

---

DRAYTON SOUTH COAL PROJECT

# SOCIAL IMPACT ASSESSMENT

for  
**Anglo American Coal**  
March 2015

**Hansen Bailey**  
ENVIRONMENTAL CONSULTANTS

## EXECUTIVE SUMMARY

Hansen Bailey Environmental Consultants (Hansen Bailey) was commissioned by Anglo American Coal (Anglo American) to complete a Social Impact Assessment (SIA) for the Drayton South Coal Project (the Project). The assessment is to form part of an Environmental Impact Statement prepared by Hansen Bailey to support an application under Division 4.1, Part 4 of the *Environmental Planning and Assessment Act* (1979) to facilitate the continuation of the existing Drayton Mine by the development of an open cut mining area within Exploration Licence (EL) 5460. The Project will mine up to 6.4 Mt per annum (Mtpa) Run of Mine (ROM) export quality thermal coal by utilising existing Drayton Mine assets and infrastructure.

The Project is located approximately 10 km north-west of the village of Jerrys Plains and approximately 13 km south of the township of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW). The Project is situated within the Muswellbrook Local Government Area (LGA). The Upper Hunter Shire LGA adjoins the Muswellbrook LGA to the north of the Project, and the Singleton LGA is located to the south. The Local Area for the SIA is defined as the Muswellbrook, Singleton and Upper Hunter Shire LGAs.

The SIA provides a detailed socio-economic profile of the Local Area. Data collection and literature review were key components of the SIA. Socio-economic impacts have been predicted and appropriate management measures identified.

At the time of the 2011 Australian Bureau of Statistics (ABS) Census, the Estimated Resident Population (ERP) of Muswellbrook, Singleton and Upper Hunter Shire LGAs was 15,791, 22,694 and 13,754 respectively (ABS, 2011a). The population projections from the NSW Department of Planning and Environment (2014) for the Muswellbrook, Singleton and Upper Hunter Shire LGAs show an expected population increase from 16,350, 23,500 and 14,200 in 2011 to 19,350, 27,350 and 15,750, respectively, by 2031.

Key demographic characteristics of the three LGAs are summarised below:

- All three LGAs experienced an increase in population of between 3.5% and 6.0% during the Census period 2006 to 2011 (ABS, 2011a);
- In 2011, the median age of the population of the Singleton and Muswellbrook LGAs was 34 compared to 39 in the Upper Hunter Shire LGA and 39 in NSW;

- In 2011, all three LGAs had a higher proportion of younger people (under 15 years) than NSW; however, the proportion of older people (over 55) in the Muswellbrook and Singleton LGAs was lower when compared to the Upper Hunter Shire LGA;
- At the time of the 2011 Census, all three LGAs had a similar proportion of family households as NSW (71.0%, 71.1% and 69.8%, respectively, compared with 71.9% for NSW) (ABS, 2011a);
- In 2011, Muswellbrook and Singleton LGAs recorded higher median personal, family and household income levels than NSW. Upper Hunter Shire LGA recorded personal, family and household median income levels below NSW levels;
- The estimated unemployment rates for the September quarter 2014 for the LGAs of Singleton and Upper Hunter Shire were below the New South Wales rate of 5.7%. Muswellbrook LGA recorded an unemployment rate of 7% for the same period. Between September 2013 and September 2014 the unemployment rate in each of the three LGAs of the Local Area experienced an approximate 2% increase (Department of Planning and Environment, 2014); and
- In 2011, the mining sector was the largest employment sector in the Singleton and Muswellbrook LGAs, employing 25% and 21% of employed people respectively, compared to 1% for NSW. Although 11% of employed people in the Upper Hunter Shire LGA were employed in the mining sector, the agriculture, forestry and fishing sector was the largest employment sector (19%).

A desktop review of the current housing market in the Local Area, with a particular focus on Muswellbrook and Singleton LGAs, shows that residential property prices increased substantially between 2005 and 2011. However, the slow-down experienced in the NSW and Queensland mining industry from early 2013 has resulted in a softening of local housing markets in the Singleton, Muswellbrook and Upper Hunter Shire LGAs. The historical pressure on short-term accommodation provision has also reduced significantly with tourism accommodation providers now experiencing substantially lower nightly occupancy rates (NSW Minerals Council, 2014a).

The Project does not require any additional workforce for the operation phase, subsequently there is no potential for direct population growth in the Local Area as a result of the Project. The potential negative socio-economic impacts of the Project are therefore predicted to be minor. Population growth is the single most critical factor in the manifestation of almost all social impacts and a key driver of social change.

The existing demand for accommodation in the Local Area attributable to the existing Drayton Mine workforce is predicted to continue. No additional demand for accommodation is predicted as a result of the Project's operations phase.

The SIA included an assessment of the supply and capacity of existing community facilities and services in the Local Area. This assessment concluded that the existing services and facilities have adequate capacity to accommodate the Project induced demands given that there is proposed to be no change in the size of the Drayton Mine workforce.

As the Project will continue to utilise the existing operations workforce from Drayton Mine, it is considered unlikely that there will be any strain on the labour market within the Local Area.

To ensure the timely replacement of staff as required for the Project workforce, and to protect long term workforce retention in light of competition from existing and proposed mines, Anglo American will implement labour force recruitment strategies prior to approval of other major coal mining developments in the Local Area. Anglo American will continue their existing local hire strategy, a preferred option for ongoing workforce recruitment.

Anglo American has made an offer to enter into a Voluntary Planning Agreement with Muswellbrook Shire Council to provide in kind and monetary contributions to ensure the potential social effects of the Project are mitigated. Discussions are progressing with Muswellbrook Shire Council to reach an agreement as to the terms of the Voluntary Planning Agreement.

The continued operation of Drayton Mine has significant social and economic benefits in the form of continuing employment for a workforce of approximately 500 persons, which would enable the mine to continue to:

- Be a major employer in the Muswellbrook LGA; and
- Contribute net production benefits of \$290 Million and royalties of approximately \$221 Million (present value at a 7% discount rate) (Gillespie Economics, 2015).

## TABLE OF CONTENTS

|          |                                                    |           |
|----------|----------------------------------------------------|-----------|
| <b>1</b> | <b>INTRODUCTION .....</b>                          | <b>1</b>  |
| 1.1      | BACKGROUND.....                                    | 1         |
| 1.2      | PROJECT DESCRIPTION .....                          | 1         |
| 1.3      | DOCUMENT STRUCTURE .....                           | 5         |
| 1.4      | STUDY AREA LOCATION .....                          | 5         |
| 1.5      | REGULATORY REQUIREMENTS.....                       | 6         |
| 1.5.1    | Secretary's Assessment Requirements .....          | 6         |
| <b>2</b> | <b>SCOPE AND METHODOLOGY.....</b>                  | <b>9</b>  |
| 2.1      | INTRODUCTION .....                                 | 9         |
| 2.2      | SCOPE OF WORK.....                                 | 9         |
| 2.3      | METHODOLOGY .....                                  | 9         |
| 2.3.1    | Statistical Data .....                             | 10        |
| 2.4      | RELATED STUDIES .....                              | 11        |
| <b>3</b> | <b>PROJECT SOCIO-ECONOMIC CHARACTERISTICS.....</b> | <b>12</b> |
| 3.1      | INTRODUCTION .....                                 | 12        |
| 3.2      | PROJECT SCHEDULE .....                             | 12        |
| 3.3      | WORKFORCE DEMAND .....                             | 12        |
| 3.3.1    | Construction Workforce .....                       | 12        |
| 3.3.2    | Operations Workforce .....                         | 12        |
| 3.4      | LABOUR FORCE RESIDENCE LOCATION.....               | 13        |
| <b>4</b> | <b>EXISTING SOCIO-ECONOMIC PROFILE.....</b>        | <b>14</b> |
| 4.1      | INTRODUCTION .....                                 | 14        |
| 4.2      | OVERVIEW OF LOCAL AND REGIONAL AREA .....          | 14        |
| 4.2.1    | Upper Hunter Region .....                          | 14        |
| 4.2.2    | Muswellbrook LGA .....                             | 15        |
| 4.2.3    | Singleton LGA .....                                | 16        |
| 4.2.4    | Upper Hunter Shire LGA .....                       | 17        |
| 4.3      | POPULATION AND DEMOGRAPHIC CHARACTERISTICS.....    | 18        |
| 4.3.1    | Estimated Resident Population .....                | 18        |
| 4.3.2    | Past and Future Population Growth .....            | 19        |
| 4.3.3    | Age Structure .....                                | 21        |
| 4.3.4    | Household and Family Structure .....               | 22        |
| 4.3.5    | Stability of Residency .....                       | 23        |
| 4.3.6    | Income.....                                        | 24        |

|          |                                                               |           |
|----------|---------------------------------------------------------------|-----------|
| 4.4      | EMPLOYMENT, UNEMPLOYMENT AND LABOUR FORCE PARTICIPATION ..... | 24        |
| 4.4.1    | Historical Unemployment Rates .....                           | 26        |
| 4.5      | LABOUR FORCE CHARACTERISTICS .....                            | 27        |
| 4.5.1    | Industry of Employment.....                                   | 27        |
| 4.5.2    | Occupation .....                                              | 30        |
| 4.5.3    | Qualifications .....                                          | 32        |
| 4.6      | HOUSING.....                                                  | 34        |
| 4.6.1    | Private Dwelling Stock.....                                   | 34        |
| 4.6.2    | Housing Tenure .....                                          | 35        |
| 4.6.3    | Housing Costs and Affordability .....                         | 36        |
| 4.6.4    | Temporary Accommodation .....                                 | 40        |
| 4.6.5    | Recent Housing Growth .....                                   | 42        |
| 4.7      | COMMUNITY SERVICES AND FACILITIES .....                       | 43        |
| 4.8      | CUMULATIVE MINING DEVELOPMENT .....                           | 45        |
| <b>5</b> | <b>POTENTIAL SOCIAL IMPACTS AND MANAGEMENT.....</b>           | <b>53</b> |
| 5.1      | INTRODUCTION .....                                            | 53        |
| 5.2      | PREDICTED IMPACTS.....                                        | 53        |
| 5.2.1    | Direct and Indirect Impacts.....                              | 53        |
| 5.2.2    | Cumulative Impacts.....                                       | 54        |
| 5.3      | MITIGATION AND MANAGEMENT .....                               | 54        |
| 5.3.1    | Labour Pool and Skills.....                                   | 54        |
| 5.3.2    | Voluntary Planning Agreement.....                             | 54        |
| <b>6</b> | <b>CONCLUSION .....</b>                                       | <b>56</b> |
| <b>7</b> | <b>REFERENCES .....</b>                                       | <b>58</b> |

## LIST OF TABLES

|          |                                                                                       |    |
|----------|---------------------------------------------------------------------------------------|----|
| Table 1  | Distance and Commuting Time from Existing Drayton Mine.....                           | 6  |
| Table 2  | Secretary's Environmental Assessment Requirements Relevant to Social Impacts.....     | 6  |
| Table 3  | Statistical Boundaries and Terminology for Census Data 2006-2011.....                 | 11 |
| Table 4  | Existing Drayton Mine Workforce Residential Locations.....                            | 13 |
| Table 5  | Local Population, 2011.....                                                           | 18 |
| Table 6  | Estimated Resident Population, 2009 – 2013 .....                                      | 19 |
| Table 7  | DP&E Projected Population and Growth Rates, 2011 – 2031 .....                         | 20 |
| Table 8  | Age Distribution, 2011.....                                                           | 21 |
| Table 9  | Household Types, 2006 .....                                                           | 22 |
| Table 10 | Families Structure by Type, 2011 .....                                                | 23 |
| Table 11 | Residential Mobility, 2006 and 2011 .....                                             | 23 |
| Table 12 | Income Indicators, 2011.....                                                          | 24 |
| Table 13 | Labour Force Status, 2011 (%).....                                                    | 25 |
| Table 14 | Estimated Unemployment Rates and Labour Force, 2013 – 2014 .....                      | 26 |
| Table 15 | Unemployment Rate, December Quarter 2010 – 2013 (%).....                              | 26 |
| Table 16 | Industry of Employment, 2011 .....                                                    | 28 |
| Table 17 | Occupation Data, 2011 .....                                                           | 31 |
| Table 18 | Post-School Qualifications, 2011 .....                                                | 33 |
| Table 19 | Dwelling Type, Occupied Private Dwellings 2011 (%) <sup>1</sup> .....                 | 34 |
| Table 20 | Average Household Size (Occupancy Rate), 2006 and 2011.....                           | 35 |
| Table 21 | Tenure Type of Occupied Private Dwellings, 2011 .....                                 | 35 |
| Table 22 | Median Sale Prices - All Dwellings, June 2014.....                                    | 36 |
| Table 23 | Median Sale Prices - All Dwellings, June Quarter 2010-2014 .....                      | 37 |
| Table 24 | Median Weekly Rent - All Dwelling, September Quarter 2010-2014 .....                  | 38 |
| Table 25 | Summary of Rental Costs and Availability, December 2013 – December 2014 .....         | 38 |
| Table 26 | Representative Land Value for Standard Serviced Allotment – Muswellbrook .....        | 39 |
| Table 27 | Hotels, Motels and Serviced Apartments Statistics – March Quarter, 2014 <sup>41</sup> |    |
| Table 28 | Selected Residential Building Approvals, 2006 – 2014.....                             | 42 |

|          |                                                                  |    |
|----------|------------------------------------------------------------------|----|
| Table 29 | Summary of Community Services and Facilities .....               | 44 |
| Table 30 | Existing and Proposed Mining Projects in the Hunter Valley ..... | 46 |
| Table 31 | Proposed Timing of Mining Projects in the Hunter Valley .....    | 51 |

## LIST OF FIGURES

|          |                                 |   |
|----------|---------------------------------|---|
| Figure 1 | Regional Locality .....         | 2 |
| Figure 2 | SIA Study Area .....            | 3 |
| Figure 3 | Conceptual Project Layout ..... | 8 |

## LIST OF APPENDICES

|            |                                          |
|------------|------------------------------------------|
| Appendix A | Draft Voluntary Planning Agreement Offer |
|------------|------------------------------------------|



## LIST OF ABBREVIATIONS

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| ABS            | Australian Bureau of Statistics                                                    |
| Anglo American | Anglo American Coal                                                                |
| DFCS           | Department of Family and Community Services Analysis and Research                  |
| DP&E           | NSW Department of Planning and Environment                                         |
| EIS            | Environmental Impact Statement                                                     |
| EL             | Exploration Licence                                                                |
| EP&A Act       | <i>Environmental Planning and Assessment Act 1979</i>                              |
| ERP            | Estimated Resident Population                                                      |
| FTE            | Full Time Equivalent                                                               |
| Local Area     | SIA study area, comprising the Muswellbrook, Singleton and Upper Hunter Shire LGAs |
| LGA            | Local Government Area                                                              |
| LPI            | NSW Land and Property Information                                                  |
| MSC            | Muswellbrook Shire Council                                                         |
| Mtpa           | Million tonnes per annum                                                           |
| NSW            | New South Wales                                                                    |
| NSWMC          | New South Wales Minerals Council                                                   |
| R4R            | Resources for Regions                                                              |
| ROM            | Run-of-Mine                                                                        |
| SA2            | Statistical Area 2                                                                 |
| SA4            | Statistical Area 4                                                                 |
| SD             | Statistical Division                                                               |
| SEARs          | Secretary's Environment Assessment Requirements                                    |
| SIA            | Social Impact Assessment                                                           |
| SS             | State Suburb                                                                       |
| the Project    | The Drayton South Project                                                          |
| UCL            | Urban Centre/Locality                                                              |
| VPA            | Voluntary Planning Agreement                                                       |

## DRAYTON SOUTH COAL PROJECT SOCIAL IMPACT ASSESSMENT

*for*  
**Anglo American Coal**

### 1 INTRODUCTION

#### 1.1 BACKGROUND

Hansen Bailey Environmental Consultants (Hansen Bailey) was commissioned by Anglo American Coal (Anglo American) to complete a Social Impact Assessment (SIA) for the Drayton South Coal Project (the Project). The purpose of the assessment is to form part of an Environmental Impact Statement (EIS) being prepared by Hansen Bailey to support an application for Planning Approval under Division 4.1, Part 4 of the *Environmental Planning and Assessment Act* (1979) (EP&A Act). The Approval will facilitate the continuation of the existing Drayton Mine for up to 15 years, by developing an open cut mining area within Exploration Licence (EL) 5460.

