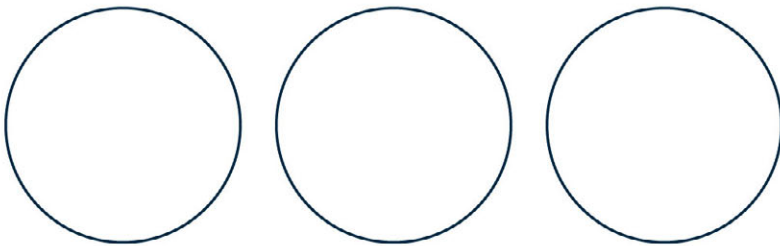


J

SOCIAL ASSESSMENT



ENSHAM CENTRAL PROJECT

SOCIAL ASSESSMENT

Prepared by:

KENNEDY CONSULTING
30 Avis Place
PULLENVALE QLD 4069

For:

HANSEN CONSULTING
20 Wharf Street
BRISBANE QLD 4069

EXECUTIVE SUMMARY

The desktop social assessment has been prepared to meet the issues identified by government and community stakeholders in the Terms of Reference for the Ensham Central Project dated April 2005.

The demographic profile of the affected community has been described. The majority of project impacts are expected to be experienced by the Emerald community. Where relevant, local trends have been compared with those for the Fitzroy Statistical Division and Queensland. The purpose of examining the demographic profile has been to identify social planning implications for the project based on patterns of employment, accommodation, age structure, income distribution and lifestyle. Potential impacts likely to result have been discussed and mitigation measures recommended as appropriate.

Labour force requirements for the project have been forecast based on the current employment trends. Existing published data confirms that the local and regional labour market is tight. The project will rely on a variety of sources to provide a suitable workforce. Stakeholders have identified a need for Ensham Resources to monitor and confirm project workforce estimates at regular intervals during construction and operational phases of the project. Ensham Resources will continue to participate in existing forums that address accommodation and skills issues, namely the Central Highlands Development Corporation (CHDC) Mining Forum and CHDC Skills Development Study Program. Participation in these forums will assist social infrastructure providers in planning for cumulative impacts as a result of major projects occurring simultaneously.

The accommodation strategy for the project workforce has been presented. The availability of accommodation within the closest urban centre of Emerald was investigated. Limited accommodation for purchase or rental is available in Emerald. The preferred alternative for accommodation of the workforce is the extension of the on-site camp and ancillary facilities.

An investigation into the social infrastructure available to service the project has been undertaken. The majority of local infrastructure and services are provided in Emerald. Local services are supported and supplemented by the regional services in Rockhampton. Social infrastructure has been described in terms of the current facilities and services available, the capacity to meet existing and future demand and the key service issues faced by the community. Research was based on existing available published information and telephone discussions with the major social infrastructure providers.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	<i>i</i>
1.0 INTRODUCTION	1
2.0 PROJECT WORKFORCE.....	1
2.1 WORKFORCE NUMBERS.....	1
2.2 WORKFORCE ACCOMMODATION.....	2
2.2.1 Workforce Accommodation Strategy	2
2.2.2 Consideration of Alternatives	4
2.2.3 On-site Camp Facilities.....	4
2.3 PROJECT CATCHMENT.....	4
2.4 WORKFORCE SKILLING AND RESOURCING	5
3.0 METHODOLOGY	5
3.1 DESCRIPTION OF THE SOCIAL ENVIRONMENT.....	5
3.2 CONSULTATION	6
4.0 SOCIAL ENVIRONMENT	6
4.1 POPULATION AND DEMOGRAPHIC PROFILE	6
4.1.1 Population	6
4.1.2 Future Population Trends.....	7
4.1.3 Age Structure	8
4.1.4 Household Structure.....	9
4.1.5 Marital Status	10
4.1.6 Labour Force Status and Local Containment.....	10
4.1.7 Employment by Industry.....	11
4.1.8 Employment by Occupation.....	13
4.1.9 Income Levels	13
4.1.10 Education Level	14
4.2 HOUSING AND ACCOMMODATION	15
4.2.1 Dwelling Structure	15
4.2.2 Short Term Accommodation.....	16
4.2.3 Rental Accommodation.....	18
4.2.4 Private Dwelling and Land Stocks.....	20
4.2.5 Community Housing	21
4.3 COMMUNITY INFRASTRUCTURE AND SERVICES.....	22
4.3.1 Health and Medical Facilities	23
4.3.2 Education	24
4.3.3 Emergency Services.....	25
4.3.4 Retail Outlets and Financial Services	26
4.3.5 Sport, Recreation and Entertainment	26
4.3.6 Welfare and Community Support Services.....	27

4.3.7	Transport.....	30
4.3.8	Telecommunications.....	31
4.4	LOCAL COMMUNITY VALUES AND LIFESTYLES.....	31
5.0	IMPACT ASSESSMENT AND MITIGATION MEASURES	31
5.1	IMPACTS ON THE SOCIAL PROFILE.....	31
5.2	IMPACTS ON LABOUR FORCE AND SKILLING.....	32
5.3	IMPACTS ON HOUSING DEMAND AND SUPPLY.....	33
5.4	IMPACTS ON COMMUNITY INFRASTRUCTURE AND SERVICES.....	33
5.5	SOCIAL IMPLICATIONS OF ACCOMMODATION STRATEGY	34
6.0	REFERENCES	34

LIST OF TABLES

Table 1	Ensham Central Project Workforce Numbers
Table 2	Ensham Central Project Workforce Accommodation
Table 3	Estimated Residential Base for on-site Camp Workforce
Table 4	Ensham Central Project Workforce by Occupation
Table 5	1996 and 2001 Population by Sex in Emerald
Table 6	Indicative Growth Patterns for Central Queensland Capricorn Region
Table 7	Population by Age in Emerald Township 1996-2001
Table 8	Household Structure for Emerald Township, Fitzroy Statistical Division and Queensland in 2001
Table 9	2001 Marital Status for Emerald Township, Fitzroy Statistical Division and Queensland
Table 10	Change in Labour Force Status in Emerald Shire between 1996 and 2001
Table 11	Comparison of 1996 and 2001 Employment by Industry Category for Emerald Shire
Table 12	Occupation by Sex in Emerald Shire
Table 13	Weekly Individual Income in Emerald Shire, Fitzroy Statistical Division and Queensland for persons aged 15 years and over (2001)
Table 14	Highest Post-secondary Educational Qualification Held
Table 15	Dwelling and Tenure Types in Emerald Shire 2001
Table 16	Short Term Accommodation in Emerald, September 2005
Table 17	Average Tourist Accommodation Occupancy Rate
Table 18	Size of Private Rental Market
Table 19	Mean Weekly Rents for Emerald 2002-2004
Table 20	Weekly Rent Levels and Trends by Bedroom Size
Table 21	Social Housing Provision - Emerald Shire
Table 22	Pre-school, Primary and Secondary Education Facilities
Table 23	Child Care Centres and Kindergartens

1.0 INTRODUCTION

This desktop report addresses the potential social impacts related to the Ensham Central Project (the project). It addresses the issues raised by government and community stakeholders during consultation and the issues outlined in the Terms of Reference for the EIS.

As identified by the Terms of Reference, the majority of social issues associated with the project relate to the project workforce, and accommodation of this workforce. Section 2.0 provides workforce data for the project, including the construction and operations workforce, and outlines the accommodation strategy for this workforce. As outlined in Section 2.0, the town of Emerald has been identified as the community most likely to be affected by the project (the project catchment). Section 3.0 explains the methodology adopted for describing the social environment. Section 4.0 describes the existing social environment, including population and demographic trends, housing and accommodation data, community infrastructure and services, and local community values and lifestyles. Section 5.0 assesses the potential impacts of the project on the existing social environment and discusses mitigation measures for impacts.

2.0 PROJECT WORKFORCE

2.1 WORKFORCE NUMBERS

Workforce numbers for project construction and operation been estimated for project planning purposes based on the most accurate, currently available information. However, workforce numbers are dependent on several variables, including project timeframes and resource demand. Consequently, the workforce numbers presented in this report may be subject to minor change during construction and operation.

Table 1 details the estimated workforce numbers for the project. The project workforce is likely to consist of a combination of permanent employees and contractors. All workforce numbers in this report include any employee or contractor employed, either directly or indirectly, by Ensham Resources.

The pre-project workforce is approximately 700 (see Table 1). This workforce is associated with open cut mining operations. Given that the project will not alter the open cut mining production rate or associated workforce, this workforce of 700 will remain in place throughout the life of the project, in conjunction with the project workforce. It should be noted that although the project does not alter the size of the open cut workforce, it extends the life of the open cut mine by 6 years and consequently extends the life of this existing workforce by 6 years.

Table 1 shows construction of the underground mine and washplant will require a construction workforce of approximately 201. The construction workforce would be employed on-site for a two year period (Years 2 and 3 of the project). The project requires an operational workforce of approximately 138 people, which includes the workforce for underground mining and operation of the washplant. As indicated in Table 1, there is a single year in which the construction and operations

workforce will partially overlap (Year 3). During this period there would be a total project workforce of 238 people, the highest project workforce at any one time.

