social Impact Assessment includes the process of analysing, monitoring, and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.

According to the US Interorganizational Committee on Guidelines and Principles for SIA, social impacts may be defined as:

the consequences to human populations of any public or private actions—that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society (Burdge *et al*, 1995, p. 11).

Social impacts are better assessed from going into the field and collecting primary data rather than through secondary data on infrastructure and social services. Methods used to support this include family level surveys, focus group discussions and key informant interviews, participant observation, stakeholder consultations, and other direct data collection methods. The opportunities afforded by these methods to interact with affected groups is seen to reflect both the publics' right to participate in decision-making and their status as valuable sources of information on social impacts (Burdge *et al*, 1995).

Stakeholder analysis provides an approach to the collection of social data using such methods that is particularly focussed on documenting the values, interests, attitudes and aspirations of a defined group of stakeholders in relation to a particular issue. This information is then, ideally, fed back to those stakeholders to enhance mutual understanding and support informed negotiation and deliberation over development options (Dale and Lane, 1994).

## **2.2 Methods**

Over a four day period in September/October 2006, the research team conducted semi-structured face-to-face interviews in Moranbah with 24 key informants. The interviews were conducted at a location convenient to the informant, such as a workplace, and lasted between half an hour and two hours. In order to ensure that a good understanding could be generated of the spread of community perceptions, an interview schedule was developed based on open-ended questions that provided respondents maximum opportunity to raise the issues and concerns of most relevance to them. The researchers also approached as diverse a range of potential respondents as possible.

The informants were active (paid and unpaid) in local businesses, a local church, community organisations, education/youth (various positions), the grazing industry, a variety of health care services, mining (a manager, miners and union representatives), the police force, service groups, a range of sporting clubs and mothers/housewives.

Sixteen stakeholders lived and worked in Moranbah. Four lived in Moranbah and worked for mining companies. Two lived and worked on a cattle property in Belyando Shire. One person lived in the Shire on a cattle property and worked in Moranbah. The final informant lived in the Broadsound Shire and worked for a mining company.

Fourteen respondents had spent longer than 15 years living in Belyando Shire, one had spent between 10 and 15 years, and two people had spent 5 to 10 years in the shire. One respondent had lived in the Shire between two and five years, and five had spent less than two years living in the Shire. One informant did not live in Belyando Shire.

Three men and three women were interviewed individually, while four interviews took place with small groups of two to four people (three groups of women and one interview with two men). One interview took place with four female church members and another discussion took place with four male representatives of sporting clubs. Most informants were between 30 and 60 years of age (evenly distributed in thirties, forties and fifties), while a couple of stakeholders were in their twenties.

### ***3.0 Current strengths of Moranbah town and community***

#### ***3.1 Social infrastructure and community services***

Stakeholders generally were satisfied with the educational facilities available in Moranbah. There were two primary schools that were very well regarded (well equipped, good programs). Most stakeholders were happy with the high-school as well (subject choice, variety of school excursions, worked well together with the primary schools). There was a TAFE which offered courses for students and adults including early childhood development, engineering, hairdressing/beauty services. Informants said:

“I’m very happy with the school... Both the primary and secondary [her colleague agrees with her], I have children in both of them... Businesses and mines do get involved in school; not only money but engineers involved with robotics coming in and helping the teachers in the class. The schools themselves work very well together; [daughter] moving to new class this term, she’ll be going once a week to high-school to do science experiments at high-school [she’s at primary school].”

“When my son started Grade 8, he’s in Grade 11 now, but now they [Grade 8] got TAFE and school based traineeships and apprenticeships. A lot of that sort of stuff didn’t exist 10 years ago... There’s a Japanese trip going to Japan [students studying Japanese], another group went to Greece with ancient history; quite diverse. For the last holidays they did a bar course, a group of kids, my son was included; up North out of school for a week.”

Some stakeholders were happy with entertainment facilities in Moranbah which included a cinema, community centre, and swimming pool. People were particularly happy with the variety of sports in the town. Some stakeholders said that there was enough to keep children occupied. One reported:

“I like living here, [good place to] bring up children, enough stuff for kids to do. If you live in a bigger place hard to get there so they can’t participate in those things... Swimming, hockey, art... If I was in a city I would have to travel 30-45 minutes taking him [son, to arts].”

Recent developments in social infrastructure and facilities included:

- The child care centre extended its opening hours and another one was planned;
- A funding submission had been submitted to employ a project worker to develop a business plan for a neighbourhood centre;
- The high-school program was more diverse than 10 years ago; and
- A skills centre (minerals and energy academy) was planned.

### ***3.2 Economic and employment opportunities***

Many stakeholders said that there were many jobs to choose from for people coming to Moranbah. The mines and industries/businesses associated with the mines employed many people and people earned high wages. One of the informants said:

“I think we’re lucky; my husband earns a lot of money. I’m not complaining, anyone that gets a job out there [mines] is lucky.”

One stakeholder said that the high incomes offered people choice in parenting styles; one of the partners (usually the woman) could stay home and look after the children as their partner earned enough for two. Although some women and children lived in Mackay while the men stayed in Moranbah during their shift blocks, other families decided to keep the family unit together (and reduce the travel time of the men) by settling in Moranbah.

### ***3.3 Physical infrastructure***

A stakeholder said that Moranbah had become less isolated over the years. The travel time to Mackay had decreased dramatically (improved road) and regular flights from Moranbah were also available (primarily, to cater for the commuting miners but available to anybody). This meant that people were benefiting from employment in the mining industry while at the same time the amount of dust and visual impacts of mining were minimised, according to a stakeholder, as the closest mine (underground) was 20-25 km from the town.

Some stakeholders were happy with the levels of shopping and services available in Moranbah and many did not travel regularly to Mackay or elsewhere to shop. One informant said:

“Industry-wise we don’t need much more; I think we’re pretty self-contained. Not much you need to go to Mackay for or if you want to get something from Mackay you can get it delivered.”

One of the stakeholders said that the local businesses (a bank, chemist, shops, the unions) donated goods/money to the community. Two extremes can be identified on the ‘satisfaction with local shops’ scale; on the one hand there is the shoe shop which received a lot of praise from many stakeholders (quality, quantity, variety, innovative owner and prices not too bad). On the other hand, many stakeholders commented on the lack of a butcher. Virtually all stakeholders were dissatisfied with the supermarket as well (compared to Mackay), but one of the informants said that quantity and variety were still better than at Clermont or Dysart.