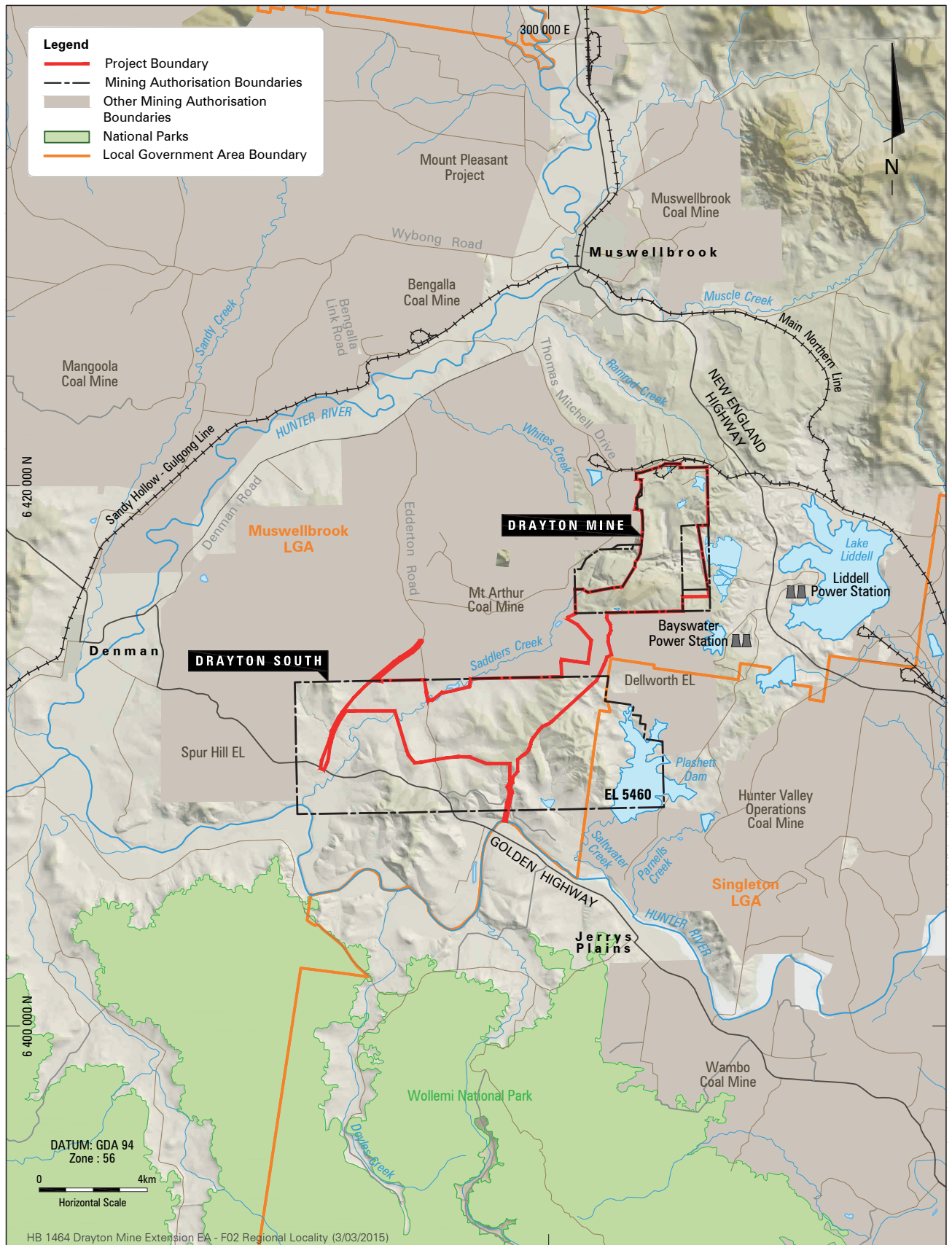
#### 1.2 PROJECT DESCRIPTION

Drayton Mine is located approximately 10 km south of the township of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW) (**Figure 1**). Drayton Mine has been operating in the Muswellbrook community for over 30 years and runs out of economic coal in 2015. The Project is adjacent to the Drayton Mine on wholly owned land identified for mine extension since the 1990's.

The Project will allow for the continuation of the existing Drayton Mine for up to 15 years, by developing an open cut mining area within EL 5460. The extended mine life will ensure employment continuity for the existing Drayton Mine workforce of 500, the ongoing utilisation of its infrastructure and the orderly rehabilitation of Drayton Mines completed Mining Areas. The Project will mine up to 6.4 Mt per annum (Mtpa) Run of Mine (ROM) export quality thermal coal by utilising existing Drayton Mine assets and infrastructure.

The Project is situated within the Muswellbrook Local Government Area (LGA). **Figure 1** illustrates the location of the Project. The Project is located adjacent to two thoroughbred horse studs, two power stations and several existing coal mines.

For the purposes of this assessment, Muswellbrook LGA, Singleton LGA and the Upper Hunter Shire LGA are defined as the Local Area (**Figure 2**). Together these LGAs form part of the Upper Hunter Region.

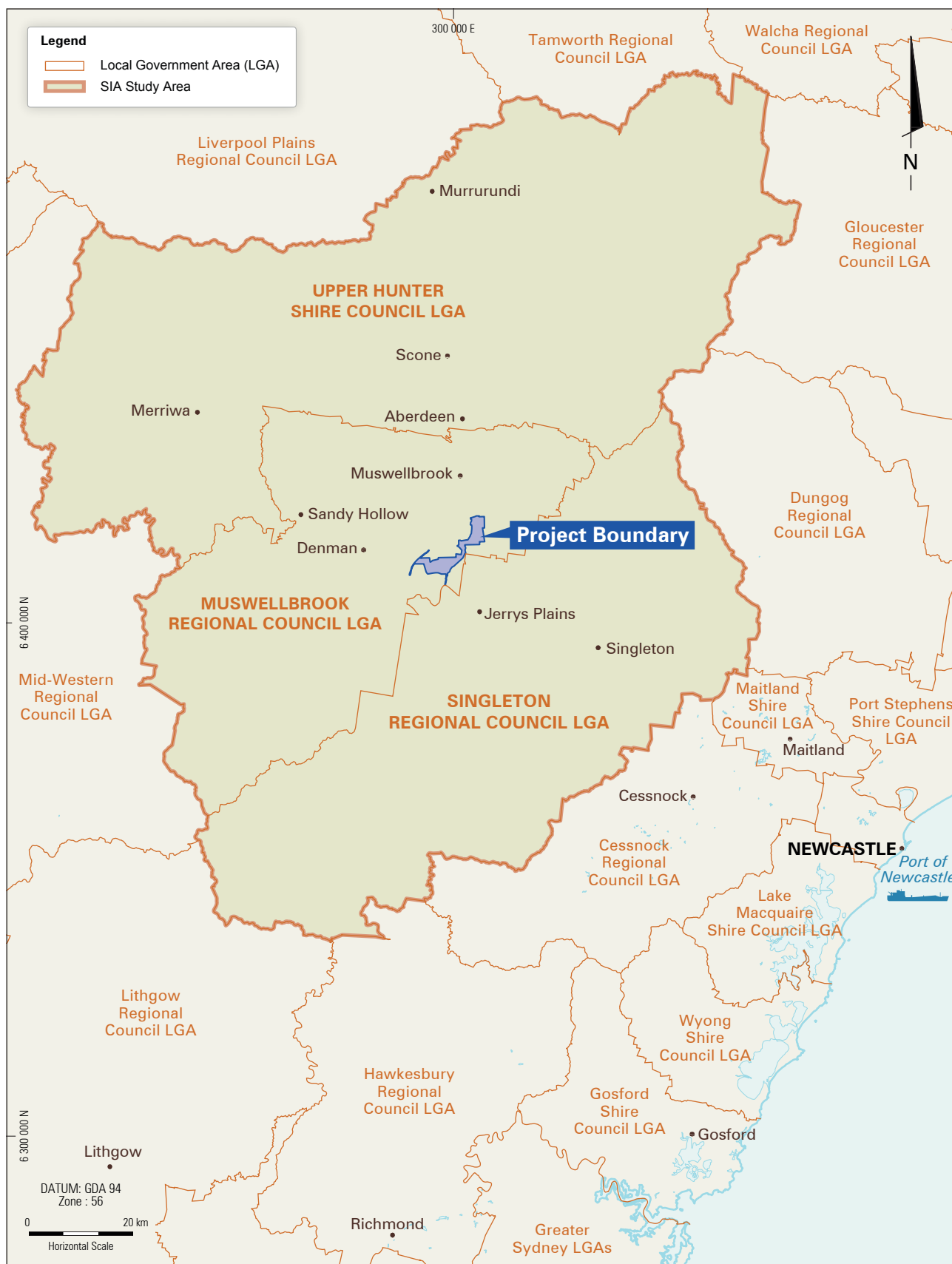


DRAYTON SOUTH COAL PROJECT



Regional Locality

**FIGURE 1**



DRAYTON SOUTH COAL PROJECT



SIA Study Area

**FIGURE 2**

The Project includes:

- Continuation of operations at Drayton Mine as currently approved with minor additional mining within the existing East, North and South Mining Areas for a period of 15 years;
- Developing a new open cut mining area within EL 5460 mining up to 6.4 Mtpa Run of Mine (ROM) coal;
- Allowing for the ongoing employment of a workforce of up to 500 full time equivalent employees;
- Utilisation of the existing Drayton Mine equipment fleet;
- Utilising the existing Drayton Mine voids for the storage of water and emplacement of tailings and rejects;
- Utilisation of the existing Drayton Mine infrastructure including the Coal Handling and Preparation Plant, rail loop and associated infrastructure, workshops, bath houses and administration offices;
- Construction of a transport corridor to the new mining area;
- Continued utilisation of the Antiene Rail Spur off the Main Northern Railway Line to transport product coal to the Port of Newcastle for export;
- Realigning and upgrading a section of Edderton Road;
- Continuation of mutually beneficial arrangements with neighbours AGL Macquarie and Mt Arthur Coal Mine;
- Installation of further water management and power reticulation infrastructure to support the new mining areas; and
- Progressive rehabilitation of disturbed areas as mining operations are completed.

The conceptual layout of the Project is shown in **Figure 3**.

A portion of the workforce associated with the existing Drayton Mine operation will be redeployed to the Project for the construction phase. No material construction workforce will be required to complete the Project. No additional workforce will be required for the Project operations phase.

### 1.3 DOCUMENT STRUCTURE

This SIA is structured as follows:

- **Section 1** - Introduction - describes the Project and explains its regional and regulatory context;
- **Section 2** - Scope and Methodology - provides an explanation of the scope and methodology adopted for the SIA;
- **Section 3** - Project Socio-Economic Characteristics - describes the Project workforce characteristics and associated accommodation arrangements;
- **Section 4** - Existing Socio-Economic Profile - provides a profile of the socio-economic characteristics of the Local Area;
- **Section 5** - Potential Social Impacts and Management - describes the predicted social impacts of the Project and identifies suitable actions to manage adverse impacts and enhance benefits;
- **Section 6** - Provides a conclusion; and
- **Section 7** - Provides a list of references.

### 1.4 STUDY AREA LOCATION

The study area for the SIA includes the LGAs of Muswellbrook, Singleton and Upper Hunter Shire (**Figure 2**). These areas are here-in referred to as the Local Area.

The nearest major town to the Project is Muswellbrook, located approximately 10 km by road from the existing Drayton Mine entrance and 16 km from the Project Boundary (**Figure 1**). The village of Jerrys Plains is approximately 10 km south-east of the Project Boundary and 40 km by road from the entrance to the existing Drayton Mine. Jerrys Plains is located within the Singleton LGA. Jerrys Plains is the closest settlement to the Project Boundary.

**Table 1** details the distance and commuting times from the entrance of the existing Drayton Mine to centres in the Local Area.



**Table 1**  
**Distance and Commuting Time from Existing Drayton Mine**

| Location      | LGA          | Approximate Distance (km) | Approximate Commute Time (Mins) |
|---------------|--------------|---------------------------|---------------------------------|
| Muswellbrook  | Muswellbrook | 10                        | 15                              |
| Denman        | Muswellbrook | 31                        | 25                              |
| Jerrys Plains | Singleton    | 40                        | 30                              |
| Singleton     | Singleton    | 40                        | 30                              |
| Aberdeen      | Upper Hunter | 24                        | 20                              |
| Scone         | Upper Hunter | 37                        | 33                              |

## 1.5 REGULATORY REQUIREMENTS

This SIA has been prepared as an appendix to the Project EIS to address the relevant Secretary's Environment Assessment Requirements (SEARs). There are no specific government issued procedural requirements for the preparation of SIAs in NSW.

### 1.5.1 Secretary's Assessment Requirements

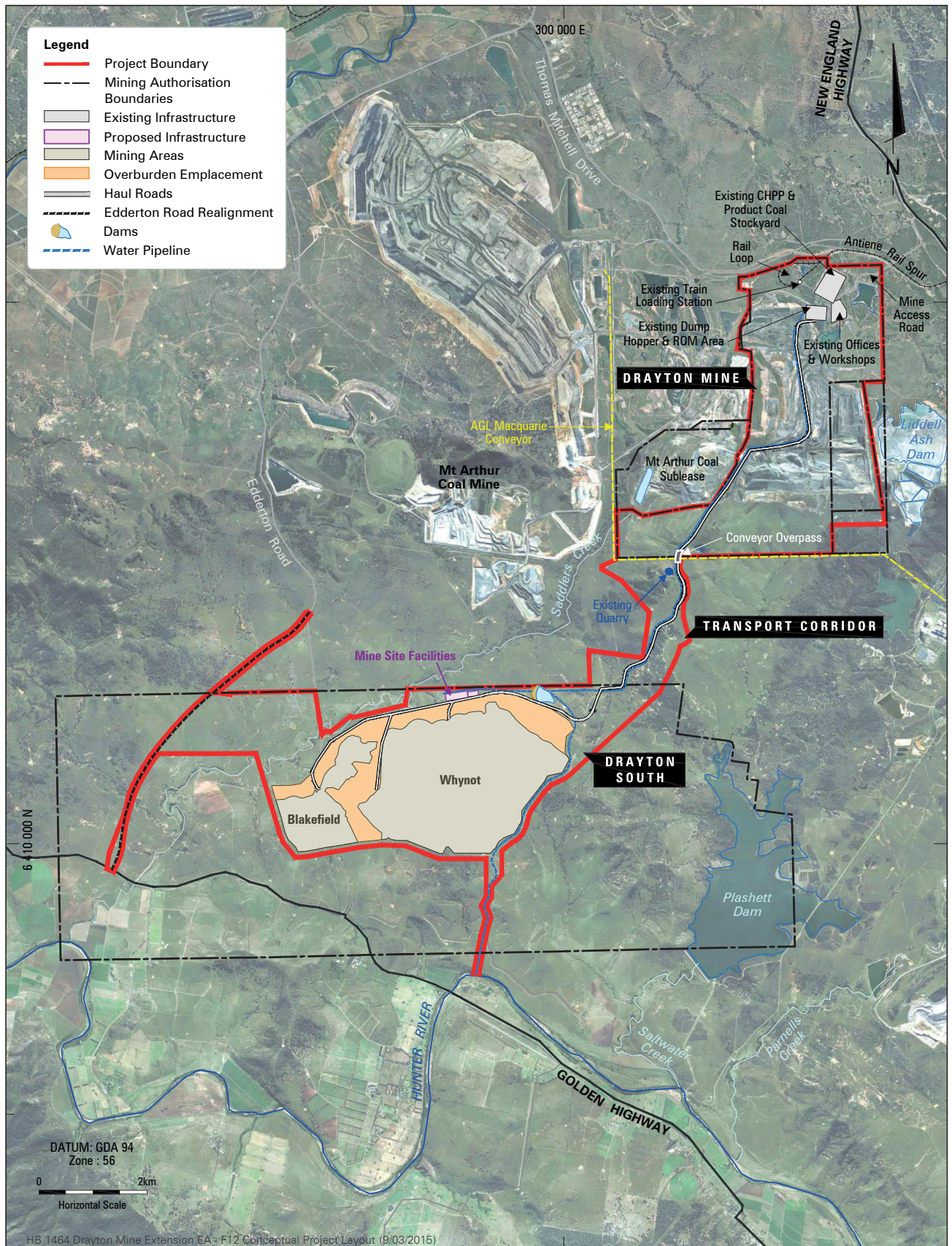
The Secretary of the NSW Department of Planning and Environment (DP&E) issued the SEARs for the Project on 19 December 2014. **Table 2** lists each requirement in the SEARs relevant to social impact assessments and where it is addressed in this SIA.

