1. Objectives

The objectives of this discussion paper are to:

- provide an overview of existing and potential growth management issues for mining towns situated in the Bowen and Surat Basins;
- examine existing and proposed responses to growth management issues by the State of Queensland, local government and industry; and
- outline a proposed framework for sustainable growth management of mining towns in Queensland.

The Department of Local Government, Planning, Sport & Recreation (DLGPSR) welcomes feedback on this draft paper.

2. Background

2.1 Proposal for a Mining Town Sustainable Growth Management Framework

In November 2005, the Honourable Desley Boyle, MP, Minister for Environment, Local Government, Planning and Women, announced DLGPSR would assist Belyando Shire Council resolve issues associated with rapid growth in the town of Moranbah. The Minister proposed the Moranbah Growth Management Group be formed to develop strategies to resolve serious growth management issues impacting upon the town.

The Minister also announced DLGPSR would develop a framework for the sustainable management of mining towns to assist other communities potentially affected by the impacts of mining industry expansion. This framework is now referred to as the Sustainable Futures Framework for Mining Towns

The Sustainable Futures Framework for Mining Towns will guide communities towards orderly and proper planning of towns impacted by mining projects. The proposed framework will assist local governments, State agencies, mining companies, communities and other key stakeholders to collaboratively consider appropriate strategies to plan for a sustainable future for mining towns. A key consideration is to ensure the granting of mining tenure under the Mineral Resources Act 1989 does not constrain town growth boundaries from promoting equitable and sustainable economic and population growth.

The Sustainable Futures Framework for Mining Towns will also provide the basis to alleviate the need for significant State involvement in any future urban planning reviews of mining towns, which are principally local government matters.

It is intended that the Sustainable Futures Framework for Mining Towns will enable the following planning issues to be addressed for mining towns:

- Population and economic impacts from mining expansion. It is important to protect both the valuable mineral resources and the economic, environmental and social values of the community.
• Avoidance of encroachment of mining activities into sensitive areas and vice-versa. This will be achieved through measures such as defined urban boundaries, buffer zones and separation distances to avoid encroachment of land uses. This will include consideration of: the siting of facilities such as coal stockpiles, wash plants and coal loading facilities; impacts of exhaust fans from underground mines; contaminants that emanate from exhaust fans; and the appropriateness of restricting areas around towns in which surface mining is prohibited.

• Determination of growth options for land use and infrastructure required to support growth. This includes consideration of options for the strategic growth management of towns; demand and supply issues, desired settlement patterns with urban development based on the best and most efficient use of available land resources. It also includes consideration of the appropriate mix of housing types to better match the mining workforce mix comprising transient and potentially permanent residents. The aim will be to avoid the inadvertent creation of longer term social problems for the community when there is a downturn in the mining industry.

• Identification of land use requirements for social services. This includes consideration of the related social and community infrastructure implications from mining expansion including housing and State government services.

• Encouragement of the mining industry to minimise adverse impacts on the environment and nearby towns. The aim here is to ensure sustainable production through efforts of demand management, cleaner production, waste management, and management of community health issues.

• Identification of opportunities to seek risk sharing partnering arrangements. These partnerships will be between mining companies, local councils and the State government to address issues arising from the above.

The Sustainable Futures Framework for Mining Towns will be consistent with the following Queensland Government priorities:

• Improving health care and strengthening services to the community:
  – improving Queenslanders’ access to affordable housing.

• Managing urban growth and building Queensland's regions:
  – supporting Queensland’s regions through statewide infrastructure development and regional job creation.
  – linking Queensland through efficient and integrated transport options.
  – building on the strengths of Queensland’s diverse regions.

• Protecting the environment for a sustainable future:
  – promoting sustainable development through responsible use of the State’s natural resources.

• Growing a diverse economy and creating jobs:
  – diversifying and strengthening the economy through value adding, productivity growth and the development of future growth industries.

2.2 Queensland Coal Mining Towns

The Bowen Basin is currently the most important source of coal in Queensland. The Surat Basin with its large resources of open-cut thermal coal is attracting
increasing interest both locally and internationally. Domestically, Queensland’s vast coal deposits mean that coal will remain the major fuel for electricity generation in the State for the foreseeable future.

The amount of coal railed to central Queensland ports for export is expected to increase by between 5 and 13 per cent per annum over the next five years. The medium forecast is expected to be a sustainable increase of 8.5 per cent per annum. By 2009-10, somewhere between 215 and 235 Mt/a of coal could be railed - a massive increase compared to the 143 Mt delivered in 2003-04 and only 79 Mt a decade ago. Further background on Queensland’s coal industry is included in Appendix 1.

The Queensland coal mining town communities to be considered within the Sustainable Futures Framework for Mining Towns include:

**Bowen Basin**
- Bowen & Collinsville (Bowen Shire)
- Nebo, Glenden & Coppabella (Nebo Shire)
- Moranbah & Clermont (Belyando Shire)
- Dysart & Middlemount (Broadsound Shire)
- Capella & Tieri (Peak Downs Shire)
- Emerald (Emerald Shire)
- Blackwater (Duaringa Shire)
- Springsure & Rolleston (Bauhinia Shire)
- Biloela, Moura, Theodore and Baralaba (Banana Shire)

**Mulgildie Basin**
- Monto (Monto Shire)

**Surat Basin**
- Taroom & Wandoan (Taroom Shire)
- Miles (Murilla Shire)
- Chinchilla (Chinchilla Shire)
- Dalby (Dalby Town / Wambo Shire)

The maps at Appendix 2 show the communities in relation to mining activity.

### 2.3 Growth Trends for the Mining Towns

Estimates of population growth in mining communities tend to be lower than the associated levels of economic activity would suggest. Workers engaged in ‘drive in/drive out’ mining operations, who reside locally while on-shift but otherwise live outside of the area, are not categorised as ‘residents’ according to the Australian Bureau of Statistics (ABS) population estimates. For example, a mining employee who stays in an accommodation centre in Nebo Shire during his work period but otherwise has a permanent place of residence in Mackay would be counted in the resident population for Mackay, not Nebo.

The number of persons accommodated in the area and consuming services at a given point in time may be considerably higher than the resident population estimate indicates. The degree to which mining companies utilise ‘drive in/drive
out’ employment arrangements and temporary accommodation centres rather than permanent local housing for employees therefore influences population estimates for the local area. Similarly, projections of population growth are also based on the number of people who are likely to reside in the area full-time, and do not necessarily reflect the total employment growth associated with expansion of mining activity.

In September 2005, DLGPSR’s Population Information and Forecasting Unit (PIFU) released a series of revised population growth scenarios for select LGAs and towns in the Bowen Basin, based on updated expectations of mining expansion to 2021). In addition to other demographic growth indicators, these population growth scenarios were based on advice from mining companies regarding predicted labour force numbers, and the indicated number of employees who would be housed locally. It should be noted that subsequent amendments to company accommodation strategies favouring temporary accommodation and drive in /drive out arrangements over local housing have affected the accuracy of these revised population growth estimates, and they should be disregarded in favour of PIFU’s more recent 2006 population projections (High series). These projections are only available at LGA level at present (Appendix 3).

Population projections for the mining towns and relevant local government areas are summarised in the tables at Appendix 3.

**Full-Time Equivalent population estimates.**

While some degree of population growth has occurred in the resident populations of most towns in the Bowen Basin since 2001, the extent of that growth will remain unclear until the results of the 2006 Census are released in mid-2007. Larger centres such as Moranbah, Emerald, Moura, Blackwater, Dysart and Middlemount have recorded growth in resident populations, according to the latest ABS Estimated Resident Population (ERP) figures for June 2005. However, most of these centres and other towns such as Glenden, Nebo, Coppabella, Springsure and Capella have also become centres for growth in the non-resident worker population, with large work camps (often called Single Person Quarters or SPQs) becoming established.

In response, PIFU has derived a component method for estimating “Full-Time Equivalent” (FTE) population estimates for all nine local government areas within the Bowen Basin. This FTE includes a count of people working in the area for an extended period but having a usual place of residence elsewhere (the ‘non-resident’ worker population), as well as an estimate of the resident population present in the area at 30 June 2006. The FTE population measures will not replace the resident population estimates prepared by the Australian Bureau of Statistics (ABS), but are provided as supplementary indicators of population size. Although PIFU will update FTE estimates on an annual basis, it is not possible to project the non-resident worker component in order to estimate future FTE populations.

Key findings relating to FTE population estimates are:
In total, around 10,763 non-resident workers were counted living in non-private accommodation across all nine shires in the Bowen Basin, compared to the estimated 69,200 residents living in the area at the time of survey.