The total Ensham workforce will revert to 700 following the closure of the underground mining operations in Year 14.

Table 1
Ensham Central Project Workforce Numbers

	Pre-Ensham Central Project (Years 0 and 1)	Project Construction (Year 2)	Project Construction/ Operations Overlap (Year 3)	Project Operations (Year 4 to Year 14)
Project Workforce	0	201	238	138
Open-Cut Workforce	700	700	700	700
Total	700	901	938	838

Source: Ensham Resources

2.2 WORKFORCE ACCOMMODATION

2.2.1 Workforce Accommodation Strategy

The majority of the current Ensham workforce work 7 days on and 7 days off in 12 hour shifts. Only a small percentage of the workforce (administration, management and some specialist areas) are based locally and travel to the site on a daily basis. The shift workforce is accommodated in on-site camp accommodation during the 7 day shift period. The shift workforce disperses to their residential base for the 7 day roster break. This accommodation strategy has worked successfully for Ensham Resources since the commencement of mining operations in 1993 and Ensham Resources proposes to adopt it for the project.

Accordingly, as indicated in Table 2, the entire construction workforce, and all but 26 of the operations workforce, will be housed in on-site camp accommodation. The workforce not housed in on-site camp accommodation would travel daily to the site and are thus likely to be based in Emerald, the closest regional centre.

Table 2
Ensham Central Project Workforce Accommodation

Place of Residence	Project Construction (Year 2)	Project Construction/ Operations Overlap (Year 3)	Project Operations (Year 4 to Year 14)
Emerald (Travelling Daily to Work)	0	26	26
On-site Camp	201	212	112
Total	201	238	138

Source: Ensham Resources

The on-site camp accommodation strategy enables employees to select from a wide choice of residential bases, depending on individual preferences. These range from towns such as Cairns in far north Queensland to Brisbane in South-East Queensland to Roma in western Queensland. Based on trends amongst the current Ensham workforce, the majority of the on-site camp workforce are likely to base their families in regional centres such as Rockhampton. These centres are favoured by the workforce because they provide access to a larger variety of social infrastructure than that available in the towns surrounding the project site. Table 3 provides an estimate of the place of residence of the project's on-site camp workforce (and their families), based on the place of residence of the current Ensham on-site camp workforce.

Table 3 indicates that the majority of the construction and operations shift workforce accommodated in on-site camps are expected to have their residential base in Rockhampton. Other key residential base locations include Mackay, south and south-east Queensland, Emerald and a range of other central Queensland towns. Only 14% of the on-site camp workforce is estimated to select the town of Emerald as its residential base. These employees will be accommodated on-site during each working shift but will return to Emerald during roster breaks. This estimate is conservative and the actual proportion of the workforce based in the town of Emerald is likely to be lower due to the current high prices and limited availability of accommodation which will detract from its appeal, relative to other regional centres, such as Rockhampton.

Table 3
Estimated Residential Base for on-site Camp Workforce

Residential Base	Construction (Year 2)	Construction/ Operations Overlap (Year 3)	Operations (Year 4 to Year 14)
Emerald	28	29	16
Central Queensland (excl town of Emerald)	39	40	21
Rockhampton	62	67	36
Mackay	35	37	20
North Queensland	4	4	2
West Queensland	3	3	1
South & SE Queensland	30	32	16
Gladstone	0	0	0
Interstate	0	0	0
Total	201	212	112

Source: Ensham Resources

In summary, based on the above discussion, it is estimated that the following project workforce may be accommodated in the town of Emerald:

- construction workforce of up to 28 on-site camp workers based in Emerald during roster breaks; and
- operations workforce of up to 42 people, comprising 26 people who travel daily to the site and 16 on-site camp employees based in Emerald during their roster breaks.

2.2.2 Consideration of Alternatives

Ensham Resources has selected to accommodate the workforce in on-site camp accommodation because of the success of this strategy at current Ensham operations. One feasible alternative to on-site camp accommodation for the additional workforce would be to house the entire workforce locally in the Emerald area. This option is less favourable because of the current high price and lack of availability of accommodation in the area (refer Section 4.2 for additional detail).

Accommodation of the workforce in other urban centres such as Rockhampton and Mackay was not considered a viable option due to the large distance from the project site.

2.2.3 On-site Camp Facilities

New on-site camps will be constructed to accommodate the construction workforce and the project operational workforce. All new camp facilities will be within the project site boundaries and will be developed in accordance with relevant building and design industry standards.

The current on-site camp provides a good level of services for use by employees. These include:

- Single rooms with amenities (TV, ensuite)
- Inground swimming pool;
- Recreation room;
- Tennis courts;
- Tavern;
- Gymnasiums;
- Vending machines;
- Kitchen and dining area serving breakfasts and dinners;
- Ambulance;
- Carpark; and car washing facilities; and
- Bus service for commuters travelling between the project site and Yeppoon.

The new camps would provide a similar style of accommodation and level of services.

2.3 PROJECT CATCHMENT

As discussed in Section 2.2, the majority of the workforce will have residential bases in locations including Rockhampton, Mackay and other regions throughout Queensland. The estimated distribution of the project workforce to these centres will not result in any significant proportional population increases. Consequently there will not be any significant related social impacts on these locations. The social assessment will thus focus on the town of Emerald.

Blackwater is also within proximity to the project site. However, it is more likely that the project workforce will look to Emerald for local goods and services in preference to Blackwater because of the higher level of community infrastructure and services available. Therefore it is not anticipated that Blackwater would experience any significant social impacts as a consequence of the project.

Although the focus of the social assessment is on Emerald, the community facilities and services in Rockhampton are discussed in the instances where they supplement those in Emerald.

2.4 WORKFORCE SKILLING AND RESOURCING

Table 4 shows the expected skill requirements for the project.

Table 4
Ensham Central Project Workforce by Occupation

Occupation	Construction	Operations
Tradespersons	78	66
Miners	107	55
Professionals	13	15
Clerical	3	2
Total	201	138

Source: Ensham Resources

The project will recruit a mix of people with varying skill profiles, including:

- Technically qualified trades;
- Professionals including engineers and geologists;
- Specialist mining employees;
- Transport operators;
- Experienced machine and equipment operators; and
- People with no previous experience.

Ensham Resources will seek a suitable workforce for the project in the Central Queensland region, throughout Queensland and nationally.

3.0 METHODOLOGY

3.1 DESCRIPTION OF THE SOCIAL ENVIRONMENT

Qualitative and quantitative data on the existing features of Emerald and the Central Queensland Capricorn regional communities has been obtained to define and understand the existing social environment.

The features of the existing social environment that have been considered in this assessment include:

- Population and demographics of the likely affected community (catchment);
- Labour force and skilling;
- Housing and accommodation;
- Community infrastructure and services (including recreational, cultural, leisure and sporting facilities and activities in the catchment); and
- Local community values and lifestyles.

In order to provide a clear understanding of the social and economic environment for this desktop analysis, local, regional and Queensland data are presented and compared as relevant to the project. Statistics for Emerald and Emerald Shire are compared with existing available published data for the Fitzroy Statistical Division and Queensland where relevant. The Fitzroy Statistical Division comprises Jericho, Emerald, Peak Downs, Bauhinia, Duinga, Banana, Mount Morgan, Calliope, Livingstone and Fitzroy shires and the coastal settlements of Rockhampton City and Gladstone City. Data sets for the Fitzroy Statistical Division were analysed as existing available ABS published information for the Central Queensland Capricorn region with appropriate detail were not available at the time of preparing this report.

Much of the analysis relies on the most recent 2001 Australian Bureau of Statistics (ABS) data which in many respects does not reflect the current situation in the Central Queensland Capricorn region. Where possible, data have been updated using other sources.

3.2 CONSULTATION

In addition to consultation with the adjoining landowners and key representatives from government agencies and community groups, one to one meetings and telephone interviews with service providers in the area were undertaken as part of this social assessment. Stakeholders who have provided input into this social assessment include:

- Central Highlands Human Services Group;
- Department of Communities;
- Department of Housing;
- Central Highlands Development Corporation;
- Centacare;
- Anglicare;
- Emerald Neighbourhood Centre;
- Queensland Health;
- Domestic Violence Service of Central Queensland; and
- Education Queensland.

4.0 SOCIAL ENVIRONMENT

4.1 POPULATION AND DEMOGRAPHIC PROFILE

4.1.1 Population

The Fitzroy Statistical Division's population growth has historically been accommodated in three discernible areas (Rockhampton and Gladstone), coastal areas (Yeppoon to Emu Park and Boyne Island and Tannum Sands) and the key regional centre of Emerald.

On 2001 Census night there were 14,249 people (7,503 males and 6,746 females) counted in Emerald Shire (including overseas visitors). This represents an increase of 937 people (7.0%) since the 1996 Census, and an increase of 3,586 people (33.6%) since the 1991 Census.