**Table 2**  
**Secretary's Environmental Assessment Requirements Relevant to Social Impacts**

| Secretary's Requirements                                                                                                                                                                                                                                                              | Section Addressed in SIA or Other Documents |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Specific Issues                                                                                                                                                                                                                                                                       |                                             |
| Social & Economic – including: -                                                                                                                                                                                                                                                      |                                             |
| <ul style="list-style-type: none"> <li>An assessment of the likely social impacts of the development (including perceived impacts)</li> </ul>                                                                                                                                         | Section 5.2                                 |
| <ul style="list-style-type: none"> <li>An assessment of the likely economic impacts of the development, paying particular attention to: <ul style="list-style-type: none"> <li>The significance of the resource</li> <li>The costs and benefits of the project</li> </ul> </li> </ul> | Project EIS Economic Impact Assessment      |
| <ul style="list-style-type: none"> <li>The demand for the provision of local infrastructure and services, having regard to Muswellbrook Shire Council's (MSC) requirements</li> </ul>                                                                                                 | Section 5.2                                 |

| Secretary's Requirements                                                                                                                                                                                                                                                              | Section Addressed in SIA or Other Documents           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <b>Muswellbrook Shire Council</b>                                                                                                                                                                                                                                                     |                                                       |
| Workforce – an assessment of the projects labour force requirements must be made which identifies or predicts: <ul style="list-style-type: none"> <li>The projected construction workforce and composition by LGA for each year of the construction phase</li> </ul>                  | Section 3.3                                           |
| <ul style="list-style-type: none"> <li>The total direct operational workforce and composition by LGA for each year of the project life</li> </ul>                                                                                                                                     | Section 3.3                                           |
| <ul style="list-style-type: none"> <li>The total indirect operational workforce and composition by LGA for each year of the project life</li> </ul>                                                                                                                                   | Section 3.3<br>Project EIS Economic Impact Assessment |
| <ul style="list-style-type: none"> <li>The total number of apprentice and trainees required to manage workforce replacement over the life of the project</li> </ul>                                                                                                                   | Section 3.3                                           |
| Assessment of social infrastructure and services should explicitly include: <ul style="list-style-type: none"> <li>Health services: medical, dental and hospital</li> </ul>                                                                                                           | Section 4.7 and Section 5.2                           |
| <ul style="list-style-type: none"> <li>Emergency Services: Ambulance, fire and rescue, Rural fire service, State Emergency Services</li> </ul>                                                                                                                                        | Section 4.7 and Section 5.2                           |
| <ul style="list-style-type: none"> <li>Secondary, vocational and higher education</li> </ul>                                                                                                                                                                                          | Section 4.7 and Section 5.2                           |
| <ul style="list-style-type: none"> <li>Child care</li> </ul>                                                                                                                                                                                                                          | Section 4.7 and Section 5.2                           |
| <ul style="list-style-type: none"> <li>Recreation</li> </ul>                                                                                                                                                                                                                          | Section 4.7 and Section 5.2                           |
| Housing affordability and accommodation demand should be addressed for all stages of the Project. Assessment should be based on current housing stock and the capacity of rental of existing and approved motel accommodation to satisfy accommodation demands throughout the Project | Section 4.6 and Section 5.2                           |
| The capacity of the existing water and sewer infrastructure to service the associated accommodation assessment should be assessed                                                                                                                                                     | Section 5.2                                           |





DRAYTON SOUTH COAL PROJECT



**Hansen Bailey**  
ENVIRONMENTAL CONSULTANTS

Conceptual Project Layout

**FIGURE 3**

## 2 SCOPE AND METHODOLOGY

### 2.1 INTRODUCTION

This section outlines the scope and methodology used in this SIA and describes its relationship to other technical assessments prepared as part of the Project EIS.

### 2.2 SCOPE OF WORK

This section describes the scope of work for the SIA. The scope of the SIA is to provide a:

- Description of the socio-economic profile of the communities of the Local Area;
- Description of the range of social infrastructure present in the Local Area with a particular focus on the Muswellbrook LGA;
- Description of housing market dynamics in the Local Area;
- Description and analysis of key project details relevant to the assessment of socio-economic impacts;
- Prediction and analysis of the potential social impacts associated with the Project including consideration of the following potential impacts:
  - Demand for housing and short term accommodation;
  - Demand for community infrastructure and services including children's services, education and recreation services; and
  - Demand for emergency services.
- Identification of actions to manage and/or mitigate any adverse social impacts; and
- Analysis of the potential cumulative impacts of the Project and surrounding industry.

### 2.3 METHODOLOGY

The methodology for the SIA included the following key components:

- Identification of the SIA study area;
- Profiling the socio-economic environment of the SIA study area based on a review of existing information/data and with reference to the following characteristics:
  - Population and demography;
  - Housing market dynamics including short-term accommodation provision;
  - Labour market dynamics;
  - Economic vitality; and
  - Community service and facility provision.



- Identification and assessment of potential socio-economic impacts including consideration of the following potential impacts:
  - Demand for housing and short term accommodation;
  - Demand for community infrastructure and services including children's services, education and recreation services; and
  - Demand for emergency services.
- Identification of appropriate management actions to address socio-economic impacts and to maximise community benefits.

The information contained in the SIA has been drawn from a number of sources including studies carried out by surrounding mining operations and published background information and statistical data.

The information was used to obtain a general understanding of the local setting and potential social impacts to the Local Area. Specific studies reviewed are referenced throughout this SIA and listed in **Section 7**.

### 2.3.1 Statistical Data

The statistical data referenced in this SIA is drawn primarily from 2006 and 2011 Census data compiled by the Australian Bureau of Statistics (ABS) and population and housing projections from the DP&E, as well as other publicly available sources.

In 2012 the ABS changed the boundaries of data from the Australian Standard Geographical Classification to the Australian Statistical Geography Standard. This has resulted in terminology changes, which in turn has made it difficult to compare 2006 data to 2011 data from some geographical areas. **Table 3** presents the ABS Census boundaries used to present data for the key geographical locations of the Local Area, and the associated terminology changes between 2006 and 2011 data. Where possible, every effort has been made to use comparable data.

Census areas which vary in size or boundary between 2006 and 2011 are still used in this SIA, in the absence of any alternative statistical information. However, care has been taken to apply statistics from these areas as proportions rather than absolute numbers, such that any discrepancy between the two Census years is minimised. Readers are asked to make reference to **Table 3** when interpreting data presented for these areas.

All care has been taken to ensure that data figures are correct, but in some cases totals may not equal 100% or the appropriate total number due to rounding.

**Table 3**  
**Statistical Boundaries and Terminology for Census Data 2006-2011**

| Report Reference   | 2006                                 | Comparison      | 2011                                              |
|--------------------|--------------------------------------|-----------------|---------------------------------------------------|
| Muswellbrook       | LGA                                  | Is the same as  | LGA                                               |
| Singleton          | LGA                                  | Is the same as  | LGA                                               |
| Upper Hunter Shire | LGA                                  | Is the same as  | LGA                                               |
| Hunter             | Statistical Division (SD)<br>Balance | Is larger than  | Hunter (ex Newcastle)<br>Statistical Area 4 (SA4) |
| Muswellbrook       | Urban Centre/Locality<br>(UCL)       | Is smaller than | UCL                                               |
| Denman             | UCL                                  | Is smaller than | UCL                                               |
| Singleton          | UCL                                  | Is smaller than | UCL                                               |
| Aberdeen           | UCL                                  | Is the same as  | UCL                                               |
| Scone              | UCL                                  | Is smaller than | UCL                                               |
| Jerrys Plains      | State Suburb (SS)                    | Is smaller than | SS                                                |
| NSW                | State                                | Is the same as  | State                                             |

## 2.4 RELATED STUDIES

The studies which are to be read in conjunction with this assessment include the following:

- The Project EIS Traffic Impact Assessment; and
- The Project EIS Economic Impact Assessment.

### **3 PROJECT SOCIO-ECONOMIC CHARACTERISTICS**

#### **3.1 INTRODUCTION**

This section describes the specific characteristics of the project relevant to the assessment of socio-economic impacts.

#### **3.2 PROJECT SCHEDULE**

The EIS refers to Project Years, rather than calendar years, with Project Year 1 being the first year of construction. Based on current planning and the immediate need for additional coal resources, Project Year 1 would be 2016. The overall schedule is also subject to the necessary regulatory approvals being obtained by Project Year 1.

Project construction is anticipated to commence in Project Year 1 and continue for a period of up to 12 months. Construction will consist of the development of the Project transport corridor, mine site facilities, major water storage dams and the open cut box cut required for the commencement of open cut mining operations.

Open cut operations are scheduled to commence in Project Year 1 and extend for a period of 15 years until Project Year 15.

#### **3.3 WORKFORCE DEMAND**

##### **3.3.1 Construction Workforce**

The construction workforce will be drawn from the existing Drayton Mine operations workforce (i.e. a portion of the existing approved operations workforce will be redeployed to the Project construction phase). The Project will not require a new or additional workforce for the construction phase.

##### **3.3.2 Operations Workforce**

The Project will utilise the existing operations workforce of 500 full time equivalents (FTE) employees from Drayton Mine.

The existing Drayton Mine workforce is employed on a 12 hour shift cycle. A new shift cycle of up to 12.75 hours is proposed for the Project to accommodate the additional travel time to the Drayton South mining areas.

### 3.4 LABOUR FORCE RESIDENCE LOCATION

The existing Drayton Mine workforce at peak operations was 500 persons. The workforce lives predominantly in the Muswellbrook and Singleton LGAs. **Table 4** describes the residential locations of the workforce.

**Table 4**  
**Existing Drayton Mine Workforce Residential Locations**

| Residential Location   | Existing Workforce |                           |
|------------------------|--------------------|---------------------------|
|                        | No. FTE Persons    | % of Residential Location |
| Muswellbrook LGA       | 195                | 39                        |
| Singleton LGA          | 120                | 24                        |
| Upper Hunter Shire LGA | 65                 | 13                        |
| Maitland LGA           | 45                 | 9                         |
| Cessnock LGA           | 60                 | 12                        |
| Other LGAs             | 15                 | 3                         |
| <b>Total</b>           | <b>500</b>         | <b>100</b>                |

## 4 EXISTING SOCIO-ECONOMIC PROFILE

### 4.1 INTRODUCTION

This section describes the socio-economic characteristics of the Local Area.

### 4.2 OVERVIEW OF LOCAL AND REGIONAL AREA

The Project is located within the Muswellbrook LGA in the Upper Hunter Region within the Hunter SA4. The workforce associated with the existing Drayton Mine resides predominantly within the communities of the Muswellbrook, Singleton and Upper Hunter Shire LGAs (**Figure 2**).

#### 4.2.1 Upper Hunter Region

The Muswellbrook, Singleton and Upper Hunter Shire LGAs form part of the Upper Hunter Region (as defined in the *Upper Hunter Strategic Regional Land Use Plan (2012)*). According to the NSW Minerals Council (NSWMC) (2014b) there were more than 17 coal mines operating in the Upper Hunter Region in the 2013-2014 financial year. Based on the outcomes of the NSWMC *2013/2014 Economic Impact Assessment* (NSWMC 2014), the mining sector in the Upper Hunter Region contributed a direct spend of approximately \$1.6 Billion to the state economy in the 2013/2014 financial year, equal to 11% of the total mining contribution in NSW.

The Upper Hunter Region has experienced sustained population and labour market growth over the past 10 years (to 2013), underpinned by employment generated through significant growth in the resources sector. At the peak of the mining boom in 2012, the Upper Hunter Region, particularly the Singleton LGA, sustained record low unemployment rates (less than 4% in 2012 compared to more than 5% in NSW for the same time). Critical issues impacting the Upper Hunter Region during this period of sustained growth included:

- Land supply and housing issues for the mining and non-mining sector. Housing affordability and housing availability issues were prevalent in regional centres such as Muswellbrook and Singleton;
- Significant pressure on the delivery of key services and facilities to the expanding population, in particular the provision of health and social services;
- Impacts on other industries in terms of access to labour supply, land and infrastructure; and
- Marked demographic change in the population.

The economy of the Upper Hunter Region is now experiencing the full impact of the slow-down in the mining industry (Hunter Research Foundation (HRF), 2014). Analysis of the key indicators of employment and unemployment, labour force size, household spend, house prices and rent costs highlight the significant changes that have occurred in the Upper Hunter Region following the slow-down in the mining industry.

The LGAs of the Upper Hunter Region have experienced an increase in unemployment rates (**Section 4.4**) and a decline in total employment numbers from the peak of late 2012 (Hunter Research Foundation (HRF), 2014). Unemployment rates across the Upper Hunter Region have increased significantly over the last 12 months, with the unemployment rate in Muswellbrook reaching 7% in December quarter 2014, compared to 5.7% for NSW in the same period. Labour data for the Upper Hunter Region suggests that the tight regional labour market has eased *with a significantly larger labour force [remaining] than was available prior to the boom*" (HRF, 2014).

During the mining boom the Upper Hunter Region developed a strong skill base. The HRF Business Survey (2014) suggests one of the key challenges moving forward for the Upper Hunter regional economy is developing and retaining a skill base to support diversification and economic recovery.

The findings of the recent HRF Business Survey (HRF, 2014) suggest continuing low levels of business and consumer confidence following the downturn in mining industry. In the latest HRF Household Survey, Upper Hunter Region households reported the lowest level of increased spending in the prior three months since the HRF Household Survey was first conducted in late 2001 (HRF, 2014).

Dwelling investment in the Upper Hunter Region has fallen from the peak associated with the mining boom (HRF, 2014), with an associated weakening of the real estate market. A reduction in employment levels in mining and related sectors within the Upper Hunter Region has resulted in the movement of people out of the region and a corresponding reduction in demand for housing. Across the Upper Hunter Region, house prices have eased considerably over the past 12 months and rents have fallen significantly.

#### **4.2.2 Muswellbrook LGA**

Muswellbrook LGA incorporates the regional centre of Muswellbrook and the smaller centres of Denman and Sandy Hollow. The Muswellbrook LGA has a diversified economy based on the agriculture, viticulture, mining, tourism and equine industries. The Estimated Resident Population (ERP) of the Muswellbrook LGA in 2011 was 15,791 with the majority of the population located in the centres of Muswellbrook (11,042) and Denman (1,403).



The average annual population growth in the LGA over the previous ten years has been 0.7%, which is considered a steady population growth rate. The majority of the LGA population growth to date has occurred in the township of Muswellbrook.

Coal mining has occurred in the LGA since the early 1900s, with the first open cut mine established in 1944 (MSC, 2015). The growth of the township of Muswellbrook has been influenced by the development of open cut coal mining in the area and the establishment of power generation at Liddell and Bayswater.

According to the NSWMC (2014a), the mining industry provided the following economic inputs to the Muswellbrook LGA in the 2013/14 financial year:

- Directly employed a total of 1,435 FTE persons, equivalent to 19.3% of all people employed in the LGA;
- Had a total direct spend of \$562.4 Million in the LGA, the seventh largest share of direct expenditure in mining for all NSW LGAs;
- Spent \$378.1 Million on business purchases and community contributions; and
- Directly supported 431 businesses.

The Muswellbrook LGA and in particular the township of Muswellbrook, has been significantly impacted by the down-turn in the coal mining industry since 2012, largely as a result of workforce downsizing. Unemployment rates have experienced a significant increase, house prices have dropped more than 6% since 2012 and rental vacancy rates have shifted from 1% in 2012 to a peak of 14% in 2013. (Commonwealth Bank of Australia, 2014).

#### **4.2.3 Singleton LGA**

The Singleton LGA incorporates the regional centre of Singleton and a number of smaller centres including Jerrys Plains located in proximity to the Project Boundary (**Figure 1**). Singleton is a prosperous town that has a predominantly young, employed labour force. This is the result of a strong economy, supported by a variety of industries which have contributed to a prolonged period of steady economic growth.

Traditionally a farming town, Singleton maintains successful agricultural production alongside power generation and coal mining operations. Supporting trade and engineering services for these industries are located in two well established industrial areas. Singleton is also ideally located as a tourism destination.

Singleton enjoys the benefits of a higher than average weekly household income, a factor contributing to the high standard of living enjoyed by locals. With low unemployment and a strong industrial base, Singleton provides a lifestyle that has attracted many to the area. In 2011 Singleton LGA had an ERP of 22,694. Approximately 62% of the population lives within the township of Singleton and surrounding urban centres. Between the 2006 and 2011 Census periods, township of Singleton had an average annual growth rate of 1.1% (ABS, 2011a).

According to the NSWMC (2014a) the mining industry provided the following economic inputs to the in Singleton LGA in the 2013/14 financial year:

- Directly employed a total of 2,168 FTE persons, equivalent to 19.0% of all people employed in the LGA;
- Had a total direct spend of \$925 Million, the third largest share of direct expenditure in mining for all NSW LGAs;
- Spent \$643.3 Million on business purchases and community contributions; and
- Directly supported 728 businesses.