The Full-Time Equivalent population of the Bowen Basin was estimated to be around 79,600 people at the end of June 2006.

The significance of the non-resident worker population is most apparent in the case of Nebo Shire, where this group outweighs the resident population by more than 150%. Around 3,140 non-resident workers were counted in this area, compared to only around 2,000 residents.

Around 2,200 non-resident workers were counted in Belyando Shire, a ratio of one non-resident worker for every five residents. Broadsound Shire also had a large representation of non-resident workers (1,821 persons).

Single Persons Quarters were the largest accommodation provider for non-resident workers, accommodating 8,726 people. A further 2,040 non-resident workers were living in other forms of commercial accommodation such as Hotels/Motels, Caravan Parks and Rented/Other.

Excluding SPQs, non-resident workers represent almost double the number of short-term and casual visitors occupying commercial accommodation.

Total occupancy rates for Hotels/Motels, Caravan Parks and Rented/Other dwellings were found to be in excess of 90% for Belyando, Broadsound, Duaringa and Nebo Shires on the date of the Survey. Accommodation providers identified this activity level as being ‘normal’.

Table 1 summarises the relative size of the resident and non-resident population components of the FTE populations for all of the Bowen Basin LGAs.

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>Resident population at end of June 2006 (estimated)* (persons)</th>
<th>Non-resident worker population at end of June 2006** (persons)</th>
<th>Full-Time Equivalent (FTE) population at end of June 2006 (persons)</th>
<th>Non-resident worker population as % of FTE population (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana (S)</td>
<td>13,416</td>
<td>1,154</td>
<td>14,570</td>
<td>8%</td>
</tr>
<tr>
<td>Bauhinia (S)</td>
<td>2,116</td>
<td>146</td>
<td>2,262</td>
<td>6%</td>
</tr>
<tr>
<td>Belyando (S)</td>
<td>10,503</td>
<td>2,119</td>
<td>12,622</td>
<td>17%</td>
</tr>
<tr>
<td>Broadsound (S)</td>
<td>6,503</td>
<td>1,821</td>
<td>8,324</td>
<td>22%</td>
</tr>
<tr>
<td>Bowen (S)</td>
<td>11,745</td>
<td>219</td>
<td>11,964</td>
<td>2%</td>
</tr>
<tr>
<td>Duaringa (S)</td>
<td>6,433</td>
<td>749</td>
<td>7,182</td>
<td>10%</td>
</tr>
<tr>
<td>Emerald (S)</td>
<td>13,181</td>
<td>694</td>
<td>13,875</td>
<td>5%</td>
</tr>
</tbody>
</table>
2.4 Impacts of Mining Industry Expansion

Community concerns about the impacts of mining projects on communities in the Bowen Basin have been expressed in a variety of community forums, consultative processes, deputations and in the press.

On 12 July 2005, delegates from the Central Highlands Regional Organisation of Council (CHROC) and Central Highlands Development Corporation (CHDC) presented a joint submission about the challenges of economic growth for the Central Highlands to the former Treasurer, Hon Terry Mackenroth, MP.

The delegates identified five key challenges for priority attention:

1. Better communication with Councils by the State in processes surrounding identification, planning, development, implementation and operations of major projects to enable appropriate responses in respect of population growth, infrastructure demand and service delivery.
2. Assistance to provide affordable and timely housing through streamlining of freeholding applications, rental assistance programs, more State-provided public housing and mining companies providing suitable housing for employees.
3. PIFU to undertake new population forecasts for all Central Highlands Shires.
4. Improved regional planning arrangements including funding for critical local government infrastructure projects and resourcing of statutory regional planning similar to the SEQ Regional Plan process.
5. Detailed assessment by project proponents of socio-economic issues associated with EIS processes to be made mandatory to address social displacement in small towns including creation of “haves v have nots”, disproportionate salary scales and roster systems affecting family life.

Impacts of mining industry development on mining towns identified through consultation with communities are listed in Appendix 4.

A preliminary scan of known and potential growth management issues has been completed for each of the Bowen and Surat Basin mining towns. A brief overview of some of the growth management issues for each town is contained in Appendix 5.
2.5 Current responses to Mining Industry Expansion Impacts

2.5.1 Coal Infrastructure Taskforce

The Queensland Government established the Coal Infrastructure Coordination Group (CICG) in October 2004 in response to the massive growth of the Queensland coal industry. It is now referred to as the Coal Infrastructure Taskforce (CIT) The CIT is overseeing detailed planning for at least A$2.1 billion worth of coal infrastructure projects for the Queensland’s expanding coal export industry. The CIT has developed a Program of Actions to address issues for which the State Government and Government-owned Corporations have primary responsibility, in particular major infrastructure provision and a response to housing impacts. Current major projects related to the coal industry are outlined in Appendix 6.

2.5.2 Blueprint for the Bush

On 1 June 2006, the Premier launched the Blueprint for the Bush, a 10-year plan to build a strong rural Queensland of sustainable, liveable and prosperous communities. The companion document to the Blueprint for the Bush, the Rural Economic Development and Infrastructure Plan sets outs a program of infrastructure investment to support the Blueprint.

2.5.3 Regional planning

There are four existing regional planning processes, these being: Whitsunday Hinterland and Mackay 2015 Regional Plan; Central Queensland A New Millennium Regional Growth Management Framework; Eastern Downs Regional Land Use Strategy; and Wide Bay Burnett Regional Planning Project.

The Queensland Government’s Blueprint for the Bush also introduced an initiative to strengthen and improve regional planning and community participation by providing $4.5m for three new regional planning initiatives and funding regional groups of councils in rural Queensland to develop regional infrastructure plans as part of established regional planning processes.

2.5.4 Local government planning schemes

All local governments are required to have prepared IPA compliant planning schemes by the end of 2006. Generally, the approved and draft IPA planning schemes present no real impediments to provision of land for expansion of towns to meet demands created by mining industry expansion. A summary of the current status of IPA planning schemes for Bowen and Surat Basin local governments is included at Appendix 7.

2.5.5 Local Communities

Local communities are responding to the impacts of mining industry expansion through actions including: informing local Parliamentary representatives and Ministers about issues, engaging key government agencies, local agencies and local businesses, in finding ways of addressing service deficiencies, preparation of new IPA compliant planning schemes to provide for predicted future growth, local government corporate plans and operational plans identifying key items of physical
and social infrastructure, and consulting with local communities experiencing the impacts of mining industry growth.

2.5.6 Mining Companies

Mining companies are increasingly requiring mine activities to engage with local communities through the development of social and environmental plans and to report on performance against a range of social, economic and environmental (triple bottom line) indicators on an annual basis. Companies also provide assistance to communities through a range of financial and other contributions.

2.5.7 Moranbah Growth Management Group

The Moranbah Growth Management Group comprises representatives from the Queensland Government (DLGPSR), Office of the Coordinator-General, Department of Natural Resources and Water (NRW), Belyando Shire Council, mining companies (BMA and Anglo), unions and is chaired by the Member for Fitzroy, Mr Jim Pearce.

The key role of the Moranbah Growth Management Group is to support Belyando Shire Council to develop short, medium and long term options leading to an overall strategy to address growth management issues for Moranbah. The Moranbah Growth Management Group is nearing completion of a preferred growth management strategy for the town.

2.5.8 EIS Process Improvement Project

As well as developing a Sustainable Futures Framework for Mining Towns, DLGPSR, with support from key State agency stakeholders, is also conducting a review of the environmental impact statement process.

The EIS process needs to ensure relevant consideration and assessment is undertaken to address and manage impacts from major projects to include social issues such as accommodation for the workforce, housing affordability, demand and supply in towns, provision of social support services and changes to workforce supply and capability, in addition to the cumulative impacts numerous mining operations have on the communities that support them. An enhanced EIS process will become a tool to support community planning which occurs through the Sustainable Futures Framework for Mining Towns.

3. The Sustainable Futures Framework for Mining Towns

The Sustainable Futures Framework for Mining Towns will support communities that need to undertake a review process and develop strategies to address impacts of expansion and contraction of the mining industry.

An outcome statement for the Sustainable Futures Framework for Mining Towns is:

Protecting social economic and environmental values and economic growth for the State for future generations in meeting community and mining industry interests through State and local governments, the
mining industry and communities working collaboratively to support sustainable and vibrant communities and a productive mining industry.