### ***3.4 Local leadership***

Many stakeholders were happy with the local government. According to one:

“Council at the moment is fairly strong in trying to develop links with the school, and the community in different ways... One of our students is

down there today working on the 'Mayor for a day' program; she shadows the Mayor around the town. They're [Council] very supportive. They have community meetings on issues; committee. They hold public meetings like water, housing; discuss those issues, open to suggestion."

One of the stakeholders said that the attitude of the Mayor helps in getting more water allocated to Moranbah.

### ***3.5 Amenity and environment***

Some stakeholders were generally happy with the rain and water allocation levels of the last 12 months, and the presentation of the gardens in Moranbah. They reported that the town is not as green as it used to be but is still greener than Dysart and further south, and many people took pride in their homes/gardens. As one of the informants noted:

"In Brisbane you can't even wash your car and here we can still water our lawns."

Many stakeholders said that Moranbah was a safe town, which attracted young and old. Some older people were believed to retire in Moranbah because of the safety aspect. According to a stakeholder active in real estate:

"We had people from the Sunshine Coast come back here after being robbed there, big city; you have to lock your front door while you're at the back. We don't have to do that here, safety is an issue for older people... Two retired people, lived in the Sunshine Coast and came back; bought a house from me again."

Even though the amount of traffic in the town was believed to have increased significantly, many stakeholders said that children could still walk and ride between school and home safely on their own, which appealed to parents with young children.

### ***3.6 Community identity***

Stakeholders reported that they were still able to enjoy the small town feel of Moranbah despite its rapid growth. People were seen as friendly, proud of their town (especially long-term residents) and welcoming. One of the stakeholders said:

"Happy little community. The ones that whinge, not many but you get those, they're probably bored and need a hobby. Socially hard sometimes to get things to do for your family [entertainment] but if that's the worst problem we've got then we're doing pretty good."

There was a small but growing group of senior citizens. As Moranbah was only 30 years old at the time of this study, having three generations of the same family was a relatively recent phenomenon. Some stakeholders said that this development has given Moranbah more status as a 'real' town.

## ***4.0 Benefits of the mining boom***

### ***4.1 Economic and employment opportunities***

Mining provided a livelihood to many people in Moranbah. There were extra incomes because of the mining boom and an increase in the number of people in town. The incomes of coal miners were high, the takings of existing local businesses were increasing, developers and house owners were cashing in on increased house and rental prices, and jobs were being created (in the mines themselves and in businesses/industries associated with the mines, including apprenticeships and traineeships). One stakeholder reported:

“Job opportunities have [grown] 200% more; very positive impacts for local people. Mainly that and increase in business. If there’s no mine, no jobs; Moranbah will be a ghost town... The best incomes are in Moranbah. Engineers in Brisbane; my son earned \$60,000, comes here and earns \$130-150,000... I’ve been offered a job in Brisbane when I sold my business [in Moranbah] but I said it’s not going to cover what I want, the lifestyle I like.”

### ***4.2 Population growth and diversification***

A number of stakeholders believed the population of Moranbah to be increasing rapidly. Although, as Report 1 shows, actual population growth is relatively modest due to the overwhelming majority of new employees recruited to the area continuing to reside elsewhere, the impacts of growth were still evident in a number of community groups and events. One of the stakeholders, for example, reported that:

“There has been a huge change in the Arts Council last year. One or one and half years ago you’d get 10-12 people, now 300 people; really increased. More different people in town, getting behind different things.”

The town was for the first time retaining retirees, albeit in small numbers. As another stakeholder reported:

“The average age of person in Moranbah is only 22, a few years ago it was 15. Now there’s people like me, that are grandmothers, living here; people that stay here. The town is only 30 years old and at the start everyone that was here was young but now people stay on and make it more a town.”

### ***4.3 Community development***

Stakeholders believed that mining companies had contributed to the development of the town through:

- Donations (goods or money) to clubs/communities/groups;

- Educating the community (excursions at the mine sites, helping to teach robotics at the school, training of mine employees);
- Building new houses;
- Lending out equipment to Council and community groups; and
- In the case of BMA, paying community organisations for the hours BMA employees work for those organisation in their own/free time (match/volunteer program/scheme).

Larger community events were seen to be well supported because there are both more people, and a greater variety of people, living in town. One of the stakeholders reported:

“Mainly the major mines like BMA or even the smaller ones or industries that support the mines, all donate quite freely into infrastructure; with the ABA [Australian Breastfeeding Association] they would give donations to councils to go to conferences or library resources or kindy or kids going to sporting things. Those companies and unions are all the time approached for money; a lot of service groups in the town fundraise a lot and donate the money to whatever.”



## ***5.0 Negative impacts of the mining boom and other development issues***

### ***5.1 Shift patterns and demographic change***

Many of the negative social and economic impacts associated with coal mining in Moranbah were perceived to be directly or indirectly related to the shiftwork and residential patterns favoured in the contemporary industry.

During the 1990s, mining companies shifted from conventional five day rosters to a variety of 'block shift' arrangements involving 12 hour working days, extended working weeks followed by extended periods of time off, and a mix of day and night shifts. At the same time, mining companies came increasingly to view the accommodation and social infrastructure needs of their employees as lying outside their own sphere of responsibility, leading to less emphasis on the development of 'company towns', the increased usage of various forms of fly-in/fly-out operation, and a preference for government and other entrepreneurs to supply housing and other services.

As the following sections explore in more detail, residents of Moranbah associated these changes with a variety of issues including a decline in the ratio of permanent to temporary residents, increased long-distance commuting, traffic accidents, negative pressures on family and other relationships, inflated accommodation prices, social isolation, increased demand for counselling and similar services, crime, and so on. One of the stakeholders reported:

“One of the major problems we have in towns like Moranbah is shift work. We have a permanent population of 7,500 and a temporary population of 3,500; camps, caravan parks. We used to have a much higher ratio of permanent population until four-on, four-off shifts started, it's going back before any development started. Shifts encouraged mum and the kids to move to the coast and dad to work out here four days on, four days off which means they're married for three or five days out of every eight. My son is one of them. I don't agree with them. They built a house in town [Mackay] and she lives there with the child, soon to be children, [he] moves backwards and forward... But that's fairly common, that's what shift work has done. Social issue; a lot of families don't live as families now. Will have a huge social impact for years to come.”