Singleton LGA has also experienced the full impact of the mining downturn. Business and consumer confidence is depressed (HRF, 2014; Newcastle Herald, 2015). Unemployment rates have increased from a low of 1.8% in 2012 to 4.4% in 2014 and there has been a softening of the local housing market.

### ***Jerrys Plains Village***

The village of Jerrys Plains is located approximately 10 km south-east of the Project Boundary and 40 km from the entrance to the existing Drayton Mine by road. Jerrys Plains is the closest settlement to the Project Boundary. In 2011 Jerrys Plains had an ERP of 225, determined from aerial photo interpretation of the number of dwellings in the village. In 2011, the Jerrys Plains 'State Suburb', which covers a wider area than the actual village, had a total population of 688.

#### **4.2.4 Upper Hunter Shire LGA**

The Upper Hunter Shire LGA is a major cattle, crop, pig, poultry and sheep producer. The LGA has a number of vineyards, a cattle abattoir and is the single largest producer of thoroughbred horses in Australia. The largest equine veterinary practice in the southern hemisphere is located in Scone which is known as the Horse Capital of Australia.

The Upper Hunter Shire LGA had a population of 13,754 in 2011 and incorporates the regional centres of Scone (5,079), Aberdeen (1,837), Merriwa (973) and Murrurundi (847). The average annual population growth in the LGA over the previous ten years has been 0.5%, which is considered a steady population growth rate.

According to the NSWMC (2014a) in the 2013-2014 financial year the mining industry in Upper Hunter Shire LGA:

- Employed a total of 664 FTE persons, equivalent to 10.2% of all people employed in the LGA;
- Had a total direct spend of \$95.7 Million;
- Spent \$13.1 Million on business purchases and community contributions; and
- Directly supported 69 businesses.

Upper Hunter Shire LGA has been less affected by the slow-down in the mining industry due in part to the diversity of the economy in the LGA and to the smaller reliance on the mining sector when compared with neighbouring LGAs.

#### 4.3 POPULATION AND DEMOGRAPHIC CHARACTERISTICS

This section describes the population characteristics of the Local Area.

##### 4.3.1 Estimated Resident Population

ERPs are provided annually by the ABS for LGAs across Australia. At 30 June 2013, the ERP of Muswellbrook, Singleton and Upper Hunter Shire LGAs was 16,851, 23,751 and 14,650, respectively (ABS 2013).

The most recent population data for communities within the Local Area is summarised in **Table 5** and provided by the ABS 2011 Census.

**Table 5**  
**Local Population, 2011**

| Location           | Population |
|--------------------|------------|
| Muswellbrook LGA   | 15,791     |
| - Muswellbrook UCL | 11,042     |
| - Denman UCL       | 1,403      |
| Singleton LGA      | 22,694     |

| Location               | Population |
|------------------------|------------|
| - Singleton UCL        | 13,961     |
| - Jerrys Plains SS     | 688*       |
| Upper Hunter Shire LGA | 13,754     |
| - Scone UCL            | 5,079      |
| - Aberdeen UCL         | 1,837      |

Source: ABS, 2011a

Note: \* Jerrys Plains village (as opposed to the wider State Suburb) contains approximately 75 dwellings (determined from Singleton Shire Council water service data and aerial photo interpretation undertaken in 2012.). When multiplied by the occupancy rate of three for Jerrys Plains at the 2011 Census, this equates to a population of approximately 225 persons

### 4.3.2 Past and Future Population Growth

#### **Estimated Resident Population 2009 – 2013**

Population growth is shown in **Table 6** for the Muswellbrook, Singleton and Upper Hunter Shire LGAs from June 2009 to June 2013 (the most recent ERP data available).

**Table 6** shows that the Muswellbrook, Singleton and Upper Hunter Shire LGAs have all experienced an increase in population between 2009 and 2013. Both the Muswellbrook and Upper Hunter Shire LGAs experienced a higher rate of population increase than NSW. This population growth can be partially attributed to the corresponding expansion in the resources sector in the each LGA. The Singleton LGA experienced only a small population change compared to other LGAs in the Local Area and NSW.

**Table 6**  
**Estimated Resident Population, 2009 – 2013**

| Location               | 2009      | 2010      | 2011      | 2012      | 2013      | Change<br>2008 – 2013<br>(%) |
|------------------------|-----------|-----------|-----------|-----------|-----------|------------------------------|
| Muswellbrook LGA       | 15,878    | 16,108    | 16,328    | 16,694    | 16,851    | 6.1                          |
| Singleton LGA          | 23,063    | 23,335    | 23,523    | 23,785    | 23,751    | 3.0                          |
| Upper Hunter Shire LGA | 13,801    | 13,983    | 14,206    | 14,509    | 14,650    | 6.2                          |
| NSW                    | 6,904,942 | 7,014,887 | 7,127,168 | 7,232,589 | 7,410,399 | 7.3                          |

Source: ABS, 2011a

### NSW Department of Planning and Environment Population Projections

The projected population and growth rates for the Muswellbrook, Singleton and Upper Hunter Shire LGAs from 2011 to 2031 are detailed in **Table 7**. These projections are supplied by the DP&E for each LGA in NSW, and use standardised demographic modelling, including expected natural increase in population (births over deaths) and net migration assumptions.

**Table 7**  
**DP&E Projected Population and Growth Rates, 2011 – 2031**

| Year                          | Resident Population<br>at 30 June | Annual Growth<br>Rate for Previous<br>5 Years (%) |
|-------------------------------|-----------------------------------|---------------------------------------------------|
| <b>Muswellbrook LGA</b>       |                                   |                                                   |
| 2011                          | 16,350                            | n/a                                               |
| 2016                          | 17,100                            | 0.9                                               |
| 2021                          | 17,850                            | 0.9                                               |
| 2026                          | 18,600                            | 0.8                                               |
| 2031                          | 19,350                            | 0.8                                               |
| <b>Singleton LGA</b>          |                                   |                                                   |
| 2011                          | 23,500                            | n/a                                               |
| 2016                          | 24,550                            | 0.9                                               |
| 2021                          | 25,600                            | 0.8                                               |
| 2026                          | 26,500                            | 0.7                                               |
| 2031                          | 27,350                            | 0.6                                               |
| <b>Upper Hunter Shire LGA</b> |                                   |                                                   |
| 2011                          | 14,200                            | n/a                                               |
| 2016                          | 14,700                            | 0.7                                               |
| 2021                          | 15,100                            | 0.6                                               |
| 2026                          | 15,450                            | 0.5                                               |
| 2031                          | 15,750                            | 0.4                                               |

Note: n/a: Not available

Source: ABS, 2008; DP&E, 2014

For the Muswellbrook, Singleton and the Upper Hunter Shire LGAs, the projections in **Table 7** show an increasing population from 2011 to 2031, with populations of 19,350, 27,350 and 15,750, respectively, projected for 2031. However, while the Muswellbrook LGA is anticipated to experience relatively stable population growth through to 2031, both the Singleton and Upper Hunter Shire LGAs are projected to experience a decline in population growth rates during this period.

### 4.3.3 Age Structure

In 2011 the Muswellbrook and Singleton LGAs had a median age of 34, compared to a median age of 38 for the Hunter SA4 and NSW. The Upper Hunter Shire LGA had a median age of 39. The 2011 age structure of the Muswellbrook, Singleton and Upper Hunter Shire LGAs is outlined in **Table 8**.

**Table 8**  
**Age Distribution, 2011**

| Age Cohort   | Muswellbrook LGA |            | Singleton LGA |            | Upper Hunter Shire LGA |            | Hunter SA4 | NSW        |
|--------------|------------------|------------|---------------|------------|------------------------|------------|------------|------------|
|              | Persons          | %          | Persons       | %          | Persons                | %          | %          | %          |
| 0 - 4        | 1,246            | 8          | 1,652         | 7          | 985                    | 7          | 7          | 7          |
| 5 - 9        | 1,220            | 8          | 1,657         | 7          | 998                    | 7          | 7          | 6          |
| 10-14        | 1,138            | 7          | 1,722         | 8          | 808                    | 7          | 7          | 6          |
| 15 - 19      | 1,117            | 7          | 1,796         | 8          | 770                    | 6          | 7          | 6          |
| 20 - 24      | 1,073            | 7          | 1,498         | 7          | 828                    | 6          | 6          | 7          |
| 25 - 29      | 1,130            | 7          | 1,496         | 7          | 794                    | 6          | 6          | 7          |
| 30 - 35      | 1,112            | 7          | 1,418         | 6          | 905                    | 6          | 6          | 7          |
| 35 - 39      | 1,104            | 7          | 1,596         | 7          | 860                    | 7          | 7          | 7          |
| 40 - 44      | 1,118            | 7          | 1,787         | 8          | 919                    | 6          | 7          | 7          |
| 45 - 49      | 1,155            | 7          | 1,672         | 7          | 953                    | 7          | 7          | 7          |
| 50 - 54      | 1,025            | 6          | 1,594         | 7          | 913                    | 7          | 7          | 7          |
| 55 - 59      | 903              | 6          | 1,306         | 6          | 841                    | 7          | 6          | 6          |
| 60 - 64      | 778              | 5          | 1,147         | 5          | 700                    | 6          | 6          | 6          |
| 65 - 69      | 583              | 4          | 790           | 3          | 532                    | 5          | 5          | 4          |
| 70 - 74      | 376              | 2          | 533           | 2          | 410                    | 4          | 4          | 3          |
| 75 - 79      | 326              | 2          | 417           | 2          | 324                    | 3          | 3          | 3          |
| 80 - 84      | 220              | 1          | 346           | 2          | 808                    | 2          | 2          | 2          |
| 85 and over  | 168              | 0          | 267           | 1          | 290                    | 0          | 2          | 1          |
| <b>Total</b> | <b>15,792</b>    | <b>100</b> | <b>22,694</b> | <b>100</b> | <b>13,638</b>          | <b>100</b> | <b>100</b> | <b>100</b> |

Source: ABS, 2011a

**Table 8** shows that:

- All LGAs in the Local Area have a slightly higher proportion of younger people (under 15 years) than NSW (19%); and
- All LGAs in the Local Area have a lower proportion of older people (over 55 years) than NSW (29%).



#### 4.3.4 Household and Family Structure

**Table 9** shows household type in the Local Area compared to Hunter SA4 and NSW. **Table 10** shows family structure in the Local Area compared to Hunter SA4 and NSW.

**Table 9**  
**Household Types, 2006**

| Household Type          | Muswellbrook LGA |                | Singleton LGA |            | Upper Hunter Shire LGA |            | Hunter SA4 | NSW        |
|-------------------------|------------------|----------------|---------------|------------|------------------------|------------|------------|------------|
|                         | No.              | % <sup>1</sup> | No.           | %          | No.                    | %          | %          | %          |
| Lone person households  | 1,416            | 26             | 1,602         | 21         | 1,427                  | 27         | 23         | 24         |
| Group households        | 1184             | 3              | 202           | 3          | 156                    | 3          | 2          | 4          |
| Family households       | 3,933            | 71             | 5,952         | 77         | 3,661                  | 70         | 74         | 72         |
| <b>Total households</b> | <b>6,533</b>     | <b>100</b>     | <b>7,756</b>  | <b>100</b> | <b>5,244</b>           | <b>100</b> | <b>100</b> | <b>100</b> |

Source: ABS, 2011a

Note: <sup>1</sup> = % of total households

**Table 9** shows that in 2011:

- The Singleton LGA had a higher proportion of family households (77%) than NSW and the Hunter SA4 (72% and 74%), while the Upper Hunter Shire and Muswellbrook LGAs had a smaller proportion of family households (70% and 71%); and
- The Singleton LGA had a lower proportion of lone person households (21%) than NSW and the Hunter SA4 (24% and 23%), while the Upper Hunter and Muswellbrook LGAs had slightly higher proportion of lone person households (27% and 26%).

**Table 10** shows that in 2011:

- The Singleton LGA recorded a higher proportion of *'couple families with children'* (49%) than NSW and the Hunter SA4 (46% and 43% respectively);
- The Upper Hunter Shire LGA recorded the highest proportion of *'couple families without children'* in the Local Area; and
- All LGAs in the Local Area recorded a lower proportion of one parent families than the Hunter SA4 and NSW.

**Table 10**  
**Families Structure by Type, 2011**

| Category                         | Muswellbrook LGA |                | Singleton LGA |                | Upper Hunter Shire LGA |                | Hunter SA4     | NSW            |
|----------------------------------|------------------|----------------|---------------|----------------|------------------------|----------------|----------------|----------------|
|                                  | No.              | % <sup>1</sup> | No.           | % <sup>1</sup> | No.                    | % <sup>1</sup> | % <sup>1</sup> | % <sup>1</sup> |
| Couple families with Children    | 1,793            | 45             | 3,002         | 49             | 1,570                  | 43             | 43             | 46             |
| Couple families without children | 1,483            | 37             | 2,198         | 36             | 1,575                  | 43             | 39             | 37             |
| One parent Families              | 1,449            | 16             | 833           | 13             | 519                    | 14             | 17             | 17             |
| Other families                   | 67               | 2              | 55            | 1              | 33                     | <1             | 1              | <1             |
| <b>Total families</b>            | <b>4,792</b>     | <b>100</b>     | <b>6,088</b>  | <b>100</b>     | <b>3,697</b>           | <b>100</b>     | <b>100</b>     | <b>100</b>     |

Source: ABS, 2011a

Note: <sup>1</sup> = % of total families

#### 4.3.5 Stability of Residency

The time that residents have lived in a community affects the extent to which they develop relationships and networks with other residents, and build social capital. The longer that more residents have lived in a place, the stronger their community networks are likely to be. The census provides valuable indicators of community stability by asking people where they lived one and five years ago (Public Practice, 2007). **Table 11** shows that the component LGAs of the Local Area support a more mobile population than NSW.

**Table 11**  
**Residential Mobility, 2006 and 2011**

| Location               | 2006 % Living in Different Address |                              | 2011 % Living in Different Address |                              |
|------------------------|------------------------------------|------------------------------|------------------------------------|------------------------------|
|                        | 1 Year Ago <sup>1</sup> (%)        | 5 Years Ago <sup>1</sup> (%) | 1 Year Ago <sup>1</sup> (%)        | 5 Years Ago <sup>1</sup> (%) |
| Muswellbrook LGA       | 18.0                               | 41.0                         | 17.6                               | 40.2                         |
| Singleton LGA          | 17.2                               | 41.9                         | 14.9                               | 38.5                         |
| Upper Hunter Shire LGA | 15.8                               | 38.1                         | 15.2                               | 36.9                         |
| Hunter SA4             | -                                  | -                            | 14.3                               | 37.0                         |
| NSW                    | 15.3                               | 38.3                         | 13.9                               | 36.9                         |

Note: <sup>1</sup> = Percentage of respondents does not include 'not stated'

#### 4.3.6 Income

**Table 12** shows the median weekly individual, family and household income in 2011 for the LGAs within the Local Area as well as the Hunter SA4 and NSW.

**Table 12** shows that in 2011, the Muswellbrook and Singleton LGAs had higher median income levels than NSW and the Hunter SA4. In contrast, the Upper Hunter Shire LGA recorded lower median income levels than NSW and the Hunter SA4. In 2011, median weekly family income levels in both the Muswellbrook and Singleton LGAs were significantly higher than the adjoining Upper Hunter Shire LGA, Hunter SA4 and NSW.

**Table 12**  
**Income Indicators, 2011**

| Location               | Median Personal Income (\$ / weekly) | Median Family Income (\$ / weekly) | Median Household Income (\$ / weekly) |
|------------------------|--------------------------------------|------------------------------------|---------------------------------------|
| Muswellbrook LGA       | \$619                                | \$1,697                            | \$1,399                               |
| Singleton LGA          | \$640                                | \$1,927                            | \$1,692                               |
| Upper Hunter Shire LGA | \$552                                | \$1,392                            | \$1,071                               |
| Hunter SA4             | \$528                                | \$1,407                            | \$1,237                               |
| NSW                    | \$561                                | \$1,477                            | \$1,394                               |

Source: ABS, 2011a

#### 4.4 EMPLOYMENT, UNEMPLOYMENT AND LABOUR FORCE PARTICIPATION

**Table 13** shows the 2011 Census unemployment rate, labour force participation rate and employment to population ratio for the LGAs of the Local Area and their component urban settlements compared to the Hunter SA4 and NSW.

All settlements of interest within the Local Area recorded higher labour force participation rates than both the Hunter SA4 and NSW. Jerrys Plains also recorded the highest labour force participation rate at 74.5%, significantly higher than NSW (59.7%).