Approximately 70.8% of the Emerald Shire population counted on census night is located within Emerald township.

Table 5 shows there was an increase in population for males and females between 1996 and 2001.

Table 5
1996 and 2001 Population by Sex in Emerald

	1996	2001	Number increase	Percentage increase
Males	4,901	5,235	+334	6.8%
Females	4,439	4858	+419	9.4%
Total	9,340	10,093	+753	8.0%

Source: Australian Bureau of Statistics Community Profile Data 1996 and 2001 Census

The Department of Local Government and Planning (DLGP) has examined highlights and trends of population statistics in Queensland, the Central Queensland southern region and Emerald to 2005.

Analysis by the Department has shown that Queensland continued to maintain its status as Australia's fastest growing state with a growth rate of 2.1% in the year to June 2004. Most of Queensland's growth occurred in the South East region. Outside the South East the Central Queensland region experienced the sixth highest growth rate and the fifth highest absolute growth.

Population growth in Rockhampton (475 people) was also substantially higher than in previous years (152 people in 2003 and 111 people in 2002) and was a turnaround from the average annual population decline of nearly 200 people during the 5 years to 2001.

Some of the important coal mining shires in the central Queensland southern region, such as Emerald and Duaranga also experienced population growth in the year to June 2004 due in part to higher levels of activity and increasing employment in the coal mining sector. Population growth¹ in Emerald Shire increased in 2004 (129 people) compared with the previous year (108 people).

4.1.2 Future Population Trends

Emerald is a key regional centre within the Central Queensland Capricorn region. Emerald experienced dramatic growth in the late 1980s and early 1990s as a consequence of the expansion within the mining sector and changed agricultural practices in the area. In its Central Queensland Regional Growth Management Framework 2002 report the Central Queensland Regional Planning Advisory Committee stated that it is not expected that Emerald will grow as rapidly in the future. Fluctuations in growth may vary and occasionally show short term negative character. Growth as an overall trend, however, is anticipated and Emerald is expected to retain its role as the key regional centre in the sub-region.

¹ It should be noted that the population growth referred to is based on the estimated residential population and does not include employees who may reside in the area for the duration of their working shift. This is an issue for these shires where coal mining is prevalent (eg. Emerald, Duaranga, Peak Downs and Banana Shires).

Table 6 shows the projected 2021 population for the Central Highlands sub-region is 29,431 with the majority of the expected growth to occur within Emerald Shire (Department of Local Government and Planning:2001).

The annual average growth rate between 2001 and 2026 for Emerald Shire is projected to be 1.0 percent. This compares with an annual average growth rate of 1.5 per cent for the State. As a result, the region's share of Queensland's population is projected to be 0.3 per cent in 2026 compared with 0.4 per cent in 2001.

Table 6
Indicative Growth Patterns for Central Queensland Capricorn Region

Locality	2006	2011	2016	2021
Bauhinia (S)	2,142	2,112	2,064	2001
Duaringa (S)	7,865	7,319	6,890	6,483
Emerald (S)	14,553	15,630	16,706	17,679
Jericho (S)	949	904	863	832
Peak Downs (S)	2,749	2,609	2,520	2,436
Central Highlands Sub-region	28,258	28,574	29,043	29,431
Fitzroy (S)	11,378	12,772	41,143	15,476
Livingstone (S)	30,770	35,306	40,000	44,333
Mt Morgan (S)	2,318	1,993	1,690	1,444
Rockhampton (C)	59,314	59,349	59,390	59,451
Rockhampton/ Capricorn Coast Sub-region	103,780	109,420	115,223	120,704
Queensland	3,962,034	4,297,745	4,632,195	4,964,404

Source: DLGP, Population Trends and Prospects for Queensland 2001

4.1.3 Age Structure

Table 7 shows the proportion of the population in each age group in Emerald township for 1996 and 2001. In 1996 the largest proportion of the population of Emerald was in the 20-39 age group (38.9%). Although there is some decline in overall numbers for this age group in the 2001 census data the 20-39 age (34.5%) group represents the highest proportion of the population. Since the 1996 Census, Emerald has attracted an increase in the proportion of the population in the 50+ age group (+4.8%).

This pattern of age distribution is consistent with the trend of Emerald Shire and Queensland becoming attractive destinations for the settlement of retirees. The proportion of the population over 55 years increased from 10% to 12% for Emerald Shire and 20% to 21% for Queensland.

Table 7
Population by Age in Emerald Township 1996-2001

Age Group	1996		2001		Change in age group 1996-2001 (%)
	Number	% of Population	Number	% of Population	
0-9 years	1,746	18.7	1,821	18.0	-0.7
10-19 years	1,425	15.3	1,504	14.9	-0.4
20-29 years	1,800	19.3	1,744	17.3	-2.0
30-39 years	1,828	19.6	1,736	17.2	-2.4
40-49 years	1,333	14.3	1,512	15.0	+0.7
50-59 years	602	6.5	895	8.9	+2.4
60-69 years	328	3.5	490	4.9	+1.4
70+	217	2.3	336	3.3	+1.0
Total	9,340	100.0	10,093	100.0	108.1

Source: Australian Bureau of Statistics Community Profile Data

4.1.4 Household Structure

Table 8 shows the number and proportions of household structures in Emerald township, Fitzroy Statistical Division and Queensland. The most prevalent type of family type in Emerald is couple families with dependent children (1,201 families or 50.3%). This was followed by couple families without children (737 families or 30.9%).

The number of couple families with dependent children in Emerald township is significantly higher than the average for the Fitzroy Statistical Division (40.5%) or Queensland (37%).

Table 8
Household Structure for Emerald Township, Fitzroy Statistical Division and Queensland in 2001

Household Structure	Number in Emerald	Number in Emerald (%)	Number in Fitzroy Statistical Division (%)	Number in Queensland (%)
Couple Family with dependent children (1)	1,201	50.3	40.5	37.0
Couple Family with non-dependent children	130	5.5	6.9	7.3
Couple family without children	737	30.9	36.0	37.4
One parent family	279	11.7	15.0	16.0
Other Family	36	1.5	1.5	1.8
Total	2,383	100.0	100.0	100.0

Source: Australian Bureau of Statistics Census of Population and Housing Catalogue 2016.3

Notes: (1) Comprises couple families with children under 15; couple families with dependent students and couple families with children under 15 and dependent students.

4.1.5 Marital Status

In the 2001 Census, 52.8% of persons in Emerald township) aged 15 years and over were married, 3.8% were separated, 6.63% were divorced, 3.1% are widowed and 33.6% have never been married. The number and proportion of people in each marital status group in Emerald and Queensland is outlined in Table 9.

In the 1996 Census 56.0% of persons were married, 2.0% were separated, 5.6% were divorced, 2.7% widowed and 32.4% had never been married.

The highest proportion of the population has been married which is consistent with the averages for the Fitzroy Statistical Division.

Table 9
2001 Marital Status for Emerald Township, Fitzroy Statistical Division and Queensland

Marital Status	Number in Emerald (%)	Number in Fitzroy Statistical Division (%)	Number in Queensland (%)
Never married	33.6	30.7	31.6
Married	52.8	53.3	51.1
Separated or Divorced	10.4	10.7	11.6
Widowed	3.1	5.4	5.79
Total	100.0	100.0	100.0

4.1.6 Labour Force Status and Local Containment

In recent times Emerald Shire has been characterised by a high rate of employment. During the week prior to Census Night 2001, 94.7% of the labour force in Emerald Shire was employed. This compares with 95.1% who were employed in the 1996 Census and 91.1% for the 1991 Census.

In the 2001 Census, 381 people (214 males and 167 females) were unemployed, representing 5.3% of the labour force. Of these, 277 (72.7%) people were looking for full-time employment and 27.3% were looking for part-time work.

2001 unemployment figures for Emerald Shire (5.3% of the labour force) are significantly lower than Fitzroy Statistical Division (8.0% of the labour force) and Queensland (8.2% of the labour force).

Table 10
Change in Labour Force Status in Emerald Shire between 1996 and 2001

Age Group	Employed	Unemployed and seeking	In Labour Force	Not in Labour Force	Total
15-19 years	+108	+9	+117	-15	+126
20-24 years	+79	-8	-87	+22	+52
25-34 years	-102	0	-102	-82	+165
35-44 years	-7	+16	+9	+3	+41
45-54 years	+253	+22	+275	+19	+314
55-64 years	+143	+8	+151	+211	+375
65+	+44	-3	+41	+163	+290
Total	+518	+44	+404	+321	+1363

Source: Australian Bureau of Statistics 2001 Community Profile Data

The local labour force performed most of the jobs in many regional local government areas (high job containment). In the Fitzroy Statistical Division shires of Banana, Emerald, Bauhinia, Livingstone and Taroom local residents occupied more than 80% of the jobs in 2001. In the local government areas of Duaringa, Gladstone, Mount Morgan, and Rockhampton, job containment was also relatively high at more than 70%. (Department of Local Government and Planning: 2001).