### ***5.2 Income disparities***

Economic hardship is not unknown to Moranbah. Contraction of the mining sector in the early 1990s was associated with the closure of local businesses and considerable industrial unrest. Even in the current environment of high employment and labour shortages there were reported to be significant instances of economic hardship. In recent years, the high cost of accommodation in Moranbah ensured that anyone who was not earning a substantial income was likely to be vulnerable to economic hardship. Such people may include non-mine employees, welfare recipients, and so on. As one service provider stated:

“We do have a number of people who are very poor. People tend to think that all miners get paid very high wages. Not all of them do get paid very high wages and we get lots of single mums here and a lot of people who battle with high house prices and locals working in Coles etc. they can’t afford to pay what the miners pay... The Department of Housing sends people here; they have a few houses. I’ve had people come through here with help for resumes and looking for work. They come from elsewhere. [And] we have quite a few [local] people who are in need of emergency finance assistance.”

### ***5.3 Labour shortages***

There was a shortage of tradespeople in Moranbah, with claims that residents and businesses ‘without any connections’ were forced to wait a year for a builder and even longer to get a washing machine repaired. One of the stakeholders reported:

“Carpenter, electrician, all that is very hard to find. We use them seven days a week with my business, very hard to get because the mines grab them and they earn better money.”

The cost of trade work had also increased due to competition for tradesmen who generally could earn more money working for mining companies (as contractors). Contractors also had trouble keeping staff, with many using the experience they got with a contractor to gain a job with the mines. Mining companies were short-staffed as well with reportedly high turnover as workers shifted between mines.

All businesses/clubs/organisations in Moranbah, as well as graziers, had difficulties attracting and retaining staff due to the high cost of living compared with other rural towns and the competition for labour with the mines. Many employees in non-mining businesses with partners working in the mines followed those partners to other localities as they pursued opportunities in the more highly paid mining industry. One of the stakeholders said:

“Green-keeper; he wanted to come for \$1500 plus house [per week]. We just can’t afford that. Our club is getting on well but not too extreme to justify \$2000 a week, so we had to employ another young lad; he’s working under another person [green-keeper] who works in the mines. He does what he’s told, but any moment he can decide to drive trucks in the mines for \$2000 a week. We can’t get a green-keeper at the club because to offer him to get out here we have to offer mine wages and we can’t do that.”

Despite the increased availability of employment in Moranbah, it was believed that new jobs were concentrated in the unskilled and semi-skilled categories, leaving both a shortage and a narrow range of skilled employment opportunities. This was of particular concern to the partners of miners moving to Moranbah who may not be interested in unskilled/semi-skilled positions or have the specific education and experience required for the limited skilled and/or professional positions.

## ***5.4 Housing***

Demand for accommodation was reported to be substantially higher than supply; a situation that contributed, not surprisingly, to rapidly increasing rental and purchase prices and corresponding falls in affordability:

“The wife of [...] said what’s going on there as she used to live there; shared accommodation. They were paying 200-something a week rent there. The landlord ... put aircon in and freshened the place up. Rents will be moved from 300 to 500 bucks a week. They reckon the companies will buy them up and put their men in and they’ll pay that money; they don’t care. But the average Joe can’t pay.”

This reflected a widespread view that demand for housing, coupled with comparatively high incomes in the mining sector, were shutting non-mine employees and others out of the accommodation market. However, stakeholders were also quick to point out that the cost of accommodation was also causing difficulty for many working within the mines. According to one woman working in emergency accommodation:

“It’s getting harder and harder for people who don’t work for the mines to be able to afford to live here; rents starting at \$500 a week... \$250 for a room, and pay electricity extra. People like [working in] local supermarket, local businesses can’t afford those types of rents. Even guys working for the mines if they are the sole provider for the family even for them it gets difficult; if they pay \$500-600 per week rent out of take-home pay and also have to pay for petrol, on average one hour round trip to get to and from work, and around \$200 for food and still have to pay electricity, phone etc. Some guys have families elsewhere and they pay \$165 per week if they’re lucky enough that a mine subsidises a room in a camp, but they still got their petrol and rent where their family is living and still have to support that family.”

While, in the past, new mine workers had access to subsidised rental accommodation, at the time of this study, the majority of workers needed to take care of their own accommodation. Transit houses were available for senior professional and managerial staff, but these had to be vacated within 15 months. Stakeholders reported that only one mining company still provided subsidised housing for all workers. The immediate need of workers to find accommodation meant that they had little choice but to pay the going rates. The colleague of the accommodation worker quoted above argued that:

“Mining has encouraged people to buy \$300-400,000 homes in a town where maybe in five years time [those houses will] not be worth anything.”

The first woman again:

“That is very scary but when you’re in a transit house you’re locked in; you need to look for buying, renting or building here. If you don’t do any of these things you’re out in 15 months... I’ve worked with homeless in Victoria; people with multiple mental health issues, drug/alcohol issues as reasons why they are homeless. But here, the majority, very few have those issues as reasons why, just simply not being able to afford.”

Low cost accommodation options were also undersupplied. There was believed to be a shortage of public housing and of units/cottages suitable for the aged. All caravan parks were reported to be full. Some newcomers/prospective workers were living in their cars (and using the bath house at work to shower and change); others were living in tents on properties, in the bush around the mines, or on the banks of creeks. There were instances reported of three or more families living in one house. Adult children and apprentices could not live independently in Moranbah due to the availability and cost of accommodation. According to one of the stakeholders:

“The problem with apprentices is they can’t afford \$600 rent, even if they share with three. They can’t share a flat together as there’s no flats available. I have an 18-year old daughter and she has a couple of girlfriends and they would like to live on their own but can’t in this town; you have to leave town or live with me for the rest of her life, the thought of it...”

Other issues reported were:

- A shortage of builders;
- A lengthy leadtime to get approval for buildings and subdivisions;
- Inadequate land set aside for housing because coal reserves run around most of Moranbah; and
- People continuing to occupy social housing even following the commencement of a well-paid job (as they are initially given housing on legitimate grounds, they cannot be evicted).