The planning approach taken for a particular community will differ according to nature of the issues impacting upon the community. However, an effective application of the review process will depend upon adherence to some key underpinning principles. DLGPSR will guide and support communities in applying the framework principles.

3.1 Principles

The key principles inherent in successful futures planning for communities with relationships to the mining industry:

**Principle 1 - Leadership**

Objective:
Leadership capability will support stakeholders to respond effectively to issues and accept responsibility for their actions.

1. Local government establishes a leadership group involving council, mining company and community stakeholders to develop strategies to plan for and manage the range of social, economic and environmental impacts from existing and proposed mining projects.

2. Community leadership capacity is increased through provision of opportunities for community stakeholders to contribute to planning for sustainable communities through representation in the leadership group.

3. Improvements are made to the EIS Process to ensure the cumulative socio-economic impacts of mining industry development are addressed in every new project.

**Principle 2 - Collaboration**

Objective:
Collaboration between stakeholders leading to strong alliances and sharing of resources at local and/or regional levels.

Strategies:

1. State government, local government, mining companies and communities work together in response to the range of social, economic and environmental impacts from existing and proposed mining projects.

2. Successful outcomes are achieved by partners in collaborations contributing appropriate funding and resources to address impacts of existing and proposed mining projects.

**Principle 3 - Corporate Social Responsibility**

Objective:
Corporate social responsibility is demonstrated by governments at all levels, and the private sector, through action to ensure sustainable futures for mining communities.

Strategies:

1. As participants in the leadership group, stakeholders accept responsibility and fulfil obligations to contribute towards addressing impacts of existing and proposed mining projects.

2. Agreements are entered into between key stakeholders to record obligations to provide funding and resources towards infrastructure and services required to support sustainable futures for mining communities.

**Principle 4 - Sustainability**

Objective: Sustainability is achieved through strategic planning to mitigate the social, economic and environmental impacts of mining operations.

Strategies:

1. Action plans to address social, economic and environmental impacts of existing and proposed mining projects are developed through stakeholder collaborations. (refer to example at Appendix 8)

**Principle 5 - Communication**

Objective: Communication between stakeholders is clear and effective with appropriate testing of options.

Strategies:

1. A communication strategy targeted at key stakeholders is established by the leadership group (see Principle 1 above).

2. State government, local government and mining company stakeholders provide accurate and timely information to communities about their long term plans and activities through the leadership group and through other communication processes.

**Principle 6 - Community Engagement**

Objective: Community engagement is achieved through the selection of appropriate engagement strategies, involvement of community stakeholders, and the effective use of skills and knowledge.

Strategies:

1. The leadership group actively pursues a range of approaches to effectively encourage community participation and involvement in significant planning projects to manage the existing and potential impacts of the mining industry.
2. Community engagement is effective through well-designed community consultation processes which are appropriate to individual communities.

3. The collective skills and knowledge of communities is utilised by the leadership group to maximise the success of strategies to mitigate mining industry impacts.

3.2 Planning for Sustainable Futures

There is no prescription for how communities can develop a sustainable futures response to mining industry impacts. However, the following is an outline of steps to ensure identified planning issues are addressed with sufficient rigour:

- **Initiate planning** - define purpose & scope of the planning exercise and how to manage
- **Define current state & desired future state** - current situation, what do we want to change, how?
- **Engage stakeholders and determine response model** - choose most appropriate response model based on available resources, capacity, etc
- **Prioritise identified issues**
- **Identify and assess options** - list potential options, evaluate against desired outcomes
- **Develop strategy** - plan of action
- **Stakeholder engagement** - agreement on actions and endorsement by key stakeholders
- **Develop delivery plan and procure resources / funding to implement actions** - by whom, by when?
- **Implement agreed actions** - ensure recommended actions are implemented and evaluate whether implementation is on track
- **Monitor and review outcomes post-implementation** - report back to sponsors and community the progress of action plans. A performance management process will be developed to enable regular reporting of performance against each of the principles contained in the Sustainable Futures Framework for Mining Towns.

3.3 Alternative response models

There is no one-size fits all approach to developing a collaborative response under the mining town sustainable growth management framework.

Response models may comprise:

- State intervention (e.g on recommendations of Coal Industry Taskforce);
- Other collaborations involving local government, communities, mining companies and the State;
- Local collaborations led by individual local government between communities and mining companies (e.g Bauhinia Shire);
- Special project teams formed from existing regional & local collaborations, eg. ROC’s, regional natural resource management groups and local governments; and
• Mining Town Growth Management Groups (involving key stakeholders) (e.g. Belyando - Moranbah).

3.3.1 Growth management groups

Establishment of a mining town growth management group, comprising key State government, local government industry and community stakeholders, has been found to be a successful model to progress strategic planning for mining town communities experiencing severe growth pressures. The formation of such a group will be supported by the State in a crisis situation. It is important to distinguish this approach from usual strategic planning carried out by local government as part of reviewing its planning scheme.

The process leading to the establishment of a mining town growth management group and development of appropriate strategies to address local issues might comprise:

1. DLGPSR consults with stakeholders, including local government, State agencies, industry) where it is considered the establishment of a mining town growth management group would assist a community to resolve growth management issues;
2. Determine membership of mining town growth management group, governance and funding arrangements;
3. Develop administrative arrangements, including terms of reference, role of chair, members and secretariat, frequency of meetings and reporting arrangements;
4. Define broad tasks, allocate responsible agencies and develop action timeline.
5. Procure external resources (e.g. planning consultants) as required to develop strategies and options;
6. Develop and implement a community engagement strategy to facilitate consultation with the community about draft strategies and options; and
7. Implement the agreed strategy through amendments to local government planning scheme and regional plan, and DLGPSR reports on outcomes to Coal Industry Taskforce, if required.

4. Conclusions

The benefits of a Sustainable Futures Framework for Mining Towns are:

• New growth will be guided in such a manner as to preserve and protect the existing character of towns without comprising existing and potential mining activities in the locality;
• Assumptions about potential growth should, as much as possible, be based on accurate population projections developed using appropriate methodologies which take into account the particular circumstances of individual mining communities as well as data describing the characteristics of communities e.g. assumptions about mining projects which are likely to proceed or (alternatively) scale down, mining company employee policies, service population, etc;
• Planning for social impacts resulting from growth will be better addressed. State and local government service providers will assess whether their existing
facilities can absorb projected growth and whether other shortfalls may arise in other non-government services;

- Housing demand and supply issues will be considered to inform the development of short, medium and long-term planning options;

- Residential densities will be optimised where possible, having regard to the character and density of surrounding developed areas, topography and natural features, transport, utilities, and other community services and facilities, while incorporating natural features and open spaces and considering urban renewal initiatives;

- Land (including State and local government land) required for infrastructure, commercial and industrial uses needed to support predicted town growth will be identified. Land requirements must not encroach on mining leases adjacent to town boundaries;

- Impacts on the transport network of the town and surrounding area will be considered to address projected population growth, potentially increased densities within urban areas, any relocation of infrastructure, and the connectivity between the new growth corridor and the existing town; and

- Strategic infrastructure plans will be developed to enable existing and new community infrastructure (e.g. roads, sewerage, water supply, etc.) to support growth plans for mining operations and communities. These plans will also include cost estimates for infrastructure requirements. The responsibility for contributing appropriate funding towards required infrastructure will be assigned to the responsible entity and recorded in a suitable partnership agreement where required.
Appendix 1  Queensland’s coal industry

During 2005-06, total coal sales declined marginally, by 2.62 million tonnes (Mt) or 1.5% from the previous year’s sales of 172.43Mt to a total of 169.79Mt. In the previous year of 2004-05, coal sales rose by 7.6% over the 2003-04 sales to 172.43 million tonnes (Mt) and coal exports increased by 7.7% over the 2003-04 export total to a new record of 145.47 Mt.

During 2005-06, a total of 47 mines (33 opencut and 14 underground) were recorded as contributing to the production statistics recorded by the Department of Mines and Energy. This represents an additional 4 underground mines from the previous year. All operating underground mines are located in the Bowen Basin.

Mines producing the highest coal tonnages between 2000 and 2005 are situated in the northern Bowen Basin, near the towns of Moranbah, Clermont, Emerald and Blackwater.

Shipments of coal are made to 31 countries with Japan continuing to be the largest importer of Queensland coals. Japan purchased 38% of State coal exports. Other significant purchasers include South Korea (15%) and India (11%). European countries were also major consumers, collectively taking 18% of the State’s coal exports for 2005-06.

At 30 June 2006, the Queensland coal industry directly employed a workforce (including contractors) of 18 687. This represented an increase of 2,826 employees on the employment level at the end of 2004-05 and a cumulative increase of 5,495 employees from the end of 2003-04.