The top 3 local government areas in the Fitzroy Statistical Division for job containment were inland and some distance from the residential areas with large populations in the labour force. Banana, Emerald and Bauhinia with higher job containment measures are distant from the regional centres of Rockhampton and Mackay. For the Fitzroy Statistical Division local government areas, the highest labour force containment measures were recorded for Bauhinia, Emerald, Banana and Jericho Shires.

Bauhinia, Emerald, Banana and Jericho Shires also recorded relatively high labour force containment measures in 2001 compared with other local government areas in the Fitzroy Statistical Division. In Emerald Shire with a labour force of almost 6,800 people, 7 out of 10 people in the labour force were employed within their home local government area.

4.1.7 Employment by Industry

Table 11 shows the employment by industry categories for Emerald Shire. The percentage of people employed in mining declined between 1996 and 2001.

The agricultural industry was second only to the mining industry in 1996 and the largest employment category for Emerald Shire in 2001. Of the remaining categories, retail trade (15%) and education (7.5%) were the largest employers in 2001. Participation of the workforce in construction (6.8%) and wholesale trade (6.0%) followed employment in education.

Over the period 1996-2001 Emerald Shire experienced growth in retail trade (2.6%), manufacturing (1.9%), education (0.8%), health and community services (0.4%), property and business (0.3%) and other community support services (0.3%).

Males dominated most of the employment categories in Emerald Shire except for retail trade, education, health and community services and accommodation, cafes and restaurants.

Table 11
Comparison of 1996 and 2001 Employment by Industry Category for Emerald Shire

Industry	1996 (%)	2001 (%)	1996-2001 (%)
Agriculture, Forestry Fishing	10.7	13.6	+2.9
Mining	17.8	10.9	-6.9
Manufacturing	3.7	5.6	+1.9
Electricity, gas and Water Supply	0.7	0.8	+0.1
Construction	7.1	6.8	-0.3
Wholesale Trade	6.2	6.0	-0.2
Retail Trade	12.4	15.0	+2.6
Accommodation, Cafes, Restaurants	4.6	4.9	-0.3
Transport and Storage	5.4	0.1	-4.3
Communication Services	1.0	0.7	-0.3
Finance and Insurance	1.8	1.7	-0.1
Property and Business Services	6.7	7.0	+0.3
Government Administration and Defence	3.6	3.2	-0.4
Education	6.7	7.5	+0.8
Health and Community Services	4.9	5.3	+0.4
Cultural and Recreational Services	1.1	0.9	-0.2
Personal and Other Services	2.3	2.6	+0.3
Non-classifiable economic units	1.4	0.7	-0.7
Not stated	1.8	1.7	-0.1
Total	100	100	

Source: Australian Bureau of Statistics 2001 Community Profile Data

Employment participation in several industry categories shows the economy of Emerald is more diverse. Consequently Emerald is more resilient to downturns in one industry category compared with other towns in Central Queensland that are reliant on one sector for the majority of its employment.

4.1.8 Employment by Occupation

In 2001 the largest occupational category was intermediate production and transport workers (14.8%), followed by tradespersons and related workers (14.3%) and intermediate clerical, sales and service workers (13.0%).

In 2001 approximately 58.6% of all employed persons in Emerald Shire were males. The proportion of employed males in Emerald Shire was higher than Fitzroy Statistical Division (57.7%) and Queensland (54.7%). See Table 12.

Table 12
Occupation by Sex in Emerald Shire

Occupation	Males	Females	Persons	Percent
Managers and Administrators	502	198	700	10.3
Professionals	361	423	784	11.6
Associate Professionals	401	376	777	11.5
Tradespersons and Related Workers	852	117	969	14.3
Advanced Clerical and Service Workers	18	159	177	2.6
Intermediate clerical, sales and service workers	213	669	882	13.0
Intermediate production and transport workers	919	85	1,004	14.8
Elementary clerical, sales and service workers	124	432	556	8.2
Labourers and related workers	505	310	815	12.0
Inadequately described	33	11	44	0.6
Not stated	41	27	68	1.0
Total	3,969	2,807	6,776	100.0

Source: Australian Bureau of Statistics 2001 Community Profile Data

4.1.9 Income Levels

The most common income group for Emerald Shire, Fitzroy Statistical Division and Queensland in 2001 were persons earning \$160-\$299 per week (see Table 13). There were approximately 18.6% of persons earning an income of \$160-\$299 per week in Emerald which was lower than 22.5% for Fitzroy Statistical Division and Queensland.

The next most common category for all areas were persons earning \$300-\$499 per week. Approximately 13.8% of persons earning an income in Emerald received \$1000 or more per week which exceeded the average of 10.6% for the Fitzroy Statistical Division and 8.6% for Queensland.

Table 13
Weekly Individual Income in Emerald Shire, Fitzroy Statistical Division and Queensland for persons aged 15 years and over (2001)

Weekly Individual Income	Persons –Emerald Shire	Percent (%) Emerald Shire	Percent (%) Fitzroy Statistical Division	Percent (%) Queensland
Negative/ Nil Income	591	5.4	6.3	5.8
\$1-\$79	460	4.2	4.5	3.7
\$80-\$159	792	7.2	8.2	7.7
\$160-\$299	2044	18.6	22.5	22.5
\$300-\$499	1900	17.3	16.4	17.9
\$500-\$699	1436	13.1	12.5	13.8
\$700-\$999	1208	11.0	10.4	10.6
\$1000 or more	1516	13.8	10.6	8.6
Not stated	948	8.6	7.6	7.3
Overseas Visitor	84	0.8	1.1	2.1
Total	10,979	100.0	100.0	100.0

Source: Australian Bureau of Statistics 2001 Community Profile Data

4.1.10 Education Level

The post-secondary qualifications of people aged 15 years and over were obtained for Emerald Shire, Fitzroy Statistical Division and Queensland from the 2001 census data. The percentage of persons who obtained Certificate level qualifications for Emerald Shire (18.9%) is higher than the Fitzroy Statistical Division (16.6%) and Queensland (16%). (See Table 14).

The percentage of persons who have obtained postgraduate and bachelor degrees was lower than Queensland.

Table 14
Highest Post-secondary Educational Qualification Held

Qualification	Number in Emerald Shire	Number in Emerald Shire (%)	Number in Fitzroy Statistical Division (%)	Number in Queensland (%)
Postgraduate Degree	76	0.7	0.8	1.4
Graduate Diploma and Graduate Certificate	111	1.0	1.0	1.1
Bachelor Degree	707	6.5	6.2	8.3
Advanced Diploma and Diploma	479	4.4	4.1	5.5
Certificate	2055	18.9	16.6	16.0
Not Stated	1157	10.6	10.1	10.8
Not applicable	6307	57.9	61.2	56.8
Total	10,892	100.0	100.0	100.0

Source: Australian Bureau of Statistics 2001 Community Profile Data

4.2 HOUSING AND ACCOMMODATION

4.2.1 Dwelling Structure

The majority of the population within Emerald Shire (74.1%) is accommodated within detached houses. The proportion of the population accommodated in detached houses is lower than Queensland (84.0%) and the Fitzroy Statistical Division (89.3%).

Table 15 shows 273 people within Emerald Shire (8% of the total population) reside in other dwellings including temporary accommodation and houses/ flats attached to shops or offices. The proportion of the population accommodated in other dwellings in Emerald Shire is substantially higher than for the Fitzroy Statistical Division (3.7%) or Queensland (2.2%).

**Table 15
Dwelling and Tenure Types in Emerald Shire 2001**

Dwelling Type	Tenure Type							Total
	Fully Owned	Being Purchased	Being rented	State Housing Authority	Occupied rent free or under life tenure	Being purchased under rent/ buy scheme	Not Stated	
Separate House	489	926	889	81	62	21	70	2,538
Semi-detached, row or terrace house, townhouse	7	7	118	4	3	0	4	143
Flat, unit or apartment	9	9	363	24	12	0	38	455
Other dwelling (1)	166	10	60	0	18	0	19	273
Not stated	3	5	5	0	3	0	0	16
Total	674	957	1435	109	98	21	131	3,425

Source: Australian Bureau of Statistics 2001 Community Profile Data.

Notes: (1) includes temporary accommodation (caravans, cabins, improvised home, tent, sleepers out) and houses/ flats attached to shops or offices.

4.2.2 Short Term Accommodation

Existing short term accommodation in proximity to the project was investigated.

Table 16 identifies the supply of short term accommodation provided by Emerald and the surrounding towns in Emerald Shire.

There is a high level of demand for short term accommodation in Emerald which is generally supplied by motels and tourist parks. Discussions with local accommodation providers indicate that there is generally a very high occupancy rate and little surplus available.