**Table 14** presents the estimated unemployment rates for each of the LGAs within the Local Area and NSW for the September quarters of 2013 and 2014. The number of unemployed people and the size of the labour force are also provided. The statistics in **Table 14** illustrate the impacts associated with the slow-down in the mining industry.

**Table 14** shows that in September 2013, the estimated unemployment rate for all LGAs within the Local Area was below the NSW rate (5.4%). In the year to September 2014:

- Unemployment rates across all LGAs of the Local Area experienced an increase of between 1.4% and 2.5% compared to a 0.3% increase in the NSW unemployment rate for the same period;
- The size of the labour force in all LGAs of the Local Area declined, as did the NSW labour force; and
- The Singleton LGA recorded the lowest unemployment rate in the Local Area at 4.4%, followed by the Upper Hunter at 4.6% and Muswellbrook at 7%.

**Table 13**  
**Labour Force Status, 2011 (%)**

| <b>Location</b>        | <b>Unemployment<sup>1</sup></b> | <b>Labour Force Participation<sup>2</sup></b> | <b>Employment to Population<sup>2</sup></b> |
|------------------------|---------------------------------|-----------------------------------------------|---------------------------------------------|
| Muswellbrook LGA       | 4.8                             | 63.8                                          | 60.7                                        |
| - Muswellbrook UCL     | 5.4                             | 64.5                                          | 61                                          |
| - Denman UCL           | 5.1                             | 62.0                                          | 58.8                                        |
| Singleton LGA          | 3.3                             | 66.7                                          | 64.5                                        |
| - Singleton UCL        | 4.2                             | 65.6                                          | 62.8                                        |
| Jerrys Plains SS       | 1.5                             | 74.5                                          | 73.5                                        |
| Upper Hunter Shire LGA | 3.6                             | 62.4                                          | 60.2                                        |
| - Scone UCL            | 3.8                             | 60.3                                          | 58.0                                        |
| - Aberdeen UCL         | 4.3                             | 63.8                                          | 61.1                                        |
| Hunter SA4             | 5.3                             | 58.9                                          | 55.8                                        |
| NSW                    | 5.9                             | 59.7                                          | 56.2                                        |

Source: ABS, 2011a

Notes:

(1) The number of unemployed persons expressed as a percentage of the total labour force.

(2) The number of persons is expressed as a percentage of persons aged 15 years and over.

**Table 14**  
**Estimated Unemployment Rates and Labour Force, 2013 – 2014**

| Location         | Estimated Unemployment |     |           |     |        |     | Labour Force |           |         |
|------------------|------------------------|-----|-----------|-----|--------|-----|--------------|-----------|---------|
|                  | Sep. 2013              |     | Sep. 2014 |     | Change |     | Dec. 2013    | Sep. 2014 | Change  |
|                  | No.                    | %   | No.       | %   | No.    | %   |              |           |         |
| Muswellbrook LGA | 422                    | 4.5 | 636       | 7.0 | 214    | 2.5 | 9,408        | 9,100     | -308    |
| Singleton LGA    | 422                    | 3.0 | 585       | 4.4 | 163    | 1.4 | 14,268       | 13,277    | -991    |
| Upper Hunter SA4 | 233                    | 2.7 | 351       | 4.6 | 118    | 1.9 | 8,594        | 7,692     | -902    |
| NSW              | 208,900                | 5.4 | 218,398   | 5.7 | 9,498  | 0.3 | 3,879,400    | 3,821,921 | -57,479 |

Source: DoE, 2014

#### 4.4.1 Historical Unemployment Rates

**Table 15** shows the unemployment rates for the LGAs within the Local Area, and NSW for each of the December quarters from 2010 to 2014.

**Table 15**  
**Unemployment Rate, December Quarter 2010 – 2013 (%)**

| Location               | 2010 | 2011 | 2012 | 2013 | 2014 <sup>1</sup> |
|------------------------|------|------|------|------|-------------------|
| Muswellbrook LGA       | 4.0  | 3.8  | 3.1  | 4.2  | 7.0               |
| Singleton LGA          | 2.4  | 2.0  | 1.8  | 3.0  | 4.4               |
| Upper Hunter Shire LGA | 2.7  | 2.4  | 2.0  | 2.9  | 4.6               |
| NSW                    | 4.9  | 5.2  | 5.0  | 5.6  | 5.7               |

Source: DoE, 2014, ABS, 2011b

Notes: 1 = September Quarter

**Table 15** shows that unemployment rates across the Local Area decreased between 2010 and 2012 in line with the mining boom. Singleton and Upper Hunter Shire LGAs both had very low unemployment rates during this period. The unemployment rate in all LGAs and NSW increased between 2012 and 2014, likely attributable to the slow-down in the mining sector, improvements to productivity and a corresponding reduction in workforce size. The unemployment rate in Muswellbrook LGA increased significantly between 2013 and 2014.

## 4.5 LABOUR FORCE CHARACTERISTICS

### 4.5.1 Industry of Employment

The industry of employment for people over 15 years in the LGAs in the Local Area in 2011 is outlined in **Table 16**.

**Table 16** shows that the '*mining*' sector employed the highest percentage of employed people in 2011 in both the Singleton LGA (25%) and Muswellbrook LGA (21%), compared to 9% in the Hunter SA4 and 1% in NSW. Although 11% of employed people in the Upper Hunter Shire LGA were employed in the mining sector, the '*agriculture, forestry and fishing*' sector is the highest employing sector in that LGA (19%).

In 2011, approximately 2,800 people in the Singleton LGA were employed in the '*mining*' sector, compared to 1,600 people in Muswellbrook LGA and 700 people in Upper Hunter Shire LGA.

**Table 16**  
**Industry of Employment, 2011**

| Category                                        | Muswellbrook LGA |              | Singleton LGA |              | Upper Hunter Shire LGA |              | Hunter SA4   | NSW          |
|-------------------------------------------------|------------------|--------------|---------------|--------------|------------------------|--------------|--------------|--------------|
|                                                 | No. Persons      | Employed (%) | No. Persons   | Employed (%) | No. Persons            | Employed (%) | Employed (%) | Employed (%) |
| Agriculture, forestry and fishing               | 526              | 7            | 439           | 4            | 1,240                  | 19           | 3            | 2            |
| Mining                                          | 1,576            | 21           | 2,807         | 25           | 711                    | 11           | 9            | 1            |
| Manufacturing                                   | 409              | 6            | 802           | 7            | 406                    | 6            | 10           | 8            |
| Electricity, gas, water and waste services      | 332              | 4            | 260           | 2            | 138                    | 2            | 2            | 1            |
| Construction                                    | 496              | 7            | 702           | 6            | 417                    | 6            | 8            | 7            |
| Wholesale trade                                 | 247              | 3            | 342           | 3            | 181                    | 3            | 3            | 4            |
| Retail trade                                    | 683              | 9            | 929           | 8            | 548                    | 8            | 11           | 10           |
| Accommodation and food services                 | 512              | 7            | 756           | 7            | 426                    | 7            | 8            | 7            |
| Transport, postal and warehousing               | 222              | 3            | 358           | 3            | 231                    | 4            | 4            | 5            |
| Information media and telecommunications        | 29               | 0            | 53            | 0            | 21                     | 0            | 1            | 2            |
| Financial and insurance services                | 79               | 1            | 132           | 1            | 79                     | 1            | 2            | 5            |
| Rental, hiring and real estate services         | 100              | 1            | 180           | 2            | 61                     | 1            | 2            | 2            |
| Professional, scientific and technical services | 212              | 3            | 409           | 4            | 255                    | 4            | 4            | 8            |
| Administrative and support services             | 230              | 3            | 397           | 3            | 118                    | 2            | 3            | 3            |
| Public administration and safety                | 1296             | 4            | 603           | 5            | 272                    | 4            | 6            | 6            |
| Education and training                          | 359              | 5            | 576           | 5            | 429                    | 7            | 6            | 8            |



| Category                            | Muswellbrook LGA |              | Singleton LGA |              | Upper Hunter Shire LGA |              | Hunter SA4   | NSW          |
|-------------------------------------|------------------|--------------|---------------|--------------|------------------------|--------------|--------------|--------------|
|                                     | No. Persons      | Employed (%) | No. Persons   | Employed (%) | No. Persons            | Employed (%) | Employed (%) | Employed (%) |
| Health care and social assistance   | 509              | 7            | 729           | 6            | 504                    | 8            | 10           | 12           |
| Arts and recreation services        | 70               | 1            | 59            | 1            | 97                     | 1            | 1            | 1            |
| Other services                      | 334              | 5            | 596           | 5            | 221                    | 3            | 5            | 4            |
| Inadequately described / not stated | 181              | 2            | 267           | 2            | 169                    | 3            | 2            | 2            |
| <b>Total</b>                        | <b>8,402</b>     | <b>100</b>   | <b>11,396</b> | <b>100</b>   | <b>6,524</b>           | <b>100</b>   | <b>100</b>   | <b>100</b>   |

*Note: N.A. Not Applicable*  
*Source: ABS, 2011a*

#### 4.5.2 Occupation

The occupation of all employed people age 15 years and over in the Local Area in 2011 is outlined in **Table 17**.

**Table 17** shows that in 2011:

- The Muswellbrook and Singleton LGAs had a lower proportion of the labour force employed as '*managers*' compared to the Hunter SA4 and NSW. The Upper Hunter Shire LGA had a higher proportion of the labour force employed as '*managers*' compared to the other LGAs of the Local Area, reflecting the number of people self-employed in agriculture who are managing their own farming enterprises;
- All three LGAs of the Local Area had a significantly lower proportion of the labour force employed as '*professionals*' compared to Hunter SA4 and NSW;
- The dominant occupations in the three LGAs of the Local Area were '*technicians and trades workers*' and '*machinery operators and drivers*'. All three LGAs of the Local Area had a higher proportion of '*technicians and trades workers*' than NSW but similar proportions to Hunter SA4.

The size of the labour force within the occupation groups of '*technicians and trades workers*', '*machinery operators and drivers*' and '*labourers*' reflects the size of the mining industry workforce in the region.

**Table 17**  
**Occupation Data, 2011**

| Occupation                             | Muswellbrook LGA |              | Singleton LGA |              | Upper Hunter Shire LGA |              | Hunter SA4   | NSW          |
|----------------------------------------|------------------|--------------|---------------|--------------|------------------------|--------------|--------------|--------------|
|                                        | No. Persons      | Employed (%) | No. Persons   | Employed (%) | No. Persons            | Employed (%) | Employed (%) | Employed (%) |
| Managers                               | 752              | 10           | 1,248         | 12           | 1,081                  | 17           | 11           | 13           |
| Professionals                          | 797              | 11           | 1,412         | 12           | 749                    | 11           | 14           | 23           |
| Technicians and trades workers         | 1495             | 20           | 2,142         | 19           | 1,112                  | 17           | 19           | 13           |
| Community and personal service workers | 584              | 8            | 969           | 9            | 492                    | 8            | 10           | 9            |
| Clerical and administrative workers    | 796              | 11           | 1,355         | 12           | 626                    | 10           | 13           | 15           |
| Sales workers                          | 586              | 8            | 804           | 7            | 448                    | 7            | 9            | 9            |
| Machinery operators and drivers        | 1306             | 18           | 2,161         | 19           | 865                    | 13           | 12           | 6            |
| Labourers                              | 963              | 13           | 1,096         | 10           | 1,037                  | 16           | 11           | 9            |
| Inadequately described / not stated    | 125              | 2            | 209           | 2            | 117                    | 1            | 2            | 2            |
| <b>Total</b>                           | <b>7,404</b>     | <b>100</b>   | <b>11,396</b> | <b>100</b>   | <b>6,527</b>           | <b>100</b>   | <b>100</b>   | <b>100</b>   |

Source: ABS, 2011a

Note: Count of employed persons aged 15 years and over

### 4.5.3 Qualifications

**Table 18** lists the level of post-school qualifications of people aged 15 years and over in the Local Area compared to the Hunter SA4 and NSW.

**Table 18** shows that the population of the Muswellbrook and Upper Hunter Shire LGAs are less qualified than the population of the Singleton LGA, Hunter SA4 and NSW. Less than 40% of the population aged over 15 years in the Muswellbrook and Upper Hunter Shire LGAs have a qualification compared to 42.7% in Singleton LGA, 41.1% in Hunter SA4 and 45.8% in NSW.

The dominant qualification in the Local Area and the Hunter SA4 was a certificate level qualification. Approximately 25% of the population in each of the LGAs of the Local Area, and the Hunter SA4 had a certificate level qualification in 2011, compared to 17.7% in NSW. The prevalence of certificate level qualifications across the Local Area reflects the dominance of the mining industry and the associated occupations such as '*machinery operators and drivers*' and '*technicians and trades workers*', both of which generally require certificate level qualifications.

**Table 18**  
**Post-School Qualifications, 2011**

| Location               | Category                      | Post-School Qualification |                                           |                 |                              |                   | People Aged 15 and Over |
|------------------------|-------------------------------|---------------------------|-------------------------------------------|-----------------|------------------------------|-------------------|-------------------------|
|                        |                               | Postgraduate Degree       | Graduate Diploma and Graduate Certificate | Bachelor Degree | Advanced Diploma and Diploma | Certificate Level |                         |
| Muswellbrook LGA       | No of people aged 15 and over | 97                        | 98                                        | 729             | 656                          | 2,994             | 12,188                  |
|                        | % of people aged 15 and over  | 0.8                       | 0.8                                       | 5.9             | 5.4                          | 24.5              |                         |
| Singleton LGA          | No of people aged 15 and over | 196                       | 147                                       | 1,346           | 1,142                        | 4,720             | 17,688                  |
|                        | % of people aged 15 and over  | 1.1                       | 0.8                                       | 7.6             | 6.5                          | 26.7              |                         |
| Upper Hunter Shire LGA | No of people aged 15 and over | 109                       | 83                                        | 790             | 627                          | 2,550             | 10,848                  |
|                        | % of people aged 15 and over  | 1.0                       | 0.8                                       | 7.3             | 5.8                          | 23.5              |                         |
| Hunter SA4             | % of people aged 15 and over  | 1.3                       | 0.9                                       | 7.2             | 6.8                          | 24.9              | 192,223                 |
| NSW                    | % of people aged 15 and over  | 4.3                       | 1.5                                       | 14.1            | 8.3                          | 17.7              | 5,585,147               |

Source: ABS, 2011a

## 4.6 HOUSING

This section briefly describes the housing and accommodation characteristics of the Local Area.

### 4.6.1 Private Dwelling Stock

#### *Dwelling Stock and Types*

**Table 19** shows the total number of occupied private dwellings by dwelling type in the LGAs of the Local Area in 2011. A comparison is also made to the Hunter SA4 and NSW. The majority of housing stock in the Local Area is detached housing (Muswellbrook LGA 87.5%, Singleton LGA 88.8% and Upper Hunter Shire LGA, 92.0%).

**Table 19**  
**Dwelling Type, Occupied Private Dwellings 2011 (%)<sup>1</sup>**

| Location               | Separate House | Semi-detached, Row or Terrace House, Townhouse | Flat, Unit or Apartment | Other Dwelling |
|------------------------|----------------|------------------------------------------------|-------------------------|----------------|
| Muswellbrook LGA       | 87.5           | 3.6                                            | 7.4                     | 1.1            |
| Singleton LGA          | 88.8           | 5.2                                            | 4.6                     | 1.5            |
| Upper Hunter Shire LGA | 92.0           | 2.0                                            | 3.8                     | 2.0            |
| Hunter SA4             | 87.8           | 6.7                                            | 4.3                     | 1.2            |
| NSW                    | 69.5           | 10.7                                           | 18.8                    | 0.86           |

Source: ABS, 2011a

Note:

<sup>1</sup> = % of total dwellings

#### **Occupancy Rate**

The 'occupancy rate' is a measure of the average number of people per dwelling (or an average household size) in any given geographic area.

**Table 20** shows the occupancy rate for the Muswellbrook, Singleton and Upper Hunter Shire LGAs and their component settlements compared to Hunter SA4 and NSW. Occupancy rates in Muswellbrook and Singleton UCL and Jerrys Plains SS increased significantly between 2006 and 2011. This is likely due to the demand for housing in the urban centres during this period and the corresponding shortage in supply.

There is evidence suggesting the housing market in the Hunter Valley was undersupplied for an extended period until the recent downturn, suggesting a long term pent-up demand potentially adding to the cost of housing in the region (NSW Minerals Council, 2014).