While the Bowen Basin is currently the most important source of coal in Queensland, the Surat Basin with its large resources of open-cut thermal coal is attracting increasing interest both locally and internationally. Queensland’s vast coal deposits mean that coal will remain the major fuel for electricity generation in the State for the foreseeable future.

The attached maps show the location of Queensland coal mines, infrastructure and communities.
Appendix 2  Queensland coal mines & towns

Queensland Coal Mines and Infrastructure

Source: Department of Natural Resources & Mines (December 2005) “Queensland’s World-class Coals - Mine Production and Developments”
Bowen Basin

Source: Department of Mines and Energy (November 2006) “Mining 2006 Update Queensland’s World-class Coals”
Source: Department of Mines and Energy (November 2006) “Mining 2006 Update Queensland’s World-class Coals”
### Appendix 3  Summary of population projections for mining towns and relevant local government areas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Collinsville</td>
<td>1,990</td>
<td>2,750</td>
<td>3,080</td>
<td>2,890</td>
<td>2,880</td>
<td>+890</td>
</tr>
<tr>
<td>Nebo</td>
<td>195</td>
<td>340</td>
<td>735</td>
<td>785</td>
<td>790</td>
<td>+595</td>
</tr>
<tr>
<td>Moranbah</td>
<td>6,280</td>
<td>7,790</td>
<td>11,070</td>
<td>11,690</td>
<td>11,750</td>
<td>+5,470</td>
</tr>
<tr>
<td>Clermont</td>
<td>1,990</td>
<td>2,230</td>
<td>2,490</td>
<td>2,340</td>
<td>2,350</td>
<td>+360</td>
</tr>
<tr>
<td>Dysart</td>
<td>2,600</td>
<td>2,575</td>
<td>2,960</td>
<td>3,015</td>
<td>3,030</td>
<td>+430</td>
</tr>
<tr>
<td>Middlemount</td>
<td>2,115</td>
<td>2,275</td>
<td>2,470</td>
<td>2,540</td>
<td>2,560</td>
<td>+445</td>
</tr>
<tr>
<td>Capella</td>
<td>731</td>
<td>850</td>
<td>920</td>
<td>990</td>
<td>1,070</td>
<td>+339</td>
</tr>
<tr>
<td>Tieri</td>
<td>1,606</td>
<td>1,920</td>
<td>2,080</td>
<td>2,230</td>
<td>2,400</td>
<td>+794</td>
</tr>
<tr>
<td>Emerald</td>
<td>9,790</td>
<td>10,890</td>
<td>12,470</td>
<td>13,710</td>
<td>14,560</td>
<td>+4,770</td>
</tr>
<tr>
<td>Blackwater</td>
<td>4,840</td>
<td>5,090</td>
<td>5,610</td>
<td>5,720</td>
<td>5,760</td>
<td>+920</td>
</tr>
<tr>
<td>Springsure</td>
<td>760</td>
<td>1,060</td>
<td>1,300</td>
<td>1,420</td>
<td>1,500</td>
<td>+740</td>
</tr>
</tbody>
</table>

**Towns not included in PIFU’s population growth scenarios**

- Glenden
- Coppabella
- Rolleston
- Biloela
- Moura
- Theodore
- Monto
- Taroom
- Wandoan
- Miles
- Chinchilla
- Dalby

Note: These town projections are taken from the Mining Expansion Scenarios prepared by PIFU in 2005, based on information supplied by mining companies regarding accommodation intentions. Since these projections were prepared, increased use of non-resident workforces (Fly-in/Fly-out) has occurred, resulting in fewer residents living in the area as permanent residents. As a result, these projections are now likely to overstate the extent of future population growth, and should be used with extreme caution. More accurate population projections for small areas will be prepared by PIFU following release of the 2006 edition population projections.

### Projected resident population growth (High Series projections)

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<td>Banana (S)</td>
<td>14,448</td>
<td>14,426</td>
<td>14,487</td>
<td>14,551</td>
<td>14,631</td>
<td>14,722</td>
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<tr>
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<td>2,252</td>
<td>2,275</td>
<td>2,499</td>
<td>2,637</td>
<td>2,706</td>
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<td>Bowen (S)</td>
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<td>12,629</td>
<td>13,419</td>
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<td>14,803</td>
<td>15,267</td>
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Sustainable Futures Framework for Mining Towns
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<tr>
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<td>Broadsound (S)</td>
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<td>1,554</td>
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<td>Duaringa (S)</td>
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<td>Emerald (S)</td>
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<td>18,900</td>
<td>19,517</td>
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<td>Nebo (S)</td>
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<td>2,574</td>
<td>2,595</td>
<td>2,612</td>
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<td>Peak Downs (S)</td>
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### Appendix 4 Impacts of mining industry expansion