Table 16
Short Term Accommodation in Emerald, September 2005

Accommodation	No. Rooms	Comments on Capacity
Hotels/ Motels/ Apartment Hotels/ Resorts		
Emerald Explorers Inn	36 units	Generally high; low season end Nov- mid January
Emerald Maraboon Motor Inn	70 units	Currently high due to construction; normally 50-60%; Christmas low season.
Midlander Motor Inn	23 units	No information available
Emerald Highlands	13 units	High occupancy throughout the year due to mines, railway and travellers
Emerald Meteor Motel	60 units	June/ July peak season; Mon, Tues Wed fully booked; towards the end of the week (Sat and Sun) half full
Western Gateway Motel	49 units; 10 apartments	No information available
Lodge Motel	14 units	75% does not vary significantly throughout the year
Emerald Tower Motor Inn	18 units	No information available
Motel 707	11 units	No information available
Overflow Motor Inn	16 units	Approximately 82% from beginning of February to Christmas
Bed and Breakfasts and Guesthouses		
Central Inn	20 rooms	High rate of occupancy throughout the week
Tourist Park Accommodation		
Lake Maraboon Holiday Village	95 sites; 100 sites; 70 tourist sites	Full for the majority of the year
True Blue Gums Caravan Park	23 sites	Closing. Subdividing.
Bill Creek Farmstay	1 cottage	No information available

There is limited short term accommodation provided by the towns surrounding Emerald. Discussions with local accommodation providers indicates there is generally a very high occupancy rate and little surplus is available. There are two caravan parks and one block of holiday units provided in Rubyvale. Three caravan parks are located in Sapphire and Willows. However, these towns are not within proximity to the project site. No short term accommodation is available at Anakie or Bogantungan.

The Bottletree Motel and Caravan Park in Blackwater provides 18 units and caravan accommodation.

Local accommodation is supplemented by numerous facilities provided in Rockhampton and Mackay. However, these centres being 227 km and 389 km respectively are well removed from the project site.

Tourist accommodation occupancy data collated by the ABS for Emerald Shire, Fitzroy Statistical Division was reviewed for the project. Table 17 shows a summary of occupancy data for Emerald Shire, Fitzroy Statistical Division and Queensland. The data shows that in more recent times the average occupancy rate for accommodation in Emerald Shire has increased since 2001 with rates exceeding the Queensland average in 2004.

Table 17
Average Tourist Accommodation Occupancy Rate

Locality	Average Occupancy Rate (%)						
	1998	December Quarter 1999	2000	March Quarter 2001	March Quarter 2002	September Quarter 2003	2004
Emerald Shire	57.7	54.3	n.a.	52.8	55.5	66.5	64.3
Rockhampton		65.3	n.a.	52.1	51.9	69.7	55.4
Fitzroy Statistical Division	60.3	59.4	n.a.	39.1	53.7	65.0	55.5
Queensland	60.6	60.7	n.a.	51.8	58.4	69.3	61.3

Source: Australian Bureau of Statistics Queensland Regional Profiles 1999-2004

4.2.3 Rental Accommodation

The current state of the local housing market was investigated for the project. Information about housing in Emerald was obtained from:

- Department of Housing;
- Residential Tenancies Authority;
- Real Estate Institute of Queensland; and
- Emerald Shire Council.

There are limited rental housing stocks in Emerald and rental prices are high, generally exceeding the prices in the surrounding Bauhinia, Jericho and Peak Downs Shires and the nearest major regional centre, Rockhampton.

Only two houses were listed for rent in Emerald at the time of the preparation of this report (mid-September 2005). No share accommodation or apartments were listed for rent.

Table 18 shows the size of the rental market in Emerald compared with Queensland. In the period 1999-2004 there was a substantial increase in flats rented in Emerald. The increase in the number of flats rented in Emerald Shire exceeded the growth for Queensland over the same period. Although there was a decrease in the detached housing rentals in Emerald over the 1999-2004 period, these remain the preferred rental dwelling.

Table 18
Size of Private Rental Market

Private Rental Bonds – Emerald Shire							
Dwelling Type	1999	2000	2001	2002	2003	2004	%change
Flat	385	432	471	504	508	523	35.8%
Detached House	621	713	707	581	550	528	-15.0%
Semi-Detached House	5	6	3	2	3	5	0%
Private Rental Bonds - Queensland							
Flat	113,420	116,093	121,041	123,066	125,879	130,221	14.8%
Detached House	152,092	156,602	158,673	157,770	162,425	174,579	14.8%
Semi-detached House	12,667	15,970	18,386	19,534	19,534	20,290	60.2%

Source: Residential Tenancies Authority Rental Bonds Data

Based on information supplied by the Residential Tenancies Authority the types of dwellings most in demand for rental are 3 bedroom houses (59 in 2005) and 2 bedroom flats/units (46 in 2005). Table 19 shows the average rental price is \$280 per week and \$190 per week for 3 bedroom houses and 2 bedroom flats/units respectively.

Table 19
Mean Weekly Rents for Emerald 2002-2004

Dwelling Type	June 2003		June 2004		June 2005	
	Rent (\$)	New Bonds	Rent (\$)	New Bonds	Rent (\$)	New Bonds
2 bedroom house	160	6	n.a.	4	n.a.	2
3 bedroom house	220	67	240	61	280	59
4 bedroom house	270	20	300	13	340	19
1 bedroom flats/ units	110	26	110	21	180	23
2 bedroom flats/units	155	53	165	46	190	46
3 bedroom flats/units	180	21	200	27	230	15
Townhouses	0	0	0	0	0	0

Source: Residential Tenancies Authority Rental Bonds Data

Emerald Shire has experienced an increase in median rents for all dwelling types since the 2001 census. Rental increases in the period 2001-2004 are higher than for 1998-2001. The largest increase in rentals for Emerald Shire has been in the 4 bedroom dwelling type (33.3%). Table 20 shows rentals for 4 bedroom dwellings in Emerald Shire for 1998/99, 2002/03 and 2003/04 were higher than the Queensland average.

Table 20
Weekly Rent Levels and Trends by Bedroom Size

Emerald Shire							
	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	% Change
1 bedroom	\$110	\$110	\$90	\$90	\$100	\$110	0%
2 bedroom	\$125	\$130	\$120	\$136	\$140	\$165	32.0%
3 bedroom	\$180	\$170	\$170	\$175	\$200	\$220	22.2%
4 bedroom	\$210	\$200	\$200	\$230	\$273	\$280	33.3%
Queensland							
1 bedroom	\$110	\$115	\$120	\$130	\$140	\$155	40.91%
2 bedroom	\$140	\$145	\$150	\$160	\$170	\$185	32.14%
3 bedroom	\$165	\$170	\$175	\$185	\$200	\$220	33.33%
4 bedroom	\$200	\$210	\$220	\$230	\$250	\$270	35.0%

Source: Residential Tenancies Authority Rental Bonds Data

4.2.4 Private Dwelling and Land Stocks

Existing supply of, and demand for residential development in Emerald Shire was investigated. Some housing stock is available but prices are relatively high. There was a limited supply of land available for residential construction.

Residential land and dwelling activity in Emerald Shire was the tenth highest in Queensland for the year ending December 2004 (Department of Local Government, Planning, Sport and Recreation: 2005). Applications for a total of 330 residential lots were being assessed by Council in December quarter 2003/ 2004. Of these, 264 were for development in urban residential zones. Emerald Shire approved 111 residential lots in the year to March quarter 2005. This was a decrease of 63.1% compared with the same period last year when 301 lots were approved. Emerald Shire Council has advised in the period September 2004-September 2005 a total of 47 residential development (reconfiguration of lot) applications were approved (pers.comm:2005).

68 residential lots were produced² in Emerald Shire in the year to March quarter 2005 compared with the previous year when 21 lots were produced. This was an increase of 223.8%. The number of lots registered³ in Emerald Shire increased by 200% to 6 registrations compared with 2 registrations recorded in the same period last year. The majority of lots registered (52.8%) in the period March

² developed

³ Allotment title is registered with the Department of Natural Resources and Mines

2003 to December 2004 were in the range of 451-1000m². Lot registrations in the year ending March 2005 were up 265.4% over the previous year.

The number of lots consumed⁴ in Emerald Shire in the March quarter 2005, increased by 83.3% to 27 lots when compared with the same period last year. Lot consumption for the year ending March 2005 was up 45.5% over the previous year.

In the year ending March 2005, Emerald Shire recorded a 54.1% increase in new residential dwelling approvals over the previous year. A total of 114 approvals, 96.5% of which were for separate houses, compares to 74 approvals in 2004.

In the period 1 March – 1 September 2005 a total of 122 detached houses had been sold in the town of Emerald. Of the total residential properties sold approximately 43.4% were 3 bedroom houses and 41% were 4 bedroom houses.

In mid-September 2005 there were 161 houses listed for sale in Emerald. Of the total houses listed for sale approximately 45% were 3 bedroom dwellings, 40% were 4 bedroom dwellings and 8% were 3 bedroom units. Prices ranged from \$180,000 to \$695,000.

No share accommodation or apartments were listed for sale.