**Table 20**  
**Average Household Size (Occupancy Rate), 2006 and 2011**

| Location               | Average Household Size (Persons) |      |
|------------------------|----------------------------------|------|
|                        | 2006                             | 2011 |
| Muswellbrook LGA       | 2.6                              | 2.6  |
| - Muswellbrook UCL     | 2.6                              | 3.0  |
| - Denman UCL           | 2.5                              | 2.0  |
| Singleton LGA          | 2.8                              | 2.7  |
| - Singleton UCL        | 2.7                              | 3.0  |
| - Jerrys Plains SS     | 2.8                              | 3.0  |
| Upper Hunter Shire LGA | 2.4                              | 2.4  |
| - Scone UCL            | 2.4                              | 2.4  |
| Hunter SA4             | N.A                              | 2.6  |
| NSW                    | 2.6                              | 2.6  |

Source: ABS, 2011a

Note: N.A. Not Available

#### 4.6.2 Housing Tenure

**Table 21** outlines the tenure of occupied private dwellings in 2011 for the LGAs of the Local Area compared with the Hunter SA4 and NSW.

**Table 21**  
**Tenure Type of Occupied Private Dwellings, 2011**

| Category                                | Muswellbrook LGA |                | Singleton LGA |            | Upper Hunter Shire LGA |            | Hunter SA4 | NSW        |
|-----------------------------------------|------------------|----------------|---------------|------------|------------------------|------------|------------|------------|
|                                         | Dwellings        | % <sup>1</sup> | Dwellings     | %          | Dwellings              | %          | %          |            |
| Fully owned                             | 1,512            | 27             | 2,383         | 31         | 1,849                  | 35         | 34         | 33         |
| Being purchased                         | 1,855            | 34             | 3,082         | 40         | 1,618                  | 31         | 35         | 33         |
| Rented                                  | 1,975            | 36             | 2,117         | 27         | 1,554                  | 30         | 27         | 30         |
| Other tenure type                       | 36               | 1              | 42            | 1          | 62                     | 1          | 1          | 1          |
| Tenure type not stated                  | 155              | 3              | 133           | 2          | 162                    | 3          | 3          | 3          |
| <b>Total occupied private dwellings</b> | <b>5,533</b>     | <b>100</b>     | <b>7,757</b>  | <b>100</b> | <b>5,245</b>           | <b>100</b> | <b>100</b> | <b>100</b> |

Source: ABS, 2011a

Note: <sup>1</sup> = % of Total Occupied Private Dwellings



In 2011 the proportion of occupied private dwellings that were being rented in each of the LGAs of the Local Area varied considerably - 36% in the Muswellbrook LGA compared with 27% and 30% in the Singleton and Upper Hunter Shire LGAs, respectively.

Home ownership rates also vary across the LGAs of the Local Area. In 2011, the Muswellbrook LGA had the lowest proportion of occupied private dwellings that were owned or being purchased than the surrounding LGAs, the Hunter SA4 and NSW.

**Table 21** also shows that the Muswellbrook, Singleton and Upper Hunter Shire LGAs contained more than 18,000 dwellings in 2011.

#### 4.6.3 Housing Costs and Affordability

Housing market data drawn from the quarterly *Rent and Sales Reports* produced by the NSW Department of Housing is typically referenced to describe housing costs and affordability. This data shows median residential sale prices and rental costs for the preceding quarter for each rural NSW LGA, and shows changes in the last quarter and year.

##### *Housing Market Prices*

**Table 22** presents the median sale price of all dwellings for the three LGAs of the Local Area in June 2014. Due to the small number of properties sold in the Upper Hunter Shire LGA, median change is not quantifiable.

**Table 22**  
**Median Sale Prices - All Dwellings, June 2014**

| LGA                | Median (\$'000s) | Change in Median Qtly (%) | Change in Median Annual (%) |
|--------------------|------------------|---------------------------|-----------------------------|
| Muswellbrook       | 309              | -2.1                      | 0.3                         |
| Singleton          | 465              | 11.4                      | 11.7                        |
| Upper Hunter Shire | 260s             | n                         | n                           |

Source: Department of Family and Community Services Analysis and Research (DFCS), 2014

Notes: S - 30 or less sales lodged

n - not available due to small number

**Table 23** presents median sale price data for 'all dwellings' in the LGAs of the Local Area for the period 2010 to 2014. Median sale prices across the Local Area increased steadily between 2010 and 2013, parallel to the growth in the resource sector in NSW. Between 2010 and 2013, median sale prices in the Singleton LGA increased by 21% compared to 8% in the Muswellbrook LGA. Median sale prices for 'all dwellings' in the Upper Hunter Shire LGA increased by 10.3% between 2010 and 2013 before decreasing 18.8% in 2014.

Median sale prices in Muswellbrook LGA peaked in 2013 at \$310,000 before dropping slightly in 2014 to \$309,000. The drop in median sale price between 2013 and 2014 reflects a switch to more efficient coal production methods in the mining sector and a corresponding reduction in workforce demand across many areas of NSW.

**Table 23**  
**Median Sale Prices - All Dwellings, June Quarter 2010-2014**

| LGA                | Median (\$'000s) |      |      |      |      | Change (%) |           |
|--------------------|------------------|------|------|------|------|------------|-----------|
|                    | 2010             | 2011 | 2012 | 2013 | 2014 | 2010-2013  | 2013-2014 |
| Muswellbrook       | 286              | 298  | 303  | 310  | 309  | 8.4        | -0.3      |
| Singleton          | 384              | 372  | 429  | 430  | 465  | 21.1       | 8.1       |
| Upper Hunter Shire | 290              | 289  | 320  | 320  | 260s | 10.3       | -18.75    |

Source: DFCS 2010-2014

One resident of Muswellbrook recently made the following comment in relation to the housing market in Muswellbrook:

*“Three hundred houses are for sale in my town, three are in my street, and rental prices have collapsed on old weatherboard houses from A\$1,000 a week to A\$200”* (resident of Muswellbrook) (BBC, 2015)

The property market is slow, with properties in Muswellbrook and Singleton remaining on the market for a significant amount of time, unlike during the boom period when a property could sell in one or two days.

### **Rental Market and Costs**

**Table 24** presents the trends in median weekly rent payments for a one, two and three bedroom dwelling in each of the LGAs of the Local Area for the period 2010 to 2014. **Table 24** shows that the Singleton LGA has the highest median weekly rents of the LGAs of interest. Median weekly rent across all three LGAs peaked in 2012 at the height of the mining boom.

The number of rental properties and associated rental prices listed on *Realestate.com.au* for the period December 2013 to December 2014 are listed by LGA in **Table 25**.

**Table 24**  
**Median Weekly Rent - All Dwelling, September Quarter 2010-2014**

| LGA                           | Median Weekly Rent (\$) |       |       |       |                   |
|-------------------------------|-------------------------|-------|-------|-------|-------------------|
|                               | 2010                    | 2011  | 2012  | 2013  | 2014 <sup>1</sup> |
| <b>One Bedroom Dwelling</b>   |                         |       |       |       |                   |
| Muswellbrook                  | 137 s                   | 160 s | -     | 175 s | -                 |
| Singleton                     | 195 s                   | -     | -     | 190 s | 190 s             |
| Upper Hunter Shire            | 120 s                   | -     | -     | -     | -                 |
| <b>Two Bedroom Dwelling</b>   |                         |       |       |       |                   |
| Muswellbrook                  | 200 s                   | 240   | 300 s | 220   | 212               |
| Singleton                     | 253                     | 270   | 320   | 270   | 250               |
| Upper Hunter Shire            | 200                     | 220 s | 250 s | 240 s | 230 s             |
| <b>Three Bedroom Dwelling</b> |                         |       |       |       |                   |
| Muswellbrook                  | 295                     | 320   | 350   | 300   | 250               |
| Singleton                     | 330                     | 390   | 430   | 348   | 320               |
| Upper Hunter Shire            | 250                     | 280 s | 320   | 300   | 285               |

Source: DFCS 2010-2014

Notes: <sup>1</sup> December Quarter 2013 data, as no September Quarter Data available  
 s - 10 or less bonds lodged

**Table 25**  
**Summary of Rental Costs and Availability, December 2013 – December 2014**

| Location      | Units       | All Houses  | 3 Bedroom House | 4+ Bedroom House |
|---------------|-------------|-------------|-----------------|------------------|
| Muswellbrook  | 129 / \$180 | 951 / \$290 | 388 / \$258     | 399 / \$310      |
| Singleton     | 155 / \$235 | 549 / \$330 | 296 / \$310     | 166 / \$400      |
| Jerrys Plains | No Data     | No Data     | No Data         | No Data          |

Source: RealEstate.com, 2014

Note: each cell shows: the number of properties listed for rent / the median rental price (per week)

**Table 25** shows that for the Muswellbrook LGA:

- Over a third of houses available to rent were for a 'typical' house of three bedrooms, where the median rental price (\$258) was less than that for 'all houses' (\$290);

- Almost half of the houses on the rental market were for a 'typical' larger house of four plus bedrooms, where the median rental price (\$310) was more than that for 'all houses' (\$290).

**Table 25** shows that for the Singleton LGA:

- More than half of the houses available for rent were for a 'typical' house of three bedrooms, where the median rental price (\$310) was greater than that for Muswellbrook, and was less than that for 'all houses' in Singleton (\$330); and
- One quarter of houses available for rent were for a 'typical' larger house of four plus bedrooms, where the median rental price (\$400) was more than the rent for a similar house in Muswellbrook and more than that for 'all houses' (\$330).

### ***Representative Land Values***

NSW Land and Property Information (LPI) publishes *Representative Land Values* to assist in understanding typical land values and market trends over time in LGAs across the state.

**Table 26** shows the representative land value of a standard serviced housing allotment in Muswellbrook LGA between 1996 and 2013. Data for the Singleton and Upper Hunter Shire LGAs was not published. The values are indexed to the 1996 value and indicate the market trend for that property type.

**Table 26** shows that Muswellbrook LGA experienced an increase in land value of 150% from 1996 to 2013, however, increases in the last few years have been minimal. Data published for many other inland NSW cities and towns shows a similar neutral growth for this period.

**Table 26**  
**Representative Land Value for Standard Serviced Allotment – Muswellbrook**

| LGA          | Lot Size (metres) | Year (\$) |        |        |        |        |        | Change (%) |       |
|--------------|-------------------|-----------|--------|--------|--------|--------|--------|------------|-------|
|              |                   | 1996      | 2006   | 2010   | 2011   | 2012   | 2013   | 12-13      | 96-13 |
| Muswellbrook | 15 x 40           | 39,000    | 81,000 | 85,700 | 85,700 | 88,400 | 97,400 | 10         | 150   |

Source: LPI, 2014

Note: The selected allotment is considered to be representative for that locality and will indicate the market trend. Market trends are identified in the table and not by the values of specific properties at a given date.

## Housing Stress

Housing (either mortgage or rental) stress is indicated where a household spends more than 30% of its income on either a mortgage or rent. The findings of the 2011 ABS Census provide an indication of housing and rental stress in the Local Area. The findings of the 2011 ABS Census indicate that:

- 8.5% (139) of households with a mortgage in the Upper Hunter Shire LGA experienced mortgage stress compared to 6.2% of households in the Muswellbrook LGA, 5.4% in the Singleton LGA and 11.1% in NSW.
- 20.9% (440) of households in rented private dwellings in the Muswellbrook LGA experienced rental stress compared to 17.1 % in the Upper Hunter Shire LGA, 15.8% in the Singleton LGA and 26.3% in NSW.
- The Singleton LGA had the lowest level of both rental and mortgage stress of the three LGAs of interest.
- All LGAs had lower levels of rental and mortgage stress than NSW.

### 4.6.4 Temporary Accommodation

**Table 27** lists the number of accommodation establishments of over 15 rooms in the Muswellbrook, Singleton and Scone Statistical Area Level 2 (SA2). During the 2010-2012 mining boom, all short-term accommodation providers across the Local Area experienced significant demand (NSW Minerals Council, 2014a). Anecdotal reports from this period suggest that all the accommodation providers in Singleton and Muswellbrook were severely stretched, particularly mid-week. Smaller accommodation providers (set up for the tourist market) were also always fielding enquires to house the mining workforce.

*“...at the height of the coal development we had waiting lists for accommodation, people were living in tents and on camping sites” (Real estate agent, Muswellbrook (ABC, 2015)).*

Demand for short term accommodation has reduced significantly in parallel with the slow-down in the mining industry (NSW Minerals Council, 2014b). This is evident in the quarterly occupancy rates shown in **Table 27**.

**Table 27**  
**Hotels, Motels and Serviced Apartments Statistics – March Quarter, 2014**

| SA2          | No. of Establishments* | No. of Rooms | No. Of Beds | Quarterly Occupancy Rate % | Guest Nights Occupied |
|--------------|------------------------|--------------|-------------|----------------------------|-----------------------|
| Muswellbrook | 7                      | 232          | 801         | 41.7                       | 11,710                |
| Singleton    | 8                      | 315          | 747         | 46.3                       | 17,756                |
| Scone        | 5                      | 122          | 348         | 65.9                       | 9,721                 |

Source: ABS, 2013

Note: \* Establishments included are hotels and resorts with 15 or more rooms, motels, private hotels and guest houses with 15 or more rooms and serviced apartments with 15 or more units.

**Table 27** only lists certain tourist accommodation establishments with 15 rooms and over. There are also a number of other smaller establishments in the Muswellbrook and Singleton LGAs that provide accommodation for the mining workforce.

In the Muswellbrook LGA there are:

- Two caravan parks, eight motels, five hotels and two bed and breakfast establishments in the Muswellbrook urban area;
- Two motels, two hotels and a caravan park in Denman;
- A caravan park in Sandy Hollow; and
- Approximately six other cottages throughout the LGA.

In the township of Singleton there are:

- Seven motels;
- Three caravan parks;
- Nine hotels offering accommodation; and
- One bed and breakfast and one cottage (Singleton Visitor Information Centre, 2012).

There are also a substantial number of self-contained cottages and bed and breakfast accommodation providers in the rural parts of the Singleton LGA, although these are mainly situated in the Broke Fordwich area, and the northern (Hermitage Road) part of the 'Hunter Vineyard' areas between Singleton and Cessnock.

#### 4.6.5 Recent Housing Growth

**Table 28** shows the number and value of residential building approvals granted in LGAs of the Local Area from 2006 to 2014.

**Table 28**  
**Selected Residential Building Approvals, 2006 – 2014**

| Building Approvals - Year Ending 30 June |     | 2006 | 2008 | 2010 | 2012 | 2014 |
|------------------------------------------|-----|------|------|------|------|------|
| <b>Muswellbrook LGA</b>                  |     |      |      |      |      |      |
| Private sector houses                    | no. | 76   | 123  | 55   | 141  | Na.  |
| Total dwelling units                     | no. | 119  | 161  | 163  | 150  | 134  |
| Value of new residential building        | \$m | 18.4 | 32.4 | 34.6 | 43.2 | 29.9 |
| <b>Singleton LGA</b>                     |     |      |      |      |      |      |
| Private sector houses                    | no. | 133  | 73   | 51   | 86   | Na.  |
| Total dwelling units                     | no. | 152  | 120  | 96   | 162  | 109  |
| Value of new residential building        | \$m | 29.9 | 23.2 | 21.2 | 43.2 | 17.8 |
| <b>Upper Hunter Shire LGA</b>            |     |      |      |      |      |      |
| Private sector houses                    | no. | 53   | 59   | 43   | 66   | Na.  |
| Total dwelling units                     | no. | 64   | 77   | 68   | 127  | 64   |
| Value of new residential building        | \$m | 12.4 | 15.5 | 15.5 | 33.9 | 17.7 |

Source: ABS 2010, 2011b, 2014a, 2014b

Note: Na. Not available

**Table 28** shows the following differences in the housing construction sector in each of the LGAs of the Local Area:

- In 2012 both Muswellbrook and Singleton Councils approved new residential buildings to the value of approximately \$43 Million, compared to approximately \$33 Million approved by the Upper Hunter Shire Council.
- From 2006 to 2014, the Muswellbrook, Singleton and the Upper Hunter Shire LGAs experienced a fluctuation in the number of dwellings approved;

- The number of dwelling units approved peaked at 163 dwellings in 2010 in the Muswellbrook LGA, 162 in the Singleton LGA in 2012 and 127 in the Upper Hunter Shire LGA in 2012. Dwelling unit approvals in Muswellbrook remained significantly high between 2008 and 2012.
- The number of dwelling units and the value of new residential buildings approved in all three LGAs reduced significantly in 2014 reflecting the reduction in housing demand across the LGAs.

#### 4.7 COMMUNITY SERVICES AND FACILITIES

This section provides a brief overview of the services available in the Muswellbrook and Singleton LGAs as the nearest LGAs to the Project. Both LGAs are serviced with health and education facilities, a range of recreation facilities and retail and commercial enterprises. Social capital in the Local Area is high, demonstrated through the proliferation of community groups and organisations, sporting clubs, industry bodies and support networks. A summary of community facilities and services provided in the Muswellbrook and Singleton LGAs is provided in **Table 29**.