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<th>Category</th>
<th>Mining Industry Expansion Impacts</th>
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| **Local & regional economic development** | • Financial contribution of the mining industry has made a positive impact on the provision of services in some rural communities.  
• While economic growth and development underpin the sustainability of rural communities, greater diversity in economic drivers, such as tourism development, may provide opportunities to establish alternative profitable enterprises.  
• Investment in the bush may be influenced by negative portrayals of rural communities and their long-term viability.  
• The economic outlook is for exponential growth of markets for coal products in India & China. Queensland mining towns will have a strong medium-term economic future.  
• Residents of towns often have the mindset that even in prosperous times, building and investment in mining towns is too much of a risk. Property investors need confidence to proceed with construction projects. A more stable workforce will influence them to build as building costs in these towns are substantial.  
• Creation of employment, and consequential improvements to income and wealth accumulation.  
• Assist in maintaining regional population growth/ |
| **Employment & skills**          | • The drift of apprentices, skilled workers and rural youth away from rural towns and primary or rural production to larger regional centres or mining towns to pursue greater salaries.  
• A shortage of skilled workers in health, education and rural industries. Attracting and retaining skilled and professional workers in health and education is considered particularly problematic.  
• Mining projects affect rural communities by attracting workers away from traditional rural jobs.  
• Despite the mining boom, there are still unemployed people living in communities. |
| **Government coordination and service provision** | • A lack of coordination between agencies within and across levels of government, particularly in terms of policy development and infrastructure.  
• Local councils would struggle to provide services to the bush without more grants from State and Federal governments.  
• Mining towns generate much income for State Government. Mining companies would like to see the State Government put some investment back into communities.  
• Estimated $1B worth of revenue collected by the State Government from mining royalties in the 2005/2006 financial year.  
• The policies of multiple levels of government have caused confusion and conflict over questions such as the extent to which individual mine operators should take responsibility for the provision of infrastructure in nearby communities affected by other mines and other industries. (Rolfe and Lockie, May 2005, p5) |
<p>| <strong>Housing demand and supply</strong>    | • There is no clear State policy on how the housing impacts of major projects should be addressed. The draft State Housing Policy provides for planning schemes to include housing options to satisfy diverse housing needs. |</p>
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<th>Category</th>
<th>Mining Industry Expansion Impacts</th>
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<tr>
<td></td>
<td>needs only once a local government undertakes a housing needs assessment and develops a planning strategy. Under this process, the onus is placed on local government, not developers.</td>
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<td>• Rapid influx of new workers as mine projects come on line will cause bottlenecks in housing demand and supply.</td>
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<td>• Demand is high for accommodation but there is nowhere to put people. For example, a Central Queensland University research project for Nebo found that there was considerable unmet demand for housing in Nebo Shire because the ability of the market to meet housing demand is severely constrained and more incentives may need to be offered by government or developers before private entrepreneurs will respond to the demand.</td>
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<td>• Builders are not available and not able to keep up with demand. This is holding up construction of accommodation.</td>
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<td>• Private enterprise needs to look at low-cost housing themselves and not depend on State Government.</td>
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<td>• Department of Housing (DoH) has written a process for conducting a housing accommodation analysis and strategy for proponents to follow when conducting an EIS. DoH also offers assistance to proponents in producing an accommodation strategy. DoH is internally considering how best to contribute to the EIS process.</td>
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<td>Housing choice</td>
<td>• Times have changed and people require different types of accommodation. Housing stock in purpose-built mining towns getting old.</td>
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<td>• Existing housing stock is predominantly made up of single dwellings on relatively large lots. Existing planning schemes provide limited opportunities for multiple dwellings or small lot housing. In addition to responding to the general housing shortage, there is a need to address the following understanding the demand for alternative forms of housing:</td>
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<td>- The appropriateness of single persons’ quarters/camp accommodation. Anecdotally, many who would settle permanently in mining towns are forced into the single persons’ quarters due to a lack of other options. Council has become increasingly concerned about the pressures to further increase this type of accommodation, particularly where it would take up land that would otherwise be available for permanent housing;</td>
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<td>- the potential loss of caravan park accommodation due to town expansion or medium density residential redevelopment. Alternative locations for new caravan park facilities should be considered; and</td>
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<td>- urban design assessment to determine appropriate forms of small lot or medium density housing (and, if found to be appropriate, single persons’ quarters).</td>
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<tr>
<td>Housing affordability</td>
<td>• Young people, low-income owners, and unemployed people, are also providing services to miners. Housing rents have increased and these groups cannot afford housing at this price. Young people are forced to leave town. Poor health / overcrowding in some homes is evident - this may lead to neighbourhood problems.</td>
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<td>• Local non-mine employees are not able to compete with mine wages, and will not be able to afford to live in mining towns as they cannot afford to rent homes, let alone buy.</td>
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<td>• Mine workers do not want to pay a minimum of $150,000 to build a house when there is a risk that the value of the investment will drop when mines close and the local economy declines.</td>
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<td>• House prices are high in Emerald (median $235,000), Moranbah ($230,000) and Nebo ($203,000). With the exception of these centres, however, house sale prices across the Bowen Basin may be considered to be more affordable than the Queensland average of $280,000. House prices in</td>
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<td></td>
<td>Clermont ($72,590), Collinsville ($73,000), Springsure ($81,000) remain relatively low.</td>
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<td>• Shortages of short term rental accommodation in mining communities are also placing upward pressure on rental prices.</td>
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<td>Home ownership</td>
<td>• Mining companies encourage home ownership by employees as this encourages people to assimilate into towns and make an investment. In the past, with the downturns in production and given high labour costs, the course of action taken was when houses were vacated they were disposed of - this was only a short-term view.</td>
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<td>• Mining companies previously owned the houses which they sold off to staff after obtaining freehold title from the State of Queensland.</td>
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<td>• Home ownership has contributed significantly to community permanence. Towns where a majority of housing stock is privately owned are seeing increased involvement in social networks.</td>
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<td>Rental housing</td>
<td>• Some private tenants were only given 7-10 days to get out after houses were sold.</td>
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<td>• A small number of mining companies (e.g. Curragh at Blackwater) still own and lease out accommodation. These companies have started to take rental houses back from the general market to allocate to their own workforce.</td>
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<td>• Some of the smaller mine operations have relied on bigger companies for the supply of staff housing. Now that the larger companies are taking back stock to accommodate the needs of its own workforce, there is a problem for these smaller companies.</td>
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<td>• Housing Queensland removed houses from some towns (e.g. Blackwater) which have not been replaced. There is currently a 9-12 month waiting list for HQ accommodation in some towns.</td>
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<td>• Investors buying houses in mining towns are raising both the price of housing sales and rentals.</td>
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<td>Short-term accommodation</td>
<td>• Caravan parks are full of transient residents and contractors. In one instance more than 85% of park residents were transient, with only a handful of permanent residents. There are limitations on space for expansion of some existing parks.</td>
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<td>• As far as major projects concerned, temporary accommodation is the best solution if it fits in with existing infrastructure and social networks, result in far less social unrest. Not always the opportunity to utilise existing infrastructure.</td>
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<td>• While there is a strong need for semi-permanent accommodation, caravan parks primarily exist to cater for caravans and mobile homes. The usual winter influx of southern tourists places an additional stress on available accommodation.</td>
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<td>• There is also a need for crisis accommodation (e.g. Anglicare reports that its short and medium term houses are always 100% full).</td>
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<td>• Miners have been housed in crisis accommodation in some communities as they and their families had been living out of their car because of the lack of housing.</td>
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<td>• Temporary accommodation does not provide anything for local government in terms of servicing those people. Private investors have profit in mind and their investment in towns may not result in helping those in the low-income bracket. Councils have too limited resources to be responsive to their needs.</td>
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<td>• Accommodation for single visitors and company officers visiting mine sites overnight is needed. Currently they have to be flown in and out on the same day.</td>
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| **Strategic planning & infrastructure**      | - Current statistical projections show mining towns in decline but do not seem realistic in term of known projects. There is a need for the community to be presented with very accurate predictions of the future.  
- Future predictions indicate a big impact for tourism in Central Queensland.  
- Town planning needs to be mindful of land tenure, single persons' accommodation, existing camps, green-field development, existing pressures, lifespan of infrastructure and the magnitude of development activity.  
- Flexible use of underutilised land holdings (e.g. reserves) should be considered to provide temporary accommodation options.  
- For local government, management of contributed assets is an issue. Some existing assets provided by mining companies are not of high standard or permanence. The current generation has inherited an infrastructure with an enormous replacement value and spiralling costs i.e. water has quadrupled in price in the last 5-6 years.  
- Native title is a constraint on development in many towns.  
- The result of multiple mining projects beginning operations in single communities has created a reluctance by companies to further contribute to community infrastructure requirements as increased demands on this infrastructure are no longer solely caused by a single company.  
- Proponents consider that as projects are located entirely within mining leases authorised by the *Mineral Resources Act 1989*, the *Integrated Planning Act 1997* and local government planning schemes are irrelevant.  
- Proponents incorrectly assume regional centres (e.g Rockhampton, Mackay) large enough to absorb any population increases from their projects without impact.                                                                                                                                                                                                                                 |
| **Environmental impacts & EIS Process for Mining Projects** | - The environmental impact of some mining projects, including their demand on local or regional water supplies; and the social impact, including increased competition for housing and reduced housing affordability in towns dependent on mining.  
- Projects historically did not think about impacts on community. Now this aspect is required to be looked at and considered in the EIS process prior to projects being approved. However, workforce requirements are often unresolved through the EIS process.  
- The use of contractors for construction and mine operation activities reduces the certainty of approaches to accommodation issues proposed in EIS as the project proponents are not directly responsible for addressing accommodation requirements of the project.  
- The mix of accommodation requirements (family v single quarters, and permanent v temporary) varies significantly between projects.  
- There are unsupported assumptions that the private housing market will provide workforce accommodation.  
- Many projects assume that miners and families will primarily reside in coastal towns (e.g. Mackay, Yeppoon) due to the structure of shift arrangements (such as seven days on, 12 hour shifts and seven days roster break) and lifestyle opportunities. This then means that the companies think that any impact from the small proportion of the workforce that resides in the mining towns is negligible, whether in terms of impacts on community services or the accommodation market. (Yet in the same EIS report it states that only two houses were available for rent at time of writing, September 2005.)  
- EIS tend to source population data from ABS Census statistics, updated only at 5 year intervals and which do not separately account for workers in temporary accommodation camps.                                                                                                                                                                                                                     |
| **Social impacts**                            | - There are concerns about the social impacts on communities for both the
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<td>short and long-term periods of mining projects.</td>
<td>• Opinions on the outcome of housing temporary workers are divided. Mining companies observe that there is very little social unrest and incredibly few problems. Others members of the community consider that onsite camp accommodation results in a multitude of problems for the individual and the community.</td>
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<td>• Towns do have an aged population and communities, a sense of belonging. There will always be a segment of the community who want to live in these towns.</td>
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<td>• There is already a struggle in attracting and retaining services and professionals in the community sector i.e. health, education, community welfare. The lack of available housing adds an additional stress, and this is complicated by housing standards and affordability.</td>
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<td>• With the influx of people coming for employment and bringing families with them, schools will find they have increasing numbers to deal with. The number of teachers must also increase. Similarly with other services developing, staff recruiting can be hindered by lack of available housing.</td>
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<td>• Some people prefer to live in one locality and travel to work in another. Communities need to understand and accept this as a choice made by these employees. To combat this, towns need to be made as attractive as possible to entice people to move there with families.</td>
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<td>• Local councils are struggling to recruit and retain staff which impacts on services such as maintenance of drains, grading of roads, capacity to respond to the volume of demands resulting from the cumulative impacts of multiple mining projects.</td>
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Appendix 5  Bowen & Surat Basin Towns - DLGPSR Issues Scan