Stakeholders reported that when Moranbah first came into being there were few houses and large caravan parks, and people fought to get into houses. They got their houses; miners could rent cheaply off the mines. In the late 1980s, the mines allowed them to buy the houses. More recently, people have been taking advantage of the latest boom by selling their houses in Moranbah and moving into caravan parks and/or commuting between Moranbah and the coast. People who cannot afford to buy a house for the increased asking prices were reportedly finding it harder to get into budget accommodation, e.g. people working for local businesses, who would previously have found accommodation in caravan parks, were no longer able to do so.

Many families were reported to live away because they could not find or afford housing in Moranbah. This impacts on participation rates in community organisations and sport etc. One of the stakeholders said:

“I know a lot of people living in camps [would] rather have their wives and kids here. It’s the new generation I’m talking about because shift work drove a lot of Moranbah residents to live in Mackay while dad is working

in the mines. But the new people in town can't get houses here because they can't afford it or can't buy them; massive shortage. Has always been a shortage of housing here but now dramatically increased because of the coal boom. A house sold for \$150-200,000 two years ago is now fetching \$350-400,000 [and] the new houses are costing \$500-600,000. If you gotta spend half a million on a house, would you spend it in Moranbah?"

Newcomers who did own or rent a home in Moranbah were believed to often be couples where both parents needed to work to afford the housing, which contributed to unmet need for child care.

### ***5.5 Temporary residents, isolation and dislocation***

Camp accommodation was reported to be expensive and in high demand. This meant that some shift workers leaving for their days off were required to clean out/move out for those days while someone else used their room.

Stakeholders reported that work camps were not good for the emotional wellbeing of the workers; a growing number of camp residents were believed to feel isolated and to be experiencing family problems. One of the stakeholders said:

“Community connectiveness and social isolation... Not only women [wives] and children but single young guys that come here and live away from their friends... A lot of those guys crave company, not all sexual stuff.”

Her colleague:

“Blokes do different things than girls; if you don't play sport and just go to work you don't have any connections, that's [sports] how they [men] meet and mix with people. Men mix differently [than women]; they joke but don't make a proper connection with people. Can have a long impact.”

Participation in sport and other activities for socialising among men were believed to be curtailed by the shiftwork system. Since people were on a number of different shifts/rotations and often spent considerable time commuting, sporting club memberships and socialising in general both decreased. At times, in fact, even colleagues from outside their own shift groups were only seen on workers' 'pyjama days'; that is, the half day period when they moved from day to night shift.

Negative impacts associated with a large itinerant population were also experienced by other residents of Moranbah. There was a belief, for example, that drugs were freely available in the work camps and that the camps themselves were ugly.

Outside of the camps, it was stated that mining companies and contractors bought or rented houses in suburban streets in which they would accommodate up to five of their shift workers to share rent. During the day, such residences were reported to be quiet, but in the afternoon and evening there were often many large vehicles (4WDs/utes) taking up the road, parked on the footpaths and nature strips etc, while

some shift workers were reported also to make noise at night. The yards and gardens within such residences were usually dead since the workers living in them did not regard them as their permanent homes and were not likely to feel responsible for non-essential maintenance. This created 'an eyesore' for permanent residents. Mines also rented out transit houses to their foremen/shift engineers who were waiting for new houses to become available. These workers were reported to move in and out with short interval stays, exhausting the permanent residents who liked to care about their neighbours and to include them in the life of the neighbourhood.

Some stakeholders believed that temporary residents put a strain on the services in Moranbah as they were not taken into account when water and electricity were allocated, and they raided the scarce resources at the supermarket. On the other hand, other stakeholders said that transient people did not spend their money in Moranbah and that the only groceries they bought were instant foods like 'Lean Cuisine'. Children and teachers kept coming and going, especially at junior levels. Some children were reported to stay as short as three weeks. One of the stakeholders (a teacher) said:

"All year there's been new children in the classes; I'm teaching three classes and all year there's been children coming and going. One went to Singleton; the father had a good job at the mines there and the whole family moved with him. Others moved to Mackay while dad stays here, two little girls have arrived at the end of the last term. My grandson is in Grade 1 and he had three teachers in one year, not quite normal. Whether they come with their husbands to work in the mines? I don't think you would find that in cities, to have three teachers in one year."

A teacher, however, reported that many parents did not necessarily see this as an issue and believed their children to be quite used to the ongoing changes.

The number of people that permanent residents do not know in Moranbah had become significant (contractors and all the extra people involved with the mines), where previously permanent residents tended to know most of the people in the town.

Dislocation of families (shift workers living in Moranbah during their shift blocks and going home to their partner/children living in another town like Mackay on their days off) reportedly puts a strain on relationships. Breakdown of marriages and of relationships between parents and their children and other relatives was believed to be more prevalent than before. One of the stakeholders said:

"My brother they [with his wife] have two young children. They had their own house here and when the boom came they sold their house for \$300-400,000 and moved a few years earlier to Mackay than planned because they could sell their house at a really good price. He had a gap of 6-7 months where his financial adviser advised to stay working at the mines so she moved and he had to find somewhere to live and asked us to put him up. Even though he's my brother you don't want to have someone living in your house all the time. He travelled backwards and forwards on his days off. The impact on them was quite big. After five months she said he

has to come home. He was too tired to do anything with the kids when he came home....”

Stakeholders reported that many people who moved out of Moranbah were not happy and wanted to come back but could not due to the price and availability of accommodation. Commuters were reported to drive home tired after their block of long shifts; some of them getting so sick of travelling that they leave their jobs in Moranbah and get jobs closer to their families.

Stakeholders believed the reasons for Moranbah having so many transient families included:

- the shortage and price of accommodation;
- the long break miners have on their rostered days off; and
- the fact that a lot of the work is contract based now; every six months the mines pick the cheapest sub-contractor.