Land listed for sale in Emerald and the immediate surrounds was also investigated. Of the total land stock:

- 3 were listed as rural lots ranging from 40- 82 hectares;
- 1 x 1287m² lot was listed as approved for the development of 5 townhouses;
- 1 x 1015m² lot was listed as a potential duplex/ large house site;
- 14 x 700-976m² potential house sites;
- 2 x 3000-4500m² acreage lots were listed; and
- 2 x large parcels listed as potential for residential subdivision within central Emerald.

4.2.5 Community Housing

Community housing supplies in Emerald are limited and there are long application waiting lists. Table 21 shows the total social housing provision in Emerald Shire compared with Queensland.

A youth housing complex is located at 63 Roberts Street, Emerald. The complex consist of six self contained units (2 x 1 bedroom unit, 2 x 2 bedroom units, 1 x 3 bedroom unit, 1 x 3 bedroom dwelling house). The complex is designed to assist low income people who work, study at TAFE/ University or are in the process of finding work. Applicants must be single and aged between 16 – 25 years and register their details on a waiting list.

⁴ As lots registered predominantly for detached dwellings, separate or detached housing activity is used as a surrogate measure of lot consumption.

In October 1999 Emerald Shire Council took over the management of the 26 units (2x disabled units, 13 x 3 bedroom units and 11 x 2 bedroom units) at 'Karinya Court' in Emerald. Emerald Shire Council's target group is long term housing for persons over 55 years and all units are currently tenanted. There is a waiting list.

Table 21
Social Housing Provision - Emerald Shire

Emerald Shire						
	Public Housing (note 3)	Aboriginal and Torres Strait Islander (note 3)	Long term Community Housing Program	Boarding House Program	Transitional Housing	Aboriginal and Torres Strait Islander Community Housing (note 4)
No. Dwellings	114	7	40	n.a.	4	11
Rate per 10,000 OPDs	216.0	13.0	75.0	n.a.	7.0	20.0
Queensland						
No. of Dwellings	49,144	2,811	2,844	431	1,918	5,673
Rate per 10,000 OPDs	339.0	19.0	19.0	2.0	13.0	39.0

Source: Department of Housing

Notes: (1) Numbers are based on total rental units for comparability across programs.

(2) Transitional Housing includes the Community Rent Scheme and Same House Different Landlords Program.

(3) The Department of Housing's programs of Public Housing and Aboriginal and Torres Strait Islander Housing are shown separately.

(4) 'Aboriginal and Torres Strait Islander Community Housing' refers to independent indigenous community housing providers.

Information on availability and demand for public housing was also obtained from the Department of Housing. The average wait time for public housing over the period 2003-2004 increased for all dwelling types except for four bedroom dwelling units. Demand for four bedroom dwelling units was 10 months in 2003 decreasing to 9 months in 2004. The highest increase in average wait time was for aged person accommodation from 9 months in 2003 to 32 months in 2004.

4.3 COMMUNITY INFRASTRUCTURE AND SERVICES

It is expected the project will generate demand for social infrastructure in the Central Queensland Capricorn region. Social services and associated infrastructure in the Central Queensland Capricorn region comprise health, education, public housing, public safety, sport, leisure and recreation. The majority of services are provided by government providers and community organisations. The availability and accessibility to services and the provision of infrastructure varies considerably across the Central Queensland Capricorn region. In the majority of circumstances, the project is expected to draw on social infrastructure provided in Emerald and regional facilities provided by Rockhampton.

Emerald is the major population and administrative centre for Emerald Shire and the Central Highlands region. Government administration also plays a key role in Emerald's economy as the town plays host to many government offices and agencies from both state and federal portfolios.

Rockhampton is the clearly defined major centre in the Central Queensland Capricorn region having the greatest access to infrastructure and services. Rockhampton is a major economic and administrative centre providing a wide range of higher order goods and services and a substantial population base. Given the supplementary populations from nearby areas and the visitation rates from the balance of the region, Rockhampton is expected to remain the largest city in the region.

An investigation into social infrastructure available to the project has been undertaken. Social infrastructure provision has been described according to location, facilities provided and available capacity. Where relevant, research has been supplemented by discussions with the major social infrastructure providers.

4.3.1 Health and Medical Facilities

Health services operated by Queensland Health in the Central Highlands Health Service District are the closest available facilities and services to the project site. Local health services in the Central Highlands Health District are supported by referral services from Rockhampton and Brisbane.

Emerald Shire is serviced by a 36 bed hospital at Emerald. Hospital services available include acute inpatient service, 24hr Accidents & Emergencies service, pharmacy, pathology, outpatients department, speech pathology, radiography, visiting physician from Rockhampton and physiotherapy.

Specialist services operating from Emerald Hospital include Cardiologist (quarterly), Flying surgeon from Longreach (weekly), Flying obstetrician from Roma (fortnightly), Physician (monthly), Psychiatrist (two three hour sessions each week), Orthopaedic Surgeon (monthly), Mental Health Services and Fertility Specialist (monthly-private patients only).

Health facilities and services at Emerald are supplemented by Springsure Hospital (15 beds) and Blackwater (16 beds).

There are primary health clinics at the Gemfields, Dingo and Capella. Limited dental services operate from Emerald, Springsure and Blackwater. Aged care is provided from Springsure Hospital multi-purpose health service. Allied health services provided in the Central Highlands Health Service District include speech therapy, social work, podiatry and occupational therapy. Community health services include adult and disabilities, child and youth, mental health and the Indigenous health service. Private health facilities are provided at the Central Highlands Aged Persons Home by Bluecare.

Rockhampton has a large, public hospital and 2 private hospitals with supporting medical services and specialist practitioners, as well as an extensive aged care network. A good doctor to population ratio ensures the availability of specialists, dentists, chemists and other medical services.

The Rockhampton Base Hospital is the largest hospital in the area, offering a wide range of general and specialist medical services. With 227 available beds and a comparable number of medical staff, a range of specialist services is available. Visiting clinicians from Brisbane include paediatric respiratory specialists and cardiologists, clinical geneticists, and rheumatologists. Extensive out-patient services are also provided. Major upgrades and building programs have significantly modernised and expanded the capabilities of the Base Hospital in recent years.

Private hospitals with extensive surgical and other specialist diagnostic and treatment facilities include the Mater Misericordiae Hospital and Hillcrest Hospital.

4.3.2 Education

The Rockhampton District has comprehensive education facilities ranging from preparation year to tertiary level. The region is also well serviced by State, Catholic and private schools, many of which cater for boarding students.

Pre-school, Primary and State High Schools

Emerald township is well serviced by 6 primary and 2 secondary schools as shown in Table 22. Demand for places in kindergartens and childcare centres is high and proposals for new facilities are currently pending.

Table 22
Pre-school, Primary and Secondary Education Facilities

School	Years	Enrolment	Type of School	Enrolments
Emerald Christian College	Pre-school to Year 7	34 fulltime and 3 part time students	Primary	37
Emerald North State School	Pre-school to Year 7	388 fulltime and 27 part time students	Primary	415
Emerald State High School	Years 8-12	543 fulltime and 1 part-time student	Secondary	544
Emerald State School	Pre-school to Year 7	397 fulltime students	Primary	397
Marist College	Years 8-12	382 fulltime students	Secondary	382
St Patrick's School	Pre-school to Year 7	258 fulltime and 14 part-time students	Primary	533
Capricornia (Emerald campus) School of Distance Education	Pre-school to Year 10	207 fulltime and 2 part-time primary students; 77 fulltime and 6 part-time students	Primary and Secondary	292
Denison State School	Pre-school to Year 7	286 fulltime students	Primary	286

Source: Education Queensland

Education Queensland was contacted to provide information on the available capacity of current facilities to accommodate future population growth. Education Queensland has advised in recent times enrolments have moved from a decline in numbers to a small increase. There is existing available capacity to accommodate some additional enrolments at Emerald State High School and

Emerald North State School. Dennison State School is the most recent facility with provision to extend in current education facilities planning. Based on current enrolments in education facilities at Emerald there is an overall capacity to accommodate a 10-15% increase in enrolments.

Facilities for preparation year students is at capacity to 2007. However, it proposed to incorporate facilities for the preparation year of schooling as part of primary education facilities.

Tertiary Education

Central Queensland University offers undergraduate and post graduate courses in on-campus and district mode access across numerous disciplines. Its regional campuses include campuses based at Rockhampton, Mackay, Gladstone and Emerald.

The Central Queensland Institute of TAFE and other private training providers offer a range of traineeships, apprenticeships and short courses to organisations and individuals. The TAFE has campuses at Emerald, Gladstone, Mackay and Rockhampton.

4.3.3 Emergency Services

Police/ Justice

Emerald Shire is serviced by a 24 hour Police Station at Emerald (7 officers, 3 CIB staff, 1 Training Officer, 1 Traffic Officer, 1 Prosecutor and 1 Scenes of Crime Officer) and a police station at Anakie servicing the Gemfields (2 officers). The central Magistrates Court operates from the Emerald Courthouse with Stipendiary Magistrates holding regular court hearings (source: Central Highlands Development Corporation, 1998).