- As well as Moranbah the following towns are experiencing growth management pressures requiring a coordinated response from government, industry and the community:
  - Nebo, due its strategic location close to existing and proposed mines, is becoming attractive as a hub for the mining industry. There is a serious shortage of housing and serviced available lots in the town. The town is surrounded by some large parcels of reserved land which could potentially be made available for additional residential, commercial and industrial sites. The reserved land can only be developed if native title issues have been addressed, for example, by way of an indigenous land use agreement (ILUA) if approval is obtained by Council or another party to purchase part of the reserve.
  - Coppabella, situated in Nebo Shire between the towns of Nebo and Moranbah is already experiencing significant growth management issues including demand for water and sewerage infrastructure and housing demand because of the accommodation requirements of mine expansion. The short-term demand for accommodation is able to be mitigated through the development of temporary workers camps near the town. In the longer-term, planning for land use and infrastructure will be an issue due to the likely accommodation and service requirement of eight (8) potential mining developments in the surrounding area. There is likely to be a demand for a wider range of accommodation beyond temporary camps in the Coppabella area. Nebo Shire will need to be supported and encouraged to plan for concentration of permanent residential accommodation in the established centre of Nebo where infrastructure including water, sewerage and social services may be more readily provided.
  - Emerald, a regional service centre, is experiencing growth pressures through expanded mining activities in the district. There are unmet needs for public housing and emergency accommodation in the town. These pressures are likely to be compounded by at least two potential mining developments near the town. Emerald Shire Council and private developers have responded to a demand for residential lots in the town with applications for up to 1200 new lots having been approved or being considered by Council by late 2005. Although the supply of land for housing now seems more than adequate, the supply of housing to meet needs has been slow. Good quality agricultural land which surrounds the town on three sides will become a constraint upon the town’s expansion in the long-term.
  - Blackwater (in Duaringa Shire) is experiencing a shortage of housing and choice in housing types, caused by major expansion of existing mines near the town. This pressure is likely to be compounded by the accommodation requirements of two potential mining developments.
  - Bowen (in Bowen Shire) is experiencing a strong demand for residential land and supporting infrastructure resulting from increased mining industry activity in the Collinsville and Moranbah area. Bowen, with its attractive seaside location, is proving a drawcard for mine shiftworkers who wish to reside near the coast and commute to mine sites. Mackay, Rockhampton and Yeppoon are similarly attractive to mine shiftworkers.
The following towns are likely to experience growth pressures in the short-term to medium-term which will best be supported by a coordinated response from governments, industry and the community –

- **Collinsville** (in Bowen Shire) could experience impacts, on land and housing supply, and infrastructure, due to the workforce accommodation requirements of the Sonoma mining development.

- **Glenden** (Nebo Shire) is currently experiencing a demand for affordable housing. Although this town has sufficient vacant land available for expansion, in the medium-term the town’s economic and social sustainability will need to be monitored as several nearby mines close.

- **Dysart** (in Broadsound Shire) is likely to experience growth management issues due to the workforce accommodation requirements of three potential mining developments (Vermont, Tay-Glen and Norwich Park East expansion). This will require the provision of additional housing and services in Dysart. A number of land dealings, aimed at providing sites for residential, commercial and industrial uses, are in progress.

- **Springsure** (in Bauhinia Shire) could experience impacts, in the short-term, on land and housing supply, and infrastructure, due to the workforce accommodation requirements of the proposed Minerva coal project. Good quality agricultural land could impact on options for town expansion. Bauhinia Shire Council has been working with the community and mining companies to address the potential impacts.

- **Rolleston** (in Bauhinia Shire) may experience some impacts, in the short-term, on land and housing supply, and infrastructure, due to the workforce accommodation requirements of the Rolleston coal project. Existing community infrastructure in the town of Rolleston may need augmentation to support any significant town expansion. Bauhinia Shire Council has been working with the community and mining companies to address the potential impacts.

- **Biloela** (in Banana Shire) is likely to experience significant flow-on growth pressures due to the workforce accommodation requirements of proposed massive expansion of the nearby Dawson Mining Complex. Availability of land for future town expansion, including the infrastructure required to service expansion, may become an issue due to the town’s proximity to good quality agricultural land which adjoins the town.

- **Moura** (in Banana Shire) is likely to experience significant growth pressures due the workforce accommodation requirements of proposed massive expansion of the Dawson Mining Complex. Availability of land for future town expansion, including the infrastructure required to service expansion, may become an issue due to the town’s proximity to major mine resources, and good quality agricultural land adjoining the town’s existing boundaries.

- **Theodore** (in Banana Shire) is also expected to experience growth pressures due to the accommodation requirements of the Dawson Mining Complex. There is a shortage of suitable unconstrained land for town expansion purposes. This is due to an absence of any significant stock of unallocated State land or reserved lands, and the town’s situation within a major flood plain and good quality agricultural land.

- **Wandoan** (in Taroom Shire) is likely to experience, in the medium-term, significant growth pressures due the large number of coal deposits situated near the town. Although there are no immediate mining projects planned in
the locality, planning for a future as centre of mining activity needs to be given priority.

- **Chinchilla** (Chinchilla Shire) is beginning to experience growth pressures arising from mining projects expected for Chinchilla. The community has expressed concerns about a shortage of affordable housing in the town. Property prices have risen due to mining and energy industry activity in the Shire. There is virtually no unallocated State land in the town. Mine deposits are not located close to the town area.

- Relative to the above towns, growth management issues are currently of lesser concern. However, further more detailed investigation is required:
  - **Clermont** (Belyando Shire)
  - **Middlemount** (Broadsound Shire)
  - **Capella** (Peak Downs Shire)
  - **Tieri** (Peak Downs Shire)
  - **Monto** (Monto Shire)
  - **Taroom** (Taroom Shire)
  - **Miles** (Murilla Shire)
  - **Dalby** (Dalby Town; surrounded by Wambo Shire)
Appendix 6  Major projects related to the coal industry

Coal Industry Taskforce

The CIT Program of Actions identifies:
• A$1.4 billion in coal infrastructure projects already committed;
• More than A$1 billion in projects required to be undertaken, to expand capacity to 215 Mt/a, subject to commercial contracts;
• Strategic planning to cater for a significantly larger increase in the demand for coal to 235 Mt/a capacity; and
• Significant additional investment in new locomotives and wagons required to transport coal from the mines to the ports.

Committed expansions are underway at Gladstone and Hay Point to increase the combined capacity of the export coal terminals by a total of 39 Mt/a over the next 2 years. These expansions comprise:
• 25 Mt/a at the RG Tanna Terminal at Gladstone
• 2 Mt/a at the Barney Point Terminal at Gladstone
• 6 Mt/a at the Dalrymple Bay Coal Terminal near Mackay
• 6 Mt/a at the Hay Point Coal Services Terminal near Mackay

The Queensland Government has fast-tracked a A$25 million feasibility study by Queensland Rail and Ports Corporation of Queensland for a new rail link between North Goonyella and Newlands mines. This link, called the Northern Missing Rail Link, will connect the Goonyella and Newlands rail systems and allow additional coal to be railed to Abbot Point Coal Terminal at Bowen. This A$1.1 billion project would allow an extra 35 Mt/a to be exported through Abbot Point, and provide some diversity to the major Goonyella rail system and Hay Point terminal complexes.

As well as major infrastructure projects, another outcome of the Program of Actions is a Housing Action Plan being developed by the Department of Housing. A draft Regional Housing Issues Report for the Bowen Basin was released for select consultation in March 2006. Some of the key potential responses to housing issues identified in the Housing Issues report are:

• Focusing social housing provision in identified key regional centres of Emerald, Blackwater, Biloela, Moranbah & Clermont;
• Using EIS processes to require proponents to prepare an accommodation strategy setting out how project construction and operational workforces (including contractors’ employees) will be accommodated in a way that minimises detrimental impacts on existing residents in nearby communities;
• Monitoring performance of accommodation strategies including impact on local housing market conditions and through feedback from community reference groups;
• Development of a Major Projects Housing Policy setting out the Government’s requirements for the provision of housing to accommodate major project workforces;
• Development of growth management strategies for Moranbah and Bowen to meet project population growth;
• Development and implementation of a disposal strategy for the government’s surplus land holdings;
• Development of a strategy to retain existing skilled workers in the building industry and to attract and retain apprentices to the building trades in Central Queensland;
• Recognition of the potential role of temporary accommodation such as single persons quarters in the proposed Major Projects Housing Policy;
• Monitoring the demand for public rental housing in high growth communities particularly Emerald and Moranbah; and
• Development and implementation of a disposal strategy for “employee housing” (currently owned by mining companies);

**Other major infrastructure projects**

**Hay Point Coal Terminal.** In July 2005, the BHP Billiton announced approval for the $230 million Phase 2 expansion of the Hay Point Coal Terminal, to lift capacity by an extra 4 Mt/a to 44 Mt/a by the first quarter of 2007. Further expansion, planned as Phases 3 and 4, could ultimately increase coal throughput capacity to an estimated 55 Mt/a to 57 Mt/a.