Sometimes, entire workforces were turned over and employees shifted from contractor to contractor. The mining companies did not require or encourage the miners to live in Moranbah. According to a group of four stakeholders:

“The companies really aren’t doing the right thing. They don’t try to make them [miners] stay; when they advertise jobs they say Moranbah is only two hours from Mackay/Whitsundays, why not say you can live in Moranbah the oasis... It’s not a bad town to live in; we quite like it, we have no intentions to leave... If the men are willing to work in the mine and earn all this money the family should live in the town and support the town, it’s not that they have to go to Mackay for work [partners] because there’s plenty of jobs in Moranbah; the hairdresser next-door is desperate for a senior hair stylist....”

## ***5.6 Social pressures***

Because of the seven day mining operation rosters, for workers many weekends were spent at the mine sites and not with families. This resulted in mainly women attending social events while their partners were either working or tired/sleeping. Stakeholders reported that during their 12 hour working days miners left home before sunrise and came home, tired, at night. Long working hours and fatigue were believed to impact negatively on communication within households. Families were forced to be quiet in order to allow shift workers to rest. Family life (including sexual relationships), social interaction and exercise were all believed to suffer. One of the stakeholders stated that:

“So many families don’t live here and even if they do, if you go out you have a whole lot of women at the barbeque as their husbands work. And functions at schools for the kids... At the school-functions the husbands were working or sleeping... They’re tired when they finish their shifts.... People in hospitality etc. do 12 hour shifts all the time but you’re tired; you don’t want your small children around you all the time, your sex life suffers.”

The move to block-shift rosters had allowed many families to leave Moranbah and settle in coastal towns like Mackay with the working partner commuting back to the mine. The high cost and unavailability of housing made it harder for new families to move to Moranbah, even if families wanted to stay together. Increasing numbers of men were seeking counselling to help them manage living away from their families and friends and to cope with problems such as depression, relationship breakdown, and social isolation. It was also claimed that there had been increases in alcohol/substance abuse and in family violence. The same stakeholder said:

“Some of it [domestic violence] I guess is because of the transit houses; [families] not used to living together, husband used to live here alone and used to visit their family on their days off. [Colleague] lives in one of those and they [people living in transit houses] end up with a partner they don't know.”

Her colleague:

“You almost get to the point that you're not sure you want to live with your partner anymore, living separately for one year and then together again, because I had a whole readjustment after living separately after 12 months except for a few days here and there. Living together as a family again; has he always been such a filthy pig etc. People who do that 3-4 years and then live together as a family again, can put huge strains on relationships... Also [domestic violence] to do with finances. Families coming up here [from other states]; some have sold everything because they've been told that they can get a job here which is true but there's nowhere to live. One family started to live with another family who were already here but ... ended up in a van on the camp-draft grounds and [then] in Rocky as they had nowhere to live even though they had work. Accommodation that's available is very expensive. That family is not working here any more. There's plenty of work but no accommodation. If you find a job you need to make sure it comes with accommodation because that's the only way to be sure to have a roof over your head... The caravan parks are all full... People eventually leave. Some people tough it out, live in their cars. Had three families living in one house, started with one and now three. Came in from South Africa. Not sure but heard that 4-5 guys that were headhunted, got here and they found out how the accommodation situation was. One found accommodation 1.5 hours from here, so has to travel three hours per day. By the time he gets home after 12 hour shift, it's an accident or family breakdown waiting to happen because he's stressed to the limit. Heard it's a young family so by the time he gets home the kids want to play with dad but he's buggered... Different people went from having disposable income to having to pay \$500-600 rent per week; some used to pay \$100-150 per week a few years ago, [rent] went through the roof, and adjusting to suddenly not having disposable income, spending the money while the wife's at home think we have to pay the rent etc. Money used to go for miles and miles but doesn't go very far anymore.”



Stakeholders believed it was not only the men in the work camps and the shared houses in the suburbs who suffered, but also the newcomers who paid very high rents. Other financial stressors were:

- the transit house system which forces people to invest large amounts of money in a house/land in Moranbah, which may end up wasted money within a few years if the coal industry contracts;
- The lease car arrangement which encourages people to spend a lot of money on fuel to reach the target minimum number of kilometres.

There were more men than women in Moranbah which may cause other social stresses. A recent rape was reported and stakeholders believed there were more unreported cases of sexual assault. Many students were left to look after themselves as the parents were sleeping after their shifts in the mines. Stakeholders reported that many of these kids drank large amounts of alcohol (and some used drugs) out of boredom and because of the disposable income of their parents. There were reports of a 'gang' of 13-18 year old boys and girls committing offences (damaging, stealing, speeding/'hooning' etc.). The previous stakeholder again:

“A lot of it [crime] is boredom related. Alcohol and boredom related [her colleague agrees with that]. Kids stealing cars and joy riding, breaking in; you see a lot of people have fridges on front veranda and a group of kids around town know who has what in fridge and know that this person has Bundy in the fridge or whatever and they go shopping, bit of vandalism. A lot of it is instigated by a young fellow who came in town, who already had problems, and got in touch with another crew out here.”

## ***5.7 Services***

In contradiction with the positive views expressed towards the adequacy of services in Moranbah reported in Section 3, a number of stakeholders were critical of service availability.

Moranbah had relatively few retail outlets. Many businesses had opened and closed and, most importantly, according to informants, there was no butcher, except for the butcher(s) at the supermarket. Virtually all stakeholders commented on the comparatively high prices and poor range at the single supermarket. As one of the informants commented:

“They've only got the basics out here, [it's] good for a small store, but for the only store in town you'd expect a wider range of goods and prices are high because there's no competition.”

There were only two general practitioners in Moranbah; one of whom was a public doctor, but stakeholders reported that he was so busy that he referred most patients to his private practice. There was one visiting female doctor who was always heavily booked as well. The availability of private dentists was reported to be satisfactory, but there were no public dentists and services were inconsistent due to high staff turnover. There were no natural therapy services and the orthodontist from Mackay had stopped

visiting Moranbah. Moranbah Hospital had gained two nurses in the preceding year but had lost its maternity services (no consistent service) meaning that women had to go elsewhere to deliver their babies. One of the stakeholders said:

“When you want to have a baby you can’t do that out here; you have to arrange to have it in Mackay, Rocky or Townsville and you have to go two weeks beforehand. Impacts hugely on pregnant woman and on family as you have to pack up everything. And you have to pay for accommodation nine out of 10 times as not everyone is fortunate enough to have family/friends to stay with, and your travel costs on top of it. And you have your rent here as well.”