During the mining boom many community services and organisations such as schools and recreation clubs across the Local Area benefited from the social investment initiatives of the surrounding mining industry. With the slow-down in the mining sector these services and organisations are now leaning on local clubs such as Muswellbrook RSL to provide financial support.

*"We've had a lot of community groups approach us about donations, where the coal mining industry was supporting them now we've come to the party, so we're putting more money into the local non-profit organisations."*  
(Muswellbrook RSL General Manager) (ABC, 2015)).

Both Muswellbrook and Singleton LGAs have recently benefited from funding for key infrastructure through the NSW Resources for Regions (R4R) program.

R4R aims to support regional and rural NSW communities affected by mining by addressing infrastructure constraints. The R4R program is funded by Restart NSW, the NSW Government's fund for infrastructure to support economic growth and productivity. R4R was introduced in 2012 with a single round of funding provided in 2012-2013. Two rounds of funding were offered in 2013-2014. The following funding was granted to the Singleton and Muswellbrook LGAs in the 2014-2015 funding round:



- \$4.2 million in road safety upgrades in Muswellbrook Shire (including at several locations on Bylong Valley Way, Bureen Road, Wybong Road and Hebden Road); and
- \$17 million for road upgrades in the Singleton LGA (including Hermitage and Broke Roads).

**Table 29**  
**Summary of Community Services and Facilities**

| Service                       | Muswellbrook (Urban Area) | Singleton (Urban Area)                     | Scone (Urban Area)   |
|-------------------------------|---------------------------|--------------------------------------------|----------------------|
| <b>Emergency Services</b>     |                           |                                            |                      |
| Police                        | Yes                       | Yes                                        | Yes                  |
| Fire and Rescue               | Yes                       | Yes                                        | Yes                  |
| Rural Fire Service            | Yes                       | Yes                                        | Yes                  |
| State Emergency Service       | Yes                       | Yes                                        | Yes                  |
| Ambulance                     | Yes                       | Yes                                        | Yes                  |
| <b>Health / Medical</b>       |                           |                                            |                      |
| Hospital                      | Muswellbrook Hospital     | Singleton District Hospital                | Hospital             |
| Community Health Centre       | Yes                       | Yes                                        | Yes                  |
| Child Health                  | Yes                       | Yes                                        | Yes                  |
| General Practitioners         | Yes - two practices       | Yes – five practices                       | Yes – five practices |
| Allied health professionals   | Yes - various             | Yes - various                              | Yes - various        |
| Dentist                       | Yes                       | Yes                                        | Yes                  |
| Aged care facilities          | Yes                       | Yes                                        | Yes                  |
| <b>Education and Training</b> |                           |                                            |                      |
| Pre-school                    | Yes (one)                 | Yes (two)                                  | Yes (one)            |
| Primary                       | Yes (four)                | Yes (five)                                 | Yes (three)          |
| Secondary                     | Yes (one)                 | Yes (three)                                | Yes (one)            |
| Tertiary                      | Yes (TAFE)                | Yes (TAFE and Singleton Community College) | Yes (TAFE)           |
| <b>Children's Services</b>    |                           |                                            |                      |
| Child care centres            | Yes (six)                 | Yes (five)                                 | Yes (three)          |
| Playgroups                    | Yes                       | Yes                                        | Yes                  |
| Before and After School Care  | Yes                       | Yes                                        | Yes                  |

| Service                                          | Muswellbrook (Urban Area)         | Singleton (Urban Area) | Scone (Urban Area) |
|--------------------------------------------------|-----------------------------------|------------------------|--------------------|
| Youth services                                   | Yes                               | Yes                    | Yes                |
| <b>Cultural</b>                                  |                                   |                        |                    |
| Library                                          | Yes                               | Yes                    | Yes                |
| Churches                                         | Yes                               | Yes                    | Yes                |
| Art Gallery / Cultural or Performing Arts Centre | Muswellbrook Regional Arts Centre | No                     | No                 |
| Organisations                                    | Yes                               | Yes                    | Yes                |
| Cinema                                           | No                                | Yes                    | No                 |
| <b>Government Offices</b>                        |                                   |                        |                    |
| Local                                            | Yes                               | Yes                    | Yes                |
| State                                            | Limited                           | Limited                | Limited            |
| <b>Access</b>                                    |                                   |                        |                    |
| Road                                             | Yes                               | Yes                    | Yes                |
| Rail                                             | Yes                               | Yes                    | Yes                |
| Air                                              | No                                | No                     | Yes                |
| <b>Public Transport</b>                          |                                   |                        |                    |
| Bus                                              | Yes                               | Yes                    | Yes                |
| Taxi                                             | Yes                               | Yes                    | Yes                |
| <b>Recreation and Sport</b>                      |                                   |                        |                    |
| Organisations                                    | Yes                               | Yes                    | Yes                |
| Facilities                                       | Yes                               | Yes                    | Yes                |
| <b>Community Organisations</b>                   | Yes                               | Yes                    | Yes                |

#### 4.8 CUMULATIVE MINING DEVELOPMENT

The Hunter Valley is one of the primary coalfields in NSW, along with the Gunnedah Basin, Newcastle, Southern NSW and Western NSW coalfields. In NSW, there are 56 coal mines (NSW Minerals Council 2014b) and seven major development proposals (DP&E, 2014).

Existing and proposed projects in the Hunter Valley, including modifications, with publicly available information is shown in **Table 30**. This indicates that 11,017 approved employees could potentially be associated with the existing mining industry in the Local Area.

**Table 30**  
**Existing and Proposed Mining Projects in the Hunter Valley**

| Project                       | Status     | Approval Date | Expiry Date | Proponent                       | Maximum Workforce | Current Workforce | ROM Coal Production (Mtpa) | Distance to Project (km) | Source                                                                                                                                         |
|-------------------------------|------------|---------------|-------------|---------------------------------|-------------------|-------------------|----------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Ashton                        | Approved   | 11/10/2002    | 25/02/2024  | White Mining Ltd                | 386 (combined)    | 386               | 5.2                        | 15                       | Ashton Coal, 2010; Minister for Planning, 2002a; Wells Environmental Services, 2009, 2011, 2012                                                |
| Ashton South East Open Cut    | Approved   | 4/01/2012     | 31/12/2025  | Ashton Coal Operations Limited  | -                 | -                 | 3.6                        | 15                       | Department of Planning, 2009; Wells Environmental Services, 2009; ACOL, 2011                                                                   |
| Bengalla                      | Approved   | 07/08/1995    | 27/06/2017  | Bengalla Mining Company Pty Ltd | 400               | 397               | 10.7                       | 9                        | Minister for Urban Affairs and Planning, 1995a; Hansen Consulting, 2006 Hansen Bailey, 2007, Hansen Bailey 2011, Hansen Bailey 2014; BMC, 2014 |
| Continuation of Bengalla Mine | PAC Review | N/A           | 2038        | Bengalla Mining Company Pty Ltd | 900               | -                 | 15.0                       | 9                        | Hansen Bailey, 2012                                                                                                                            |

| Project                              | Status                          | Approval Date | Expiry Date | Proponent                            | Maximum Workforce | Current Workforce | ROM Coal Production (Mtpa) | Distance to Project (km) | Source                                                                                             |
|--------------------------------------|---------------------------------|---------------|-------------|--------------------------------------|-------------------|-------------------|----------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
| Bulga Open Cut                       | Approved                        | 1/12/2014     | 31/12/2035  | Bulga Coal Management Pty Ltd        | 660               | 660               | 12.2                       | 30                       | Minister for Planning, 2014; Umwelt, 2013                                                          |
| Bulga Underground                    | Approved                        | 23/02/2004    | 22/02/2031  | Bulga Coal Management Pty Ltd        | 300               | 300               | 14.0                       | 29                       | Minister for Infrastructure and Planning, 2004a; Umwelt, 2013                                      |
| Integra Mining Complex (Open Cut)    | Approved (Care and Maintenance) | 26/11/2010    | 31/12/2022  | Integra Coal Operations Pty Ltd      | 250               | -                 | 6.0                        | 21                       | Minister for Planning, 2010a; URS, 2009                                                            |
| Integra Mining Complex (Underground) | Approved (Care and Maintenance) | 26/11/2010    | 31/12/2035  | Integra Coal Operations Pty Ltd      | 270               | -                 | 4.5                        | 15                       | Minister for Planning, 2010a; EMGA, 2011                                                           |
| Liddell                              | Approved                        | 20/12/2002    | 31/12/2028  | Liddell Coal Operations Pty Ltd      | 550               | 460               | 8.0                        | 6                        | Minister for Planning, 2002b; SLR, 2013; Glencore, 2014; Clibborn, 2014                            |
| Mangoola                             | Approved                        | 07/06/2007    | 20/11/2029  | Mangoola Coal Operations Pty Limited | 540               | 300               | 13.5                       | 10                       | Minister for Planning, 2007; Umwelt, 2006; Umwelt, 2013; EMM, 2014a                                |
| Mt Arthur                            | Approved                        | 24/09/2010    | 30/06/2026  | Hunter Valley Energy Coal Pty Ltd    | 2,600             | 2,150             | 36.0                       | Adjacent                 | Minister for Planning, 2010b; Hansen Bailey, 2009a; Resource Strategies, 2013; BHP Billiton, 2014. |

| Project                        | Status         | Approval Date | Expiry Date | Proponent                          | Maximum Workforce | Current Workforce | ROM Coal Production (Mtpa) | Distance to Project (km) | Source                                                                                |
|--------------------------------|----------------|---------------|-------------|------------------------------------|-------------------|-------------------|----------------------------|--------------------------|---------------------------------------------------------------------------------------|
| Mt Owen                        | Approved       | 08/12/2004    | 08/12/2025  | Xstrata Mt Owen Pty Ltd            | 404               | 437               | 10.0                       | 15                       | Minister for Infrastructure and Planning, 2004b; Umwelt 2003; Umwelt 2010a.           |
| Mt Owen Continued Operations   | EIS Exhibition | N/A           | N/A         | Mount Owen Pty Limited             | 920**             | -                 | 14.0                       | 15                       | Minister for Planning and Environment, 2013; Umwelt, 2015                             |
| Ravensworth East               | Approved       | 02/03/2000    | 23/11/2021  | Xstrata Glendell Pty Ltd           | 184 (combined)    | 275 (combined)    | 4.0                        | 13                       | Minister for Urban Affairs and Planning, 2000; Hansen Bailey, 2010                    |
| Glendell                       | Approved       | 25/02/2008    | 31/06/2024  | Xstrata Glendell Pty Ltd           |                   |                   | 4.5                        | 13                       | Minister for Planning, 2008; Umwelt, 2007                                             |
| Hunter Valley Operations North | Approved       | 12/06/2004    | 12/06/2025  | Coal and Allied Operations Pty Ltd |                   |                   | 22.0                       | 5                        | Coal and Allied, 2010; EMM, 2013; RTCA, 2014                                          |
| Hunter Valley Operations South | Approved       | 24/03/2009    | 24/03/2030  | Coal and Allied Operations Pty Ltd | 1721 (combined)   | 894               | 16.0                       | 12                       | Minister for Planning, 2009; Coal and Allied, 2010; Coal and Allied, 2012; RTCA, 2014 |
| Mount Pleasant Project         | Approved*      | 22/12/1999    | 22/12/2020  | Coal and Allied Operations Pty Ltd | 380               | -                 | 10.5                       | 10                       | Minister for Planning, 2011; ERM, 1998                                                |

| Project                       | Status     | Approval Date | Expiry Date | Proponent                        | Maximum Workforce | Current Workforce | ROM Coal Production (Mtpa) | Distance to Project (km) | Source                                                                                                    |
|-------------------------------|------------|---------------|-------------|----------------------------------|-------------------|-------------------|----------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------|
| Mount Thorley                 | Approved   | 22/06/1996    | 22/06/2017  | Mount Thorley Operations Pty Ltd | 1,217 (combined)  | 927 (combined)    | 28.0 (combined)            | 26                       | Minister for Planning and Infrastructure, 2012; Minister for Urban Affairs and Planning, 1996; RTCA, 2014 |
| Warkworth                     | Approved   | 03/02/2012    | 31/03/2033  | Warkworth Mining Ltd             |                   |                   |                            | 22                       | Minister for Planning and Infrastructure, 2012; RTCA, 2014                                                |
| Mount Thorley Operations 2014 | PAC Review | N/A           | N/A         | Mount Thorley Operations Pty Ltd | 1,300 (combined)  | -                 | 10                         | 26                       | EMM, 2014b                                                                                                |
| Warkworth Continuation 2014   | PAC Review | N/A           | N/A         | Warkworth Mining Ltd             | 1,300 (combined)  | -                 | 18                         | 22                       | EMM, 2014c                                                                                                |
| Muswellbrook Coal             | Approved   | 01/09/2003    | 01/09/2015  | Muswellbrook Coal Company Ltd    | 108               | 91                | 2.0 (product)              | 8                        | MSC, 2003; Hansen Bailey, 2009b; Idemitsu, 2014                                                           |
| Ravensworth Operations        | Approved   | 11/02/2011    | 31/12/2039  | Ravensworth Operations Pty Ltd   | 550               | 434               | 21.0                       | 6                        | Minister for Planning, 2011b; Umwelt, 2010b; Hansen Bailey 2014; Glencore, 2014                           |
| Rix's Creek                   | Approved   | 19/10/1995    | 23/06/2019  | Bloomfield Collieries Pty Ltd    | 97                | 97                | 15.0 (bcm total material)  | 21                       | Minister for Urban Affairs and Planning, 1995b; DIPNR, 2004                                               |

| Project                                    | Status          | Approval Date | Expiry Date | Proponent           | Maximum Workforce | Current Workforce | ROM Coal Production (Mtpa) | Distance to Project (km) | Source                                                                   |
|--------------------------------------------|-----------------|---------------|-------------|---------------------|-------------------|-------------------|----------------------------|--------------------------|--------------------------------------------------------------------------|
| Rix's Creek Extension Project              | DGR's Issued    | N/A           | N/A         | Rix's Creek Pty Ltd | 130               |                   | 4.5                        | 21                       | Minister for Planning and Environment, 2013; AECOM, 2013                 |
| Wambo                                      | Approved        | 04/02/2004    | 04/02/2025  | Wambo Coal Pty Ltd  | 842               | 871               | 14.7                       | 14                       | Minister for Infrastructure and Planning, 2004c; Wambo, 2011, WCPL, 2014 |
| Wambo Mine Southern Longwall Modifications | DGRs Issued     | N/A           | N/A         | Wambo Coal Pty Ltd  | 842               | -                 | 14.7                       | 14                       | Minister for Planning and Environment, 2012; Resource Strategies, 2012   |
| Wambo Mine Additional Longwall 10A         | DP&E Assessment | N/A           | N/A         | Wambo Coal Pty Ltd  | 842               | -                 | 14.7                       | 14                       | Resource Strategies, 2014                                                |

Note: Brown = Approved, Orange = Modification or Proposed Project

\* Mount Pleasant Project has not yet commenced construction or operations. As a result, there is current no workforce at Mount Pleasant.

\*\* Maximum workforce proposed for the consolidated Mt Owen Complex

**Table 31** demonstrates the anticipated timing of each mine with reference to surrounding developments. It is anticipated that the Project will occur simultaneously with existing short-term and long-term mining operations and proposed mining projects (conservatively assuming approval is granted).