Ambulance

The Ambulance Centre is based at Emerald (16 officers) and is staffed 24 hours a day. The Ambulance Centre is equipped with 3 primary response vehicles (2 conventional, 1 4WD) and 1 Emergency Support Unit. There is an Ambulance office at the Gemfields staffed by 1 fulltime officer (source: Emerald Ambulance Service, 1998).

Fire

Emerald has an auxiliary fire service manned by 18 officers and equipped with 2 Fire Appliances. The Gemfields is serviced by the Emerald Fire Service and a Volunteer Rural Fire Brigade (source: Emerald Fire Service, 1998).

State Emergency Service

Where emergency services such as Queensland Ambulance Service, Queensland Fire and Rescue Authority and Queensland Police require assistance, they may call on the volunteer members of the State Emergency Service particularly where natural disasters or road/ traffic accidents are anticipated to cause damage.

District level State Emergency Services are provided from Rockhampton and Mackay. The Emerald State Emergency Service operates from Emerald within proximity to the project site. Local services at Emerald can be supported by facilities and services of local State Emergency Services operating in the surrounding Shires.

Air Rescue Services

The Capricorn Emergency Helicopter Rescue Service also services the Rockhampton district, together with the Royal Flying Doctor Services.

4.3.4 Retail Outlets and Financial Services

Regional level retail and financial services are provided in Rockhampton. The major retail facilities provided in Rockhampton include:

- K-Mart Plaza
- Allenstown Plaza
- City Centre Plaza
- Keppel Bay Plaza
- Northside Plaza Shopping Centre
- Stockland Rockhampton
- The Arcade
- The Town Centre

There are two major shopping centres in Emerald. The Woolworths Emerald Village Shopping Centre includes 26 specialty shops. The other major shopping centre includes Coles, Target Country, Crazy Clark's and 20 specialty shops.

Retail outlets are also located at the Highland Centre. Markets are also held in Rubyvale, Sapphire, Anakie and Emerald.

Banking services are provided in Emerald by Westpac, ANZ, Commonwealth Bank, Credit Union Australia, Metway, QIDC and Suncorp.

4.3.5 Sport, Recreation and Entertainment

Emerald has abundant recreational facilities including botanic gardens, aquatic centre, a high grade lawn bowls club, an 18 hole golf course, a first class turf racecourse, skate facility and venues for cricket, ten pin bowling, lawn bowling, polocrosse, hockey, soccer, football, athletics and other field events. Emerald also has modern showground facilities.

Rockhampton includes 2 Olympic sized swimming pools, velodrome, water ski gardens, rowing venues, day and night tennis courts, skating rink and indoor sports venues. The Police and Citizens Youth Club and Central Queensland University Sports Complex are popular venues for a range of activities catering for all age groups. Over 70 different types of sports are played or followed.

There are several sporting and recreation organizations represented in Emerald. These include little athletics, bowling, boxing, cricket, darts, equestrian/ horse riding/ horse racing, golf, gymnastics, hockey, karate, motorcycle racing, netball, soccer, swimming and pistol clubs.

Other parks available for use by residents and visitors within Emerald include:

- Morton Park where soccer, cricket, netball and rugby union are played.
- Rundle Park where cricket, school sports and practice cricket nets are located.
- Emerald showgrounds
- McIndoe Park; and
- Roy Day Park.

Cultural facilities in Emerald include a cultural centre, art gallery, cinema, science centre and restaurants. Local annual events include rodeos, picnic races, annual show and Easter sunflower festival. These are supplemented by regional cultural facilities in Rockhampton.

4.3.6 Welfare and Community Support Services

A number of welfare and community groups are located in Emerald which provides sub-regional and district level services. Services and infrastructure include community support services, aged services, youth services and child care centres.

Family Services

Several family and welfare agencies are located within proximity to the Ensham Central Project at Emerald. These include:

- Al-Anon Emerald Neighbourhood Centre;
- Careforce (Anglican);
- Emerald Shire Library (library home visits, information service, children's activities, youth space, computer services, library for seniors);
- Emerald Community Participation Service;
- St Vincent's Community Services (Central Highlands Nursing Service);
- Victims of Crime Support Service;
- Community Health Service Centre;
- Emerald Shire Council Youth Services;
- Teen Challenge Emerald;
- Emerald Safety House;
- Emerald Sub-branch RSL; and
- St Vincent De Paul Society.

Aged Services

In October 1999, Emerald Shire Council took over the management of the 26 units (two disabled units, 13x3 bedroom units and 11x2 bedroom units at 'Karinya Court', Martin Place, Emerald. All units are currently tenanted, but there is a waiting list. Applicants must be over 55 years, must be an Emerald Shire resident and must not own property.

Bluecare Central Highlands Aged Persons Home is the only aged care facility. Facilities include a 20 bed high care centre and 38 bed low care centre including 1 respite bed.

Youth Services

The youth development officer's role is to work with young people, their families and the community to provide services and to develop responses. Services are provided in response to identified youth issues including appropriate and affordable recreation activities, housing, health, drug and alcohol issues and training and employment.

Other projects promoting young people's abilities and talents include National Youth week, Youth Expo, Liquid Lavabo, camps and supporting a variety of tour groups and local organisations with events and programs.

Community Support Services

Community support services in Emerald have reported an increase in service demand particularly in the areas of domestic and family violence, substance abuse, relationship crisis and family support. The providers of these services are limited by a lack of funding, particularly in the areas of accommodation and relationship support services.

Centacare

Centacare is a not-for-profit organization that provides a wide range of services to individuals, couples and families. The services include:

- Child counseling;
- Family and relationship counseling;
- Sponsors;
- Domestic Violence Service of Central Queensland;
- Central Highlands Sexual Assault Service;
- If Only program working with perpetrators of domestic & family violence;
- Family Support Services; and
- Employee Assistance Program to mines, Councils and other organizations.

Centacare also provides these services to Blackwater, Gemfields, Rolleston, Springsure, Lochington and Tresswell.

Centacare provides community education programs in:

- parenting;
- rebuilding (when couples have separated);
- suicide first aid intervention to 200 community members throughout the Central Queensland region;
- Support for siblings of children with disabilities; and
- Pre marriage education program;

Centacare also responds to community critical incidents (suicides, accidents, traumatic events affecting community) and provides a Personal Support Program for the long term unemployed.

Centacare has advised demand for services has increased in the last 12 months. Waiting lists are closed when an appointment is unavailable for 12 weeks. Services have been required for a child specialist counsellor since 2000.

Anglicare

Anglicare provides mental health support services, youth support services, a youth development program, an in-home family day care program and emergency accommodation in Emerald.

Eight houses (4 short term and 4 long term) are provided by Anglicare as emergency accommodation. Emergency accommodation is subject to extensive waiting lists.

Domestic Violence Service of Central Queensland

The Emerald office of Domestic Violence Service of Queensland is a resource centre for central Queensland. There are currently 4 workers providing services for the Central Queensland region.

Service and facilities operated from Emerald include delivery of training packages, workshops, primary education to school aged children, one house provided as short term crisis accommodation operated by volunteers, court support, referral support, reaching out programs for friends, family and neighbours, face to face and telephone counselling and variety of resources including brochures and library.

Emerald Neighbourhood Centre

The Emerald Neighbourhood Centre is a government owned and administered facility sponsored by the Emerald and District Social Development Association Inc. The Emerald Neighbourhood Centre has a community worker/ co-ordinator whose job it is to support the community and individuals. Other areas of work include crisis/ immediate counselling support; a contact point for the community; and assistance in the relief of financial difficulties.

Child Care Services

There are currently 5 major child care facilities and/or services provided in Emerald. The facilities provided by these centres were investigated and the results are presented in Table 23. Child care services are supplemented by the Emerald Family Day Care Centre and vacational care provided by the Emerald PCYC.

**Table 23
Child Care Centres and Kindergartens**

Facility	Number of Places	Comments on Capacity
Borilla Community Kindergarten	85 places.	No current available capacity. Usually long waiting lists. Currently extending to accommodate a 3 rd unit (additional 40 children).
Emerald Child Care Centre	75 places. Accommodate from 6 weeks to preschool aged. Provide after school care.	The only available capacity is in the nursery facility.
Emerald Outside School Hours Care	38 places. 60 vacation care places.	Awaiting for funding to upgrade capacity to accommodate 55 places.
Emerald Pre-school and Community Kindergarten	25 preschool 60 kindergarten	No available capacity. Currently no waiting lists. Usually waiting lists for entry.
Summerfields Early Childhood Development Centre	74 places. Provide before and after school care, preschool, kindergarten, toddlers and babies.	Few places available. Currently no waiting lists.

4.3.7 Transport

The region is served by rail, road and air transport.

Rail

A modern electric and diesel rail system in Rockhampton caters for passenger and freight services. The new electric tilt train service to Brisbane takes approximately 7 hours.

The Spirit of the Outback provides a visitor passenger services connecting the regional towns of Blackwater, Emerald, Barcaldine and Longreach.