Stakeholders reported that there was not much (regular) entertainment for single people, families with older children (teenagers) and couples with grown-up children (not living with the parents anymore). There was limited choice and variety in restaurants, cafes and bars. Some stakeholders believed that the cinema ‘might close any moment’ as the manager had left and their replacement was experiencing difficulty finding accommodation. One of the stakeholders said:

“If you want anything to happen in Moranbah you have to make it happen. Not like in a regional coastal centre like Mackay where you can go to a variety of places, that’s why people don’t come or stay here.”

People could travel to Mackay for entertainment, but it takes an effort with 4-5 hours travelling, having to organise accommodation, and risking an accident on the highway (see Section 5.11).

There were waiting lists for child care. There was no general community/social service/neighbourhood/drop-in centre in Moranbah, and many service providers needed more working/office space.

## ***5.8 Amenity and environment***

Because of the growth of the town, the increase in mining activities, and the drought, the amount of water available for gardens, sporting fields, rural properties, new land (housing) and new mines had been reduced. This was seen as a negative as people preferred the town to be visually appealing. Some people even wanted to leave because they could no longer enjoy their gardening.

Importantly, a number of stakeholders did not believe water was allocated equitably. While they could see the need to supply mines, they believed that residents’ needs were not given equal priority. One of the stakeholders claimed:

“There’s plenty of water available for the town but [it’s] about whether the town or the mining company gets the allocation. If you go out there you see how many coal mines are around and they all need water... I’ve been living here for 27 years and [have been] listening to politicians from state, federal, local talking about the water problems and they’re still talking about it... Government agency has a huge amount of control over water

allocations, how much farmers can extract from the ground etc. but they're in the business of making money too and councils make money out of water too. I'm a strong believer in recycling water, but I know for a fact that [in] this town [recycling water is] frowned upon because the council makes money out of supplying water; part of the rates... They wouldn't be selling if water is recycled."

Stakeholders reported that since water shortages had emerged there had also emerged a coal dust problem associated with coal trains and stock piles. People were believed to suffer sinus and asthma problems associated with dust exposure while, on grazing properties, cattle would not eat grass covered with coal dust.

While not disputing this, at least one stakeholder argued that the water problem was a temporary one:

"I don't think water is really the big issue we all think it is. When the Burdekin pipeline comes through, the Burdekin dam is huge, a much bigger reservoir than Sydney has got, that pipeline is under construction at the moment, that should be here [after] months rather than another year, that's going to relieve a lot of the pressure for mining companies, [although] they can look after themselves, and the town... The water allocation is very difficult now; is not as green as it used to be [Moranbah], but still pretty good compared to other towns..."

Other environmental issues reported in relation to mining included noise pollution and vibration associated with trucks and blasting. Visual impacts were also mentioned in relation both to stockpiles and to rehabilitated land that had not, it was believed, been returned to its former condition. Finally, it was believed that mining operations had polluted and/or exhausted a number of aquifers and water courses.

## ***5.9 Environmental health and safety***

Stakeholders believed there to be health and safety issues with existing mines, especially in underground mines. Accidents and near-misses were thought to occur on a regular basis but to attract little media coverage. Stakeholders believed that mining companies made lost-time injuries 'disappear' by letting injured employees file paperwork in the office, sending them on days off or by 'bastardising' the injury records (as there are many different classifications and categories to choose from). Stakeholders said that mining companies discourage reporting by employees. One of the stakeholders claimed:

"As an example; if you got a foreman out there, their wages, one of the factors that determines that [height of salary] is how many injuries they have within their work group. A supervisor might be in charge of 30 people; when he goes to a performance review they look at his safety records... If you've got a group of workers that are always recording near misses or they cut their finger, they should report it and they don't... Our supervisor is a good example. The company has made the system of reporting that time-consuming, I told him that I wanted to report that this

haul-truck nearly ran over me; his eyes rolled, like give me a break mate. And a lot of people see that and don't report anymore.”

Stakeholders expected a number of additional impacts if mines were opened close to Moranbah, especially from those opening up as close as one kilometre as was being planned. Such impacts included:

- Noise and danger from blasting;
- Visual impacts including draglines and lights visible from Moranbah at night;
- Potentially falling house values;
- Dust pollution and associated problems;
- Loss of population and associated businesses.

One of the stakeholders said:

“Asthma has always been up, I don't know about other towns but a very high rate of asthma here. I have it now; never had it for years, but got it 10 years ago. My daughter nearly died from an asthma attack; she was 23/24 years old, never had asthma. They flew her to Mackay in a helicopter but if she wasn't lucky enough that it happened while she was in the hospital they would have been flying her out in a coffin. Ten people that I know personally that died of asthma attacks. This [plan to build coal mines close to town] will only make that rate higher... These might be underground [mines planned] but they still have infrastructure right at the edge of town.”

### ***5.10 Social conflict***

Conflicts were reported between mining companies and cattle property owners, mining companies and unions, mining companies and the council, miners and non-miners. There were tensions over the difference in quality of the houses (not as much recent times as in the past) and, therefore, the status of employees of the different mining companies. A business owner believed that mining companies did not support local businesses as the companies ordered in bulk nation-wide. There were reportedly conflicts between senior staff/planners/foremen and the rest of the mine workers. One of the stakeholders said:

“Social division; not as bad now, but biggest social division between staff and workers/supervisors and workers. Huge social division even today. A lot of workers don't talk to the wives of the supervisors. Union sort of business; separate unions. My mate left town, lived in Moranbah and worked in Peak Downs. When they had a strike the bosses drove water trucks and a woman at school snotted [this bloke's] wife, punched her in the nose because her husband was breaking the strike by driving the water truck.”

However, stakeholders believed that Work Choices legislation had placed fresh pressure on the relationships between mines and unions; the former not recognising the latter to the extent they once did. One of the stakeholders said:

“The new legislation allows them [mining companies] to strip our union rights. Monthly meetings, committee meetings, paid union leave, union deductions; all that stuff comes out with the legislation.”