**Central Queensland Coke Plant and Power Station Project.** Queensland Coke and Energy Pty Ltd (a subsidiary of Macarthur Coal Limited) and Stanwell Corporation are proposing to build and operate a metallurgical coke-making facility and power station at Stanwell, 25 km south-west of Rockhampton. The proposed coke plant will produce high-quality blast furnace coke for export to iron and steel makers worldwide.

**Moranbah Water Pipeline Projects.** In 2004, SunWater was approached by coal miners in the northern Bowen Basin to address this issue. In partnership with six foundation users, SunWater is constructing a pipeline from the Burdekin Falls Dam to Moranbah in the northern Bowen Basin. Eastern and Southern pipeline extensions will also be constructed as part of the Moranbah Pipeline Projects. This project is intended to supplement existing water supplies drawn from Eungella Dam in the event that this wet season fails to replenish dam levels; and it will also enable the Queensland coal mining industry to better plan for future expansion.
## Appendix 7 Status of planning schemes

<table>
<thead>
<tr>
<th>Council</th>
<th>Transitional Scheme</th>
<th>IPA Scheme Stage</th>
<th>Status</th>
<th>Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowen</td>
<td>Superceded</td>
<td>7</td>
<td>Commencement 22/3/2006</td>
<td>Barry Menzies, Town Planner, Bowen Shire Council (07) 4761 3638</td>
</tr>
<tr>
<td>Nebo</td>
<td>4b</td>
<td>1st State Interest check with Council</td>
<td>Display April 2006</td>
<td>Michael Jewell, HRP (07) 4953 2877 or Mark Crawley, CEO Nebo Shire Council (07) 4950 5133</td>
</tr>
<tr>
<td>Belyando</td>
<td>4b</td>
<td>1st State Interest check with Council</td>
<td>Delayed due to extenuating circumstances. Council expects to resubmit the scheme incorporating recommendations of the Moranbah Preliminary Planning Study for public notification in December 2006.</td>
<td>Buckley Vann (Jenny Roughan (07) 3852 1822</td>
</tr>
<tr>
<td>Broadsound</td>
<td>Superceded</td>
<td>7</td>
<td>Transitional scheme replaced by IPA scheme</td>
<td>Commencement 21/9/2005</td>
</tr>
<tr>
<td>Peak Downs</td>
<td>Superceded</td>
<td>7</td>
<td>Transitional scheme replaced by IPA scheme</td>
<td>Commencement 2/12/2005</td>
</tr>
<tr>
<td>Emerald</td>
<td>5</td>
<td>Planning scheme display &amp; submission review</td>
<td>Final SIR completed. Scheme scheduled for approval to adopt prior to 29 December 2006.</td>
<td>Bill Gannon (07) 4935 1055</td>
</tr>
<tr>
<td>Duaringa</td>
<td>4b</td>
<td>1st State Interest check with Council</td>
<td>Notification completed; Submissions under review</td>
<td>Bill Gannon (07) 4935 1055</td>
</tr>
<tr>
<td>Bauhinia</td>
<td>5</td>
<td>Planning scheme display &amp; submission review</td>
<td>Amended scheme undergoing final SIR. Scheduled for approval to adopt prior to 29 December 2006.</td>
<td>Bill Gannon (07) 4935 1055</td>
</tr>
<tr>
<td>Banana</td>
<td>Superceded</td>
<td>7</td>
<td>Transitional scheme replaced by IPA scheme</td>
<td>Commencement 7/10/2005</td>
</tr>
<tr>
<td>Taroom</td>
<td>5</td>
<td>Planning scheme display &amp; submission review</td>
<td>Approved for adoption; awaiting gazettal prior to 29/12/2006</td>
<td>Campbell Higginson Planners (07) 3366 1700</td>
</tr>
<tr>
<td>Murilla</td>
<td>Superceded</td>
<td>6a</td>
<td>Commencement</td>
<td>Campbell Higginson</td>
</tr>
<tr>
<td>Location</td>
<td>Action</td>
<td>Date</td>
<td>Contact</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Chinchilla</td>
<td>2nd State Interest check with Council</td>
<td>30/6/2066</td>
<td>Planners (07) 3366 1700</td>
<td></td>
</tr>
<tr>
<td>Dalby</td>
<td>6a 2nd State Interest check with Council</td>
<td>Lodged for 2nd State Interest Review</td>
<td>Campbell Higginson Planners (07) 3366 1700</td>
<td></td>
</tr>
<tr>
<td>Dalby</td>
<td>4a 1st State Interest check with Department</td>
<td>1st State Interest Review completed</td>
<td>Council staff Blaine Patterson, Dir Community Services, Planning, etc (07) 4672 1162</td>
<td></td>
</tr>
<tr>
<td>Wambo</td>
<td>Superceded</td>
<td>Transitional scheme replaced by IPA scheme</td>
<td>Campbell Higginson Planners (07) 3366 1700</td>
<td></td>
</tr>
<tr>
<td>Monto</td>
<td>5 Planning scheme display &amp; submission review</td>
<td>Display to 23/12/2005</td>
<td>Campbell Higginson Planners (07) 3366 1700</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 8 Planning Considerations for Sustainable Futures

The planning considerations outlined are key to developing an action plan to address specific and cumulative unmitigated impacts of mining industry development.

Key planning issues are likely to include:

- Cumulative social, economic and environmental impacts;
- Managing the urban lifecycle - stages of growth, decline and rejuvenation;
- Managing risks;
- Cultural impacts;
- Capacity for economic diversification; and
- Balancing productive mining industry and sustainable & vibrant communities

The planning considerations fall into three broad categories:

1. Land Use Planning
2. Infrastructure Planning
3. Socio-economic Planning

These categories are divided into related key individual planning action areas. The response required in a particular community is likely to comprise a number of actions within each of the three major categories. This list of key planning issues is not exhaustive. There may be other issues specific to particular communities.
### Land Use Planning Considerations

Key actions which may be required to respond to the land use impacts of mining industry expansion or contraction comprise:

<table>
<thead>
<tr>
<th>Action required</th>
<th>Responsibility of</th>
<th>Collaborating with</th>
<th>Delivering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Trends.</strong> Research population and household forecasts for the community to identify growth trends.</td>
<td>Local government</td>
<td>DLGPSR - PIFU Qld Treasury - OESR ABS</td>
<td>• Accurate assessment of community population to support land use planning</td>
</tr>
<tr>
<td><strong>Economic Trends.</strong> Analyse the key economic indicators affecting the local and regional economy and potential impacting on land use. Consider wider impacts e.g. internationalisation of the Australian economy, changes in international trade, increasing economic efficiency, growth in tourism, communications and information technology</td>
<td>Local government</td>
<td>Regional economic development organisations, Tourist promotion and development bodies</td>
<td>• Understanding of impacts on local and regional economy of mining industry growth, tourism, rural industry, etc. • Economic development strategy • Local tourism and strategy.</td>
</tr>
<tr>
<td><strong>Serviced Land Availability.</strong> Identify all vacant land within the town area available for development. Include all land able to be provided with town services e.g. water, sewerage, roads, drainage, etc.</td>
<td>Local government</td>
<td>NRW Local property services</td>
<td>• Identification of land suitable for development or infill development. • Disposal strategies for surplus State land.</td>
</tr>
<tr>
<td><strong>Environment.</strong> Identify land required to be protected for its biodiversity conservation, scenic and heritage values, and areas suitable for protection as buffers between industrial and residential uses.</td>
<td>Local government</td>
<td>Regional planning organisations DLGPSR EPA-QPWS, NRW, Infrastructure agencies, Catchment Management Groups, Landcare Groups Mining companies</td>
<td>• Review status of current planning scheme and regional plan to identify constraints to land use. • Whole of life plans for mine sites.</td>
</tr>
<tr>
<td><strong>Indigenous cultural heritage.</strong> Identification and protection of indigenous cultural heritage.</td>
<td>Local government</td>
<td>NRW Indigenous communities Landholders Mining companies</td>
<td>• Cultural Heritage Management Plans</td>
</tr>
<tr>
<td><strong>Identification of mineral resource deposits.</strong> Map the location of known mineral deposits, leases, licences and other authorities in relation to town boundaries.</td>
<td>Local government</td>
<td>NRW Mining companies</td>
<td>• Mapping of constraints on future town expansion in relation to mineral resource deposits •</td>
</tr>
<tr>
<td><strong>Protection of Good Quality Agricultural Land.</strong> Review planning scheme provisions, land suitability</td>
<td>Local government</td>
<td>NRW DPI&amp;F</td>
<td>• Mapping of good quality agricultural land constraints to</td>
</tr>
<tr>
<td>Action required</td>
<td>Responsibility of</td>
<td>Collaborating with</td>
<td>Delivering</td>
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</tr>
<tr>
<td>mapping and other studies as relevant to identify good quality agricultural land constraints on future town expansion.</td>
<td></td>
<td></td>
<td>town boundaries.</td>
</tr>
<tr>
<td><strong>Pest Management.</strong> Investigate land constrained by pest animal or plant infestations by reference to Local Pest Management Plan.</td>
<td>Local government NRW</td>
<td>EPA/QPWS</td>
<td>• Mapping of pest infested lands and development of mitigation strategies to enable land to rehabilitated for possible future town needs.</td>
</tr>
<tr>
<td><strong>Air Quality.</strong> Investigate existing and potential sources of air pollution relative to future sensitive land uses.</td>
<td>Local government</td>
<td>EPA/QPWS Mining companies</td>
<td>• Strategy to maintain good air quality and liveable communities.</td>
</tr>
<tr>
<td><strong>Noise.</strong> Investigate existing and potential sources of noise from industry and transport routes relative to sensitive land uses</td>
<td>Local government</td>
<td>EPA/QPWS Main Roads Mining companies</td>
<td>• Strategy to mitigate noise impacts of industry and transport routes on land required for sensitive uses.</td>
</tr>
<tr>
<td><strong>Water Quality.</strong> Investigate existing and potential impacts on water quality from land use in proximity to rivers and underground water supply sources</td>
<td>Local government</td>
<td>NRW EPA/QPWS Mining companies</td>
<td>• Strategy to ensure water quality is protected from contaminated runoff resulting from changes in land use associated with town and industry growth.</td>
</tr>
</tbody>
</table>
## Infrastructure Planning Considerations