Taxi Services

Local taxi services are provided from Emerald by Emerald Taxis.

Bus Services

Emerald Coaches provides a local bus and charter service.

Long haul services are provided by a number of coach services and daily coach services operate from Rockhampton to the rest of Australia.

Vehicle Hire

Car hire services are available from a number of rental companies. These companies have depots in the township and some also have counters at the Emerald airport.

A selection of car, four wheel drive, bus and limousine hire companies are available in Rockhampton.

Air

Daily flights are operated between Emerald and Brisbane airports with over 20 flights per week.

The modern Rockhampton terminal expedites local and interstate business and visitor travel and has the capacity for international flights.

4.3.8 Telecommunications

The major service providers of telecommunications in Emerald Shire are Telstra and Optus. Mobile telephone range is on offer, as well as Internet and e-mail services. Residents and visitors enjoy a selection of five television stations, with the option of pay television.

4.4 LOCAL COMMUNITY VALUES AND LIFESTYLES

Results from community consultation and discussions with local stakeholders and service providers during the preparation of this social assessment process indicate the community values a range of aspects of their social environment. Emerald and surrounding region is characterised by a relaxed country lifestyle.

The role of mining as an important aspect of the Emerald community has been acknowledged. Stakeholders recognise there are extensive coal reserves in the Bowen Basin and the extraction of these resources should be undertaken in accordance with the timely supply of social infrastructure services.

5.0 IMPACT ASSESSMENT AND MITIGATION MEASURES

This social impact assessment considers the project's direct, beneficial and adverse impacts on the town of Emerald. Potential impacts have been considered at a local and regional level and include an evaluation of the short and long term impacts.

The following impacts on the social environment are considered in this assessment:

- impacts on the social profile (including demographic and cultural profiles, and residents' aspirations and values);
- impacts on labour force and skilling;
- impacts on housing demand and supply;
- impacts on community infrastructure and services; and
- social implications of the accommodation strategy.

Mitigation strategies are included in the discussion of the impacts, where relevant.

5.1 IMPACTS ON THE SOCIAL PROFILE

As indicated in Section 2.0, the majority of the workforce will be housed in on-site camp accommodation and will disperse to regional centres, such as Rockhampton and Mackay, during their

roster breaks. Consequently only a small proportion of the construction and operations workforce will be based in the town of Emerald. The contribution of the project (up to 42 employees and their families) to the total population of Emerald is likely to be only 1-2% of the current population of Emerald. Given the minor contribution of the project to the population of the town of Emerald, the project is not expected to have a significant impact on the demographic or cultural profile of Emerald or on the aspirations, values and lifestyles of existing Emerald residents. The relatively small additional population influx due to the project could have a minor additional affect on property values and rental prices. Potential impacts on housing demand and supply is provided in Section 5.3.

As detailed in Section 2.3, the estimated distribution of the project workforce to other locations, including Rockhampton, Mackay and other regions throughout Queensland, will not result in any significant proportional population increases. Due to their larger size and the available community infrastructure in these urban centres of Rockhampton and Mackay, they are likely to absorb any population increases as a result of this project without impact. Consequently there will not be any significant related social impacts on these locations.

5.2 IMPACTS ON LABOUR FORCE AND SKILLING

As indicated in Section 3.0, Emerald is characterised by high employment. Emerald and the sub-region have a high level of labour force containment. There is a limited pool of either skilled or unskilled working aged people available in the local labour market. However, the lower employment levels in the Fitzroy Statistical Division may provide some opportunity for project resourcing.

Section 2.4 details the skills levels of the required project workforce. Given the limited local labour market, Ensham Resources will have a focussed recruitment program and will seek a suitable workforce in the Central Queensland region, throughout Queensland and nationally.

Ensham Resources currently participates in two programs coordinated by the Central Highlands Development Corporation (CHDC) which address labour skills issues. These are the CHDC Mining Forum, which is a joint working party on accommodation and skills and the CHDC Skills Development Study Program. These programs both consider skills development in the Central Highlands region and include representatives of:

- CHDC;
- Local Councils (Emerald, Peak Downs, Bauhinia, Jericho) – mayors, councillors and town planners;
- A number of employment/training/skills agencies;
- A number of mining companies in the Emerald district;
- Government departments;
- Private land developers;
- Real estate agents;
- Support organisations (Anglicare, Centacare, Salvation Army, Lifeline); and
- CHRRUP (Central Highlands Regional Resource Users Planning Cooperative).

In addition, Ensham Resources is on the board of CHRRUP and represents the mining sector to this organisation.

Ensham Resources will continue to participate in these forums to ensure that it provides timely workforce data to assist these organizations in future planning and skills development.

5.3 IMPACTS ON HOUSING DEMAND AND SUPPLY

Based upon the existing Ensham workforce home locations, the proportion of the workforce which is likely to select the town of Emerald as a residential base is forecast to be relatively small (refer Section 2.0). The project is expected to have a limited impact on housing demand and supply in the town of Emerald. Despite this limited impact, the cumulative impact of the project, in conjunction with other mines expanding or being developed in the region, may contribute to existing pressure on the cost and availability of accommodation in Emerald.

Ensham Resources is unable to directly address this cumulative issue because housing demand and supply is dependent on a number of factors beyond Ensham Resource's control. These include the development of other, unrelated projects and initiatives in Emerald, such as subdivisions, to provide additional housing supply. However, Ensham Resources will assist with long term planning by providing accurate and timely planning updates to the existing forums engaged in accommodation planning. Communication and lack of suitable project information, on which to base sound planning for housing and accommodation, has been identified as a key issue by government and social infrastructure providers to be addressed as part of this EIS. In particular, Ensham Resources will continue to participate in the CHDC Mining Forum, which is a joint working party on accommodation (refer Section 5.2). Ensham Resources will also continue proactive communication with Emerald Shire Council to address housing supply issues relevant to the project.

5.4 IMPACTS ON COMMUNITY INFRASTRUCTURE AND SERVICES

The majority of local level community infrastructure in proximity to the project site is located at Emerald. Community infrastructure in Emerald is well supported by the regional level services at Rockhampton.

The impact of the project on community infrastructure and services will be limited by the fact that the majority of the workforce will be accommodated in on-site camp accommodation with full amenities. Currently, employees are free to leave the site between shifts but are strongly encouraged by management to stay on-site. The majority of the workforce prefer to remain on-site because of the high level of employee amenities provided. This pattern is expected to continue for the project.

Limited regional public transport will be supplemented by the continued operation of a bus service between the project site and Yeppoon.

Demand for emergency services may result from additional traffic generated by the project and on-site operations. Safety and emergency systems and traffic issue, for the project have been addressed in the main volume of the EIS.

Section 4.3 details the available community infrastructure and services in Emerald and, where relevant, in Rockhampton. It also provides a discussion on the available capacity of community infrastructure and services. Any potential impact of the project on the capacity of community infrastructure and services will be dependent on a range of influences on population and the relevant timing of these in relation to the timing of the project.

In order to assist with forward social infrastructure planning, Ensham Resources will consult with Emerald Shire Council and other relevant social infrastructure providers to ensure that any impacts of the project are understood and considered in planning for social infrastructure.

5.5 SOCIAL IMPLICATIONS OF ACCOMMODATION STRATEGY

Experience to date is that the shift arrangements at Ensham Mine are popular amongst employees with families as it enables them to spend time at home with their families during roster breaks. However, the physical separation of families during the roster work periods may contribute to stress on family relationships.

Ensham Resources currently makes the services of an independent counselling consultant available to all employees in the event that they require professional guidance on personal matters.

6.0 REFERENCES

- Affordable Housing, Public Housing and Housing System Initiatives, Queensland Government.
- Central Queensland Regional Planning Advisory Committee (2002) *Central Queensland Regional Growth Management Framework*, Queensland Department of Local Government and Planning.
- Department of Housing (2005) *Housing Analysis of Duaringa and Emerald Shires*.
- Department of Local Government and Planning, *Queensland Residential Land and Dwelling Activity Monitor 55- December Quarter 2004*, Planning Services, Brisbane.
- Planning Information and Forecasting Unit (2005) *Population and Housing Fact Sheet – Emerald Shire*, Department of Local Government, Planning, Sport and Recreation
- Department of Local Government, Planning, Sport and Recreation, *Total Residential Land Activity Fact Sheet-March Quarter 2005*, Planning Services, Brisbane.
- Australian Bureau of Statistics (1996) *Emerald Shire Community Profile Data*.
- Australian Bureau of Statistics (2001) *Emerald Shire Community Profile Data*.
- Central Highlands Development Corporation (1998) *Community Profile: Emerald Shire*, Emerald.
- Central Queensland News (2004-2005) *Emerald Shire Council Directory*, Emerald.
- Emerald Shire Council (n.d.) *Emerald Shire Visitors Guide*, Emerald.
- Queensland Department of State Development (2004-2005) *Projects Queensland Issue 24*, Brisbane.
- Royal Automobiles Club of Queensland (2004-2005) *Experience Queensland*.