### ***5.11 Traffic density and accident risks***

Driving time between Moranbah and Mackay had halved due to improvements in road infrastructure. All other things being equal, such improvement should also have enhanced road safety. However, the increased traffic associated with large number of commuting mine employees was seen to have increased the risk and incidence of traffic accidents. Stakeholders believed this was exacerbated by a shift away from various forms of shared transport to sole occupant vehicles and to fatigue associated with atypical work patterns; that is, with 12 hour shifts and nightshift.

Car crews (cars shared by a group of mine workers) and mine buses were gradually being used less in favour of privately leased cars. According to one of the sporting club representatives:

“You pass 100 cars with one person in it [another representative agrees with that]. You don’t see car crews anymore, people that chip in and use one car... And busses [how we used to go to work]... You gotta go to Mackay and do your shopping [to get the miles in your lease car up].”

It was believed that road fatalities and accidents had increased on the Peak Downs highway and on the roads leading to the mine sites. While the mining companies had proactive programs in place to address fatigue management, it was believed that a significant proportion of employees still think they are capable of driving home after long shifts. One of the stakeholders said:

“They [mining companies] run them [employees] through a course; how to recognise the signs of fatigue [agreement from her colleague], when you should stop and take break, how to manage the nights shift etc. But they [mines] don’t look at the actual time of their shifts. Shift workers are in a really difficult situation; they want the shift work as that’s where the money is, where they get their overtime [her colleague agrees]... It’s factored into their wage [agreement again] so if a truck driver does four on, four off gets anything between \$105-130,000. If you’re a day shifter only \$80-90,000... They [the ones at the mines who are organising the fatigue management courses] are happy with it and think it’s effective but I would like to see what the people that have been through it think.”

The practical difficulties faced by mine employees in managing fatigue were reiterated by another stakeholder:

“My husband had to start work at 06:00 he had to leave Mackay at 03:00 to make sure he got here. If he had three days off he’d spend the first day winding down, then the second day semi-human and the third day he’s

winding up again to go to work and not able to relax and go to sleep properly so had only 2-3 hours sleep before getting up and on the road.”

Other factors believed to contribute to traffic accidents included:

- Speeding (people hurrying between work and home),
- The quality of the road (narrow, many very steep edges, few overtaking lanes, at certain stretches the road blends in with the surroundings and wide/heavy loads damage the road);
- An increase in big and wide loads (big fuel trucks, dragline buckets were being transported to and from Mackay as the bucket maintenance shops in Moranbah were closed a few years ago); and
- Fatigue (people driving to their home at the coast after 12 hour shifts and driving to work after only a few hours of sleep).

Stakeholders reported that many Moranbah residents travelled less frequently to Mackay because of the perceived riskiness of driving and the subsequent stress of doing so. While driving at night, people reported being unable to use their lights on high beam due to the constant stream of traffic coming from the other direction. There were flights from Moranbah to Brisbane or Townsville available, but these were seen as very expensive.

### ***5.12 Other infrastructure***

Moranbah did not have, it was believed, adequate power or water supply to accommodate growth in the mining industry. Some stakeholders believed that this would increase the cost of expanding or developing new mining operations and other businesses. According to one local businessperson:

“I don’t think it’s an overall supply problem [electricity], I think there are pockets like this building that has inadequate supply. The buildings next door have ample. The town is 30 years old and was never planned to last that long; was planned as a coal mining town, it’s now a growing community and a lot of the infrastructure we’ve got here was not considered to be needed. Three years ago we didn’t think we would expand [the town]; started two years ago, has gone absolutely crazy... I’ve got very small feeder lines under the building... People want to rent space off me for the rest of the building but I can’t take tenants, don’t have power for myself... Can’t even put aircon in my own office; if I do the computer stops working or the lights blow up. I’ve been arguing for a year. I have a major tenant; wants to sign a 10 year lease, but I have to wait for electricity.”

## ***6.0 Future vision for Moranbah***

The vast majority of stakeholders interviewed during the preparation of this report accepted that Moranbah was a mining town and would continue to rely heavily on mining in both the short and long terms. While diversification of population and business was mentioned as a positive outcome of the ‘maturing’ of Moranbah over the years, more substantial programs of economic diversification in order to buffer the town and community from future contractions in the mining sector were not raised as priorities for the immediate future. Priorities instead focussed on the affordability of Moranbah and on the workforce arrangements, services and infrastructure required to improve its lifestyle and amenity values.

### ***6.1 Housing versus work camp development***

According to stakeholders, State Government needs to release large parcels of land around Moranbah, provide more low-cost accommodation, and speed up subdivision processes. One of them said:

“I would like to see the government, State, build more houses for low income. We have been up investment-wise, I’m in business, but like to look after low income people because without [the supermarket] and shopping centres and all that we would not be here. If we don’t have employees that work in lower level income, we will not be here.”

Many stakeholders were disappointed that a proposed housing development in the south of Moranbah was stopped by the State Government because of its location on mining (development) lease land. They believed that those coal reserves should be sterilised and opened up for housing. The alternatives for building in Moranbah south are building west of Moranbah, or building on and relocating the sporting fields. Another idea is building cheap multi-story housing in the centre of Moranbah to rent out to people on low incomes, but some stakeholders were afraid that this would create social problems.

Many stakeholders believed that work camps were good for solving some accommodation problems in the short term, but that they will create more problems than they solve in the long term. Permanent residents were believed to have more involvement in the town, reduce the amount of traffic and potential traffic accidents, and to shop locally more than temporary residents. The majority of stakeholders were thus of the view that there needs to be more focus on community development by building affordable houses and attracting families. Many stakeholders also expressed a desire to see the mining companies providing cheaper, subsidised rental accommodation for all employees even though this had become increasingly unattractive for the companies as the price of housing escalated. Participation in existing or construction of new camps is cheaper, faster and easier, but involves the risk of not attracting the desired labour. A mine manager said:

“Two options; camps and live where they like, in camp while they work and back to where they live, whether it’s Adelaide or Mackay, or you

provide them with housing in town. We're caught at the moment at half a million dollars per house, so to put 200 houses in town you look at \$100 million and capital operation out of the window. If all our workers, or a large percentage of workers, want to live in town then it's ruining our projects and it's in everybody's interest to get the prices of housing down... Just past Grosvenor creek you can build [houses]; Moranbah town council is looking at adopting that plan, there is land over there... In 2-3 years time the boom might be off, and might be commercial camp beds available. Or we might have to build our own camp and if we build, in town or on mining lease is one of the issues we have to explore... The advantage of the mine site is we don't have to go through DA and council approvals; we can build it on existing mine site tomorrow... A lot of management like to live at the coast, you can't manipulate circumstances, but a lot of the workforce likes the coast too. Yes, it stuffs up towns. I'm a person that likes living out here but you have to do what you think you can do to make a successful operation and if houses are too dear at the moment, you avoid putting houses in town because you won't have a project then 'cause capital is too much. So you have a trade-off between economic and social; triple bottom line of what you think is a profitable project... To me, the accommodation is not an obstacle, you'll have to go into camp. You just build it, order them at the back of trucks. If accommodation is very costly, the alternative is camp. The risk is you might not get people because you only offer camps; drive in, drive out. Might run short of labour."