Key actions which may be required to respond to the infrastructure impacts of mining industry expansion or contraction comprise:

<table>
<thead>
<tr>
<th>Action required</th>
<th>Responsibility of</th>
<th>Collaborating with</th>
<th>Delivering</th>
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</thead>
</table>
| **Water Supply (Urban & Industrial)**. Assessment of existing and future water supply needs to service urban population including industry located within urban boundaries | Local government NRW | Coal Infrastructure Taskforce, DLGPSR, Mining companies | • Plans for infrastructure upgrading and maintenance to meet estimated future urban demand.  
• Priority infrastructure plan with infrastructure charging schedule. |
| **Wastewater Management.** Assessment of existing and future wastewater reticulation and treatment requirements to support predicted urban growth. | Local government | EPA/QPWS, DLGPSR, Mining companies | • Plans for infrastructure upgrading and maintenance to meet estimated future urban demand.  
• Priority infrastructure plan with infrastructure charging schedule. |
| **Waste Management (Landfill).** Identification of local and regional waste management requirements to support predicted urban growth. | Local government | DLGPSR, EPA/QPWS | • Plans for infrastructure upgrading and maintenance to meet estimated future urban demand.  
• Priority infrastructure plan with infrastructure charging schedule. |
| **Electricity.** Identification of supply and infrastructure requirements to support predicted urban and major industrial growth. | Local government, Ergon Energy, Energex, etc | Mining companies | • Supply and infrastructure augmentation strategies. |
| **Gas.** Identification of supply and infrastructure requirements to support predicted urban and major industrial growth. | Local government, Gas suppliers, Origin, Sun Retail, etc | Department of Energy, Mining companies | • Supply and infrastructure augmentation strategies. |
| **Communications.** Identification of supply and infrastructure requirements to support predicted growth. | Local government, Telecommunications providers | Mining companies | • Local telecommunications strategy |
| **Roads.** Identification of road projects required to support predicted urban and regional growth. | Local government, Department of Main Roads | QT (Integrated Regional Transport Planning), Coal Infrastructure Taskforce, Mining companies | • Main Roads - Roads Implementation Program.  
• Main Roads Local Government Roads Alliance.  
• Integrated Local Transport Plan  
• Local government road development and maintenance programs. |
<table>
<thead>
<tr>
<th>Action required</th>
<th>Responsibility of</th>
<th>Collaborating with</th>
<th>Delivering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail. Identification of potential new links or rail upgrades needed to support industry expansion.</td>
<td>QR</td>
<td>QT (Integrated Regional Transport Planning) Coal Infrastructure Taskforce Mining companies</td>
<td>• Infrastructure agreements between State, local government and mining companies.</td>
</tr>
<tr>
<td>Air. Identification of potential of existing and proposed airports to provide for passenger and freight services.</td>
<td>Local government</td>
<td>QT (Integrated Regional Transport Planning) Tourism Qld Air carriers</td>
<td>• Development of rail link strategies. • Development of strategies to upgrade existing links. • Integrated Local Transport Plan</td>
</tr>
<tr>
<td>Public Transport. Identification of public transport needs for urban and regional communities.</td>
<td>Local government</td>
<td>QT (Integrated Regional Transport Planning) QR Bus companies</td>
<td>• Development of strategies for upgrading of air transport services</td>
</tr>
<tr>
<td>Recreation &amp; Open Space. Identification of existing and future recreation and open space needs, including assessment of land potentially required for redevelopment.</td>
<td>Local government</td>
<td>DLGPSR NRW EPA/QPWS Tourism Queensland</td>
<td>• Local recreation and open space strategy. • Disposal strategies for surplus State land.</td>
</tr>
</tbody>
</table>
### Socio-economic Planning Considerations

Key actions which may be required to respond to the socio-economic impacts of mining industry expansion or contraction comprise:

<table>
<thead>
<tr>
<th>Action required</th>
<th>Responsibility of</th>
<th>Collaborating with</th>
<th>Delivering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing.</strong> Investigation of housing supply and demand, diversity and affordability.</td>
<td>Local government Mining companies</td>
<td>Department of Housing Coal Infrastructure Taskforce DLGPSR Department of Communities</td>
<td>• Strategy for provision of housing to service population growth. • State social housing provision. • Mining company workforce Accommodation Plans • Private accommodation development projects (temporary workers accommodation and tourism-related)</td>
</tr>
<tr>
<td><strong>Skilled Labour.</strong> Analysis of labour force trends and identification of skills shortages.</td>
<td>Department of Employment &amp; Training</td>
<td>Coal Infrastructure Taskforce Education providers e.g. TAFE, Universities, etc. Mining companies Local government Department of Communities</td>
<td>• Development of strategies to provide skilled labour.</td>
</tr>
<tr>
<td><strong>Education &amp; Training.</strong> Analysis of labour force trends, identification of training and development needs and primary and secondary schools.</td>
<td>Department of Employment &amp; Training</td>
<td>Department of Education, Training &amp; the Arts Education providers e.g. TAFE, Universities, etc. Mining companies Department of Communities Local government</td>
<td>• Training and development programs • State school planning program.</td>
</tr>
<tr>
<td><strong>Health.</strong> Investigation of the need for health services to support predicted growth in mining communities.</td>
<td>Queensland Health Local government Mining companies</td>
<td></td>
<td>• Development of local health strategies.</td>
</tr>
<tr>
<td>Action required</td>
<td>Responsibility of</td>
<td>Collaborating with</td>
<td>Delivering</td>
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</tr>
</tbody>
</table>
| Youth. Identification of services and facilities required to support young people in mining towns. | Local government Department of Communities | Community groups Church and charitable organisations Mining companies | • Inclusion of local priorities in regional and statewide health plans.  
• Mine site occupational health and safety processes and reporting. |
| Aged Care. Identification of accommodation and service needs of the aged in mining towns. | Local government                           | Federal Government Church and charitable organisations Private aged care accommodation providers | • Local aged care accommodation strategy.  
• Provision of private aged care accommodation facilities. |
| Disability Services.                                                            | Disability Services Queensland             | Local government Community groups Church and charitable organisations | • Strategies for supporting disabled people to live independently in the community.  
• Provision of accessible places for disabled people. |
| Arts, culture & heritage. Identification of activities and projects to support the enhancement of the pursuit of the arts, culture and heritage in mining communities. | Local government                           | Department of Education, Training & the Arts Community groups Mining companies | • Local government provided facilities (grant and other funded)  
• Contributions provided by mining companies. |