It was understood that State Government was reviewing public housing policy with a view to preventing people occupying social housing who no longer needed it.

## ***6.2 Business and service requirements***

There was a general view that health, child care, retail, entertainment, cultural, sporting and other services needed to expand in concert with population growth (both permanent and itinerant). Of particular concern were health services, with stakeholders identifying specific short term needs including:

- Another 2-3 general practitioners;
- More dentists;
- A female general practitioner for gynaecological procedures like pap smears;
- An orthodontist;
- Naturopath/alternative therapies;
- More space/offices for health services; and
- Maternity services.

As well as organised and club sport, informants also commented on what they felt was the need to incorporate more physical activity into peoples' day-to-day lives; a difficult requirement for those working long hours in essentially sedentary jobs. It was also suggested that the mine buses could give miners the option of walking more. One of the stakeholders said:



“Need to be more creative with that [physical activity]. Talked to a guy today; they share a car and work long hours and he said he was being dropped off at Curtain House [camp] and walking more. And the busses should make them walk.”

Stakeholders also believed that a greater presence of construction and manufacturing industry was needed. One new business that was trying to open – a Subway/take-away restaurant – was struggling to find enough staff. Work was also under way on a \$3.6 million upgrade and beautification of the town square.

### ***6.3 Mine expansion and infrastructure requirements***

There was a general concern about the availability of water and electricity to underpin future mining development. With the Burdekin pipeline due for completion in 2007, however, there was also an expectation that water issues would be resolved. There was less certainty about the supply of electricity, although several informants questioned whether it would be possible and cost-effective to use coal seam gas to generate electricity for the town. Stakeholders asked:

“All out here belongs to CH-4... Grass-tree mine or Blackwater or whatever; they pulled gas into the grid. Why can't they do that out here?”

“CH-4 is pumping gas out; don't get a lot of return if they have a gas field on property. They say power shortage in Moranbah; why don't they whack that gas back into the power grid. That would solve the power problem for housing; just comes down to water.”

Competition for land between housing and mining was, however, the major point of contention. Moranbah was lacking room to grow as the town could not expand to the north, east and south due to mining (development) leases in those areas. Many residents were not comfortable with the development of coal mines so close to town, especially in the south, and wanted a green zone established around the town. One of the stakeholders argued there would be:

“A mass exodus of people from town including me [if the mines come closer]... I don't want to be sucking coal dust for the rest of my life, will be a lousy environment to live in, won't be able to hang your washing out on the line because it will get dirty... The amount of money they'll pull out of there [new mines close to town] they'll spend on medical bills fixing the health problems in town... We do not want coal mines that close to town, because of the dust... This coal mine here [north of Moranbah] is not as much a big issue as the one there [in the south]; you'll still have noise but no dust problem there on too many days, because of the wind. Will definitely be a dust problem from these coal mines [south]. Open-cut or underground; underground still has stockpiles.”

The graziers interviewed said that there should be a fair bargaining policy put in place and that they would like to see more generous compensation for those affected by mining, preferably in the form of a small royalty payment for the duration of the mine.

## ***7.0 Conclusions***

As noted in Report 1, the distribution of positive and negative impacts associated with the current boom in the Bowen Basin coal industry has been heavily influenced by demographic trends associated with the adoption of new shift work patterns, drive-in/drive-out mining operations, and increased reliance on contractors. With large numbers of employees commuting to work from larger, often coastal, regional centres, small towns have failed to capture the direct and indirect economic stimulus that many might have expected. As Report 1 also notes, housing development in Moranbah is below the State average, the subsequent lack of availability contributing to high rents that have been particularly disadvantageous to low income earners and to industries trying to attract new workers. These outcomes raise a concern that local communities may be shouldering many of the costs of accommodating new developments while the benefits flow more broadly to regional and state centres.

The stakeholder analysis contained in this report largely bears out these findings. Residents and service providers were generally supportive of mining and the employment opportunities it had created. However, they were less convinced of the sustainability of a local community and economy that was increasingly comprised of itinerant workers; an estimated 22% of the total population in 2004.

Economically, non-resident workforces were equated with lost business opportunities from both the net flow of expenditure to Mackay and elsewhere and from the labour shortages faced by industries that could not pay workers enough to justify commuting. Importantly, stakeholders also believed that the expansion of non-resident workforces was itself the result of dramatic inflation in the cost of housing and accommodation. These costs reduced disposable income and drove many workers and prevented many new mining employees and their families from settling in Moranbah.

Socially, the growth of non-resident workforces was seen to aggravate a number of issues. For itinerant workers staying in workcamps and other temporary accommodation while on shift, these issues were seen to include isolation, substance abuse and stress on relationships. Among permanent residents, these issues were seen mostly to revolve around a perceived lack of ownership and commitment to the community among itinerant workers that led to poor relationships with permanent residents, additional demands on community services from people, declining visual amenity in some streets due to the number of houses occupied by multiple temporary residents who did not care for gardens, and so on. All residents, whether permanent or itinerant, were thought to be exposed to increased risk of motor traffic accidents.

With proposals to develop more mines in the Moranbah area, stakeholders believed it imperative that more consideration be given to the management of the large itinerant population and encouragement of more permanent residents. Complicating this, however, was a lack of land available for housing development and a proposal to develop at least one mine in close proximity to the township. A number of stakeholders believed that this would increase dust, and noise pollution in the town, making Moranbah a less desirable place to live and encourage more workers to commute from elsewhere.

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