**Table 31**  
**Proposed Timing of Mining Projects in the Hunter Valley**

| Mine / Project                           | N.A.      | 1     | 3     | 5     | 10    | 15    | 16    |
|------------------------------------------|-----------|-------|-------|-------|-------|-------|-------|
|                                          | 2015      | 2016  | 2018  | 2020  | 2025  | 2030  | 2031  |
|                                          | Workforce |       |       |       |       |       |       |
| Drayton Mine / Drayton South             | 450       | 450   | 500   | 500   | 500   | 500   | 500   |
| Ashton                                   | 386       | 386   | 386   | 386   |       |       |       |
| Bengalla / Continuation of Bengalla Mine | 400       | 400   | 400   | 900   | 900   | 900   | 900   |
| Bulga Coal Optimisation Project          | 660       | 660   | 660   | 660   | 660   | 660   | 660   |
| Bulga Underground                        | 300       | 300   | 300   | 300   | 300   | 300   |       |
| Integra Mining Complex (Open Cut)*       | 250       | 250   | 250   | 250   |       |       |       |
| Integra Mining Complex (Underground)*    | 270       | 270   | 270   | 270   | 270   | 270   | 270   |
| Liddell                                  | 550       | 550   | 550   | 550   | 550   | 550   |       |
| Mangoola                                 | 240       | 540   | 540   | 540   | 540   | 540   | 540   |
| Mt Arthur                                | 2,600     | 2,600 | 2,600 | 2,600 | 2,600 |       |       |
| Mt Owen                                  | 404       | 404   | 404   | 404   | 404   | 660   | 660   |
| Ravensworth East / Glendell              | 184       | 184   | 184   | 184   | 184   | 260   | 260   |
| Hunter Valley Operations North / South   | 1,721     | 1,721 | 1,721 | 1,721 | 1,721 | 1,721 |       |
| Mount Thorley / Warkworth                | 1,217     | 1,217 | 1,300 | 1,300 | 1,300 | 1,300 | 1,300 |
| Muswellbrook Coal                        | 108       | 108   |       |       |       |       |       |
| Ravensworth Operations                   | 550       | 550   | 550   | 550   | 550   | 550   | 550   |
| Rix's Creek                              | 97        | 97    | 97    | 97    | 97    | 97    | 97    |
| Wambo                                    | 842       | 842   | 842   | 842   | 842   |       |       |

*Note: Brown = Approved, Orange = Modification or Proposed Project, Blue = the Project.*

It is important to note that the workforce numbers provided in **Table 30** and **Table 31** do not reflect the actual employment numbers at each mine site. This point is significant, as the slow-down in the mining industry, combined with the push for improved productivity and reduced operational expenditure, has resulted in the downsizing of numerous mine workforces across the Hunter Valley. The reduction in the number of people employed in mining in the Hunter Valley has resulted in flow-on effects on local and regional populations, labour market dynamics, housing affordability, demand for key services and facilities and social investment by the mining sector.



Although current workforce numbers in the Hunter Valley may increase as coal prices firm in the future and new projects, including the Mount Pleasant Project, Continuation of Bengalla Mine and the Mount Owen Continued Operations Project take effect, this increase in workforce, if and when it occurs, must be considered within the context of the significant reduction in mine workforce that has recently occurred across the Hunter Valley. The significant cumulative impacts that affected the Hunter Valley, and in particular Muswellbrook and Singleton LGAs, up until 2013 are no longer being experienced, as discussed above.

## 5 POTENTIAL SOCIAL IMPACTS AND MANAGEMENT

### 5.1 INTRODUCTION

This section discusses the predicted socio-economic impacts associated with the Project, and presents the key actions to be employed by Anglo American to mitigate the socio-economic impacts.

### 5.2 PREDICTED IMPACTS

#### 5.2.1 Direct and Indirect Impacts

The potential negative socio-economic impacts of the Project are all predicted to be minor. Population growth is the single most critical factor in the manifestation of almost all social impacts and a key driver of social change. The Project does not involve any additional workforce for either the construction or operation phases, and hence there is no potential for direct population growth in the Local Area as a result of the project. There may be a small but minor increase in the population of the Local Area due to the indirect workforce. The Project is critical for population sustainability in the Local Area. Approximately 380 (76%) existing employees and their families currently reside within the Local Area (**Table 4**).

The accommodation strategy for the operations phase of the Project assumes that all employees currently residing in the Local Area will continue to be located permanently there; hence there will be no direct increase in demand for housing or short term accommodation in the Local Area. Any minor increase in the population due to indirect population growth associated with the Project may generate some demand for housing or short-term accommodation, however, as a consequence of the very material economic down turn being experienced in the Local Area at the moment this is not anticipated to be noticeable. The direct Project related demand for housing and motel accommodation will not impact the servicing capacity of the existing water and sewer infrastructure in the Local Area.

As the Project will continue to utilise the existing operations workforce of 500 FTE persons from Drayton Mine, it is considered unlikely that there will be any strain on the local labour pool, including the skilled labour pool.

Any potential population increase in the Local Area attributable to the Project is anticipated to be minor and will unlikely to place additional strain on community services and facilities in the Local Area.

### 5.2.2 Cumulative Impacts

As discussed in **Section 4.8**, there are a large number of existing and proposed mining and gas developments at various stages of the planning process in the Local Area. As a result, there is potential for substantial cumulative social impacts. However, due to the current material down turn in the coal mining industry any such impact is not anticipated in the foreseeable future.

As discussed in **Section 5.2.1**, the Project is not anticipated to result in any noticeable increase in population of the Local Area as the maximum existing number of employees at the Drayton Mine operations will be maintained for the Project. The cumulative impacts of mining on housing and accommodation, and demand for community facilities and services in the Local Area, have reduced significantly following the down turn in the coal mining industry. The Project is therefore not predicted to have any cumulative impact which may affect housing availability and affordability and/or accessibility to community facilities and services in the Local Area in the future. Services and facilities in the Local Area are considered sufficient to support the Project. There is, however, likely to be a strain on community facilities and services in the future if mines currently placed on care and maintenance recommence operations and other proposed mining projects proceed.

## 5.3 MITIGATION AND MANAGEMENT

### 5.3.1 Labour Pool and Skills

To ensure the timely replacement of staff as required for the Project workforce, and to protect long term workforce retention in light of competition from existing and proposed mines, Anglo American will implement labour force recruitment strategies prior to approval of other major coal mining developments in the Local Area. Anglo American will continue their existing local hire strategy, a preferred option for ongoing workforce recruitment.

As part of the local hire strategy, efforts will be made in the recruitment and training of women and local Aboriginal people by the way of advertised targeted campaigns. Priority will also be given to employing from the current pool of skilled unemployed miners in the Local Area.

### 5.3.2 Voluntary Planning Agreement

Anglo American has made an offer to enter into a Voluntary Planning Agreement (VPA) with MSC to provide in kind and monetary contributions to ensure the potential social effects of the Project are mitigated.

Discussions are progressing with MSC to reach an agreement as to the terms of the VPA. The offer that has been made to MSC is detailed in **Appendix A**, and includes the following:

- Financial contribution towards the cost of the Thomas Mitchell Drive upgrade as advised by the DP&E;
- An annual contribution of \$50,000 to MSC to assist in funding road maintenance requirements in the Muswellbrook LGA;
- An annual payment to the MSC of \$290,000 toward a community fund (to be established). The community fund will be designed to provide economic, social (health and education) and environmental benefit for the community in the Muswellbrook LGA;
- An annual contribution of \$15,000 per annum to assist in funding environmental contributions and initiatives of MSC; and
- A commitment for Anglo American to use its reasonable endeavors to engage three apprentices in each year of operation sourced from residents within the Muswellbrook LGA. This equates to approximately 12 apprentices on site assuming a four year apprenticeship.

## 6 CONCLUSION

The SIA has been informed by a thorough examination of qualitative and quantitative data. The Project will be located in a Local Area that has been significantly impacted by existing mining activities, and as such represents a continuation of an established land use and industry sector. The predicted negative impacts of the Project are considered minor due primarily to the fact there is no additional workforce required for the Project and therefore no direct population increases in the Local Area.

The economy of the Upper Hunter Region is now experiencing the full socio-economic impact of the slow-down in the mining industry (Hunter Research Foundation (HRF), 2014). An analysis of the key indicators of employment and unemployment, labour force size, household spend, house prices and rent costs highlight the significant changes that have occurred in the Upper Hunter Region following the slow-down in the mining industry.

Cumulative impacts affecting the Upper Hunter Region, and in particular the Muswellbrook and Singleton LGAs, have reduced significantly with the slow-down in the mining industry. Cumulative impacts to do with housing demand and supply, delivery of key community services such as health and education, and labour force demand are no longer being experienced in the Local Area. Key concerns within the Local Area now relate to developing and retaining the skilled labour force, stabilising the local housing market, diversifying the economy and generating employment opportunities. These issues are a direct result of the down-turn in the mining industry.

The Project specific impacts are largely positive, and relate to the strengthening of the local and regional economies through:

- Continuity of employment;
- Continuity in local and regional supply chains; and
- Continuity of local and state government revenues.

\*

\*

\*

For

**HANSEN BAILEY**

A handwritten signature in cursive script, appearing to read "Bronwyn Pressland".

Bronwyn Pressland  
*Principal Social Planner*

A handwritten signature in cursive script, appearing to read "James Bailey".

James Bailey  
*Director*

## 7 REFERENCES

- AECOM (2013) *Preliminary Environmental Assessment, Rix's Creek Continuation of Mining Project*.
- ACOL (2011) *Annual Environmental Management Report 2010/11*.
- ACOL (2012) *Annual Environmental Management Report 2011/12*.
- ACOL (2014) *Annual Environmental Management Report 2013*.
- Ashton Coal Operations Pty Limited (2010) *Annual Environmental Management Report 2009/2010*.
- Australian Bureau of Statistics (2008) *Population Estimates by Age and Sex, Australia by Geographical Classification (Cat. No. 3235.0)*.
- Australian Bureau of Statistics (2010) *National Regional Profiles 2005-2009 (Cat. No. 1379.0.55.001)*.
- Australian Bureau of Statistics (2011a) *Census: Community Profile Series: Basic Community Profiles*.
- Australian Bureau of Statistics (2011b) *National Regional Profiles 2006-2010*.
- Australian Bureau of Statistics (2013) *Tourist Accommodation Small Area Data New South Wales 2013-14, December 2014*.
- Australian Bureau of Statistics (2014a) *Building Approvals, Australia, July 2014*.
- Australian Bureau of Statistics (2014b) *Building Approvals, Australia, December 2014*.
- ABC (2015) *Re-positioning Muswellbrook after the coal downturn* 28 April 2014 at <http://www.abc.net.au/news/2014-04-28/embargo-boom-bust-muswellbrook/5355962> accessed 3 March, 2015.
- BBC (2014) *From boom to bust in Australia's mining towns*. Julian Lorkin 4 January, 2015 at <http://www.bbc.com/news/world-australia-30584123> accessed 3 March, 2015.
- BHP Billiton (2014) *Mt Arthur Coal Annual Environmental Management Report FY14*.
- Bengalla Mining Company (2014) *Annual Review (Annual Environmental Management Report) January - December 2013*.
- Clibborn Environmental Consulting (2014) *Liddell Coal Annual Environmental Management Report*.
- Coal and Allied (2010) *Hunter Valley Operations Annual Environmental Management Report 2010*.

Commonwealth Bank (2015) *Rental yields plummet on mining town properties*, 30 October 2014 at <https://www.mywealth.commbank.com.au/property/rental-yields-plummet-on-mining-town-properties-news20141029> accessed 3 March 2015.

Hunter Valley Operations Coal and Allied (2012) *Hunter Valley South Project Approval (06\_0261) Modification*.

Department of Employment (2014) *Small Area Labour Markets Australia – September Quarter 2014*.

Department of Infrastructure, Planning and Natural Resources (DIPNR), (2004) *Rix's Creek Coal Mine Proposed Modification Assessment Report*.

Department of Planning and Infrastructure, (2012) *Upper Hunter Strategic Regional Land Use Plan*, September 2012.

Department of Planning and Environment, NSW (2014) *2014 NSW Population Projections Data*.

Department of Planning (2009) *Ashton South East Open Cut Ashton Open Cut, Director-General's Requirements*.

Department of Primary Industries NSW (2009) *2009 New South Wales Coal Industry Profile*.

Department of Family and Community Services Analysis and Research, (2014) *Rent and Sales Report No.109 ISSN - 1440-0049*.  
<http://www.housing.nsw.gov.au/NR/rdonlyres/5E209BED-3B9C-4F5D-B16A-BF0400D37B7B/0/RSReport109.pdf> accessed 19 January 2015.

EMGA Mitchell McLennan (EMGA), (2011) *Integra Mine Complex Modification 1 Environmental Assessment*, for Integra Coal Operations Pty Limited.

EMM (2013) *HVO North – Fine Reject Emplacement Modification*.

EMM (2014a) *Mangoola Coal Modification 6 Environmental Assessment*.

EMM (2014b) *Mount Thorley Operations 2014, Environmental Impact Statement*.

EMM (2014c) *Warkworth Continuation Project 2014, Environmental Impact Statement*.

ERM Mitchell McCotter Pty Ltd (1998) *Mount Pleasant Mine Environmental Impact Statement*, for Coal and Allied Operations Pty Limited.

Gillespie Economics (2015) *Drayton South Coal Project EIS, Economic Assessment*.

Glencore (2014) *Mount Owen Complex Annual Review 2013*.

Glencore (2014) *Ravensworth Complex Annual Review 2013*.

Hansen Consulting (2006) *Bengalla Mining Company Statement of Environmental Effects; Modifications to Mining Operations*, for Bengalla Mining Company Pty Limited.



Hansen Bailey (2007) *Wantana Extension Statement of Environmental Effects*, for Bengalla Mining Company Pty Ltd.

Hansen Bailey (2009a) *Mt Arthur Coal Consolidation Project Environmental Assessment*, for Hunter Valley Energy Coal Pty Ltd.

Hansen Bailey (2009b) *Muswellbrook Coal Mine Development Consent Modification Statement of Environmental Effects*, for Muswellbrook Coal Company Limited.

Hansen Bailey (2010) *Mt Owen Complex Annual Environmental Management Report 2009 – 2010*, for Xstrata Mount Owen Pty Ltd.

Hansen Bailey (2011) *Bengalla Mine Development Consent Modification EA*.

Hansen Bailey (2012) *Continuation of Bengalla Mine Background Document*, for Bengalla Mining Company Pty Limited.

Hansen Bailey (2013) *Continuation of Bengalla Mine, Environmental Impact Statement*.

Hansen Bailey (2014) *Ravensworth Operations Final Landform Modification Environmental Assessment*.

Hunter Research Foundation (2014) *Upper Hunter Region Economic Indicators, June 2014*.

Idemitsu (2014) *Muswellbrook Coal Annual Environmental Management Report (2013 – 2014)*.

Land and Property Information (LPI), (2014) *NSW Land Values*, Viewed 19 January 2014, [http://www.valuergeneral.nsw.gov.au/your\\_land\\_value/historical\\_land\\_values](http://www.valuergeneral.nsw.gov.au/your_land_value/historical_land_values).

Minister for Infrastructure and Planning (Minister Assisting), NSW (2004a) *Development Consent Section 80 of the Environmental Planning and Assessment Act 1979: Development Application 376-8-2003 (Bulga Coal Continued Underground Operations)*.

Minister for Infrastructure and Planning, NSW (2004b) *Development Consent Section 80 of the Environmental Planning and Assessment Act 1979: Development Application 14-1-2004 (Mt Owen Coal Mine)*.

Minister for Infrastructure and Planning, NSW (2004c) *Development Consent Section 80 of the Environmental Planning and Assessment Act 1979: Development Application 305-7-2003 (Wambo Coal Mine)*.

Minister for Planning, NSW (2002a) *Determination of a Development Application for State Significant and Integrated Development under Section 80 of the Environmental Planning and Assessment Act, 1979: Development Application No. DA 309-11-2001-1 (Ashton Coal Project)*.

Minister for Planning, NSW (2002b) *Integrated State Significant Development, Determination of a Development Application Pursuant to Sections 76(A)9 & 80: Development Application No. DA 305-11-01 (Liddell Colliery)*.

Minister for Planning, NSW (2007) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Application 06\_0014 (Mangoola Coal Project)*.

Minister for Planning, NSW (2009) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Project Application 06\_0261 (Hunter Valley Operations South Coal Project)*.

Minister for Planning, NSW (2010a) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Application 08\_0101 and 08\_0102 (Integra Open Cut Project)*.

Minister for Planning, NSW (2010b) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Development Application 09\_0062 (Mt Arthur Coal Mine – Open Cut Consolidation Project)*.

Minister for Planning, NSW (2011) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Application 09\_0176 (Ravensworth Operations Project)*.

Minister for Planning (Delegate), NSW (2011b) *Notice of Modification Section 75W of the Environmental Planning and Assessment Act 1979: Development Application 92/97 (Mt Pleasant Coal Mine)*.

Minister for Planning and Infrastructure (Planning Assessment Commission), NSW (2012) *Project Approval Section 75J of the Environmental Planning and Assessment Act 1979: Application 09\_0202 (Warkworth Extension Project)*.

Minister for Planning and Environment (2012) *Warkworth Extension Project Approval 09\_0202*.

Minister for Planning and Environment (2013) *Rixs Creek Extension Project Director-General's Requirements*.

Minister for Urban Affairs and Planning, NSW (1995a) *Determination of a Development Application Pursuant to Section 101 of the Environmental Planning and Assessment Act 1979: Development Application No. DA 211/93 (Bengalla Open Cut Mine)*.

Minister for Urban Affairs and Planning, NSW (1995b) *Determination of a Development Application Pursuant to Section 92 of the Environmental and Planning Assessment Act 1979: Development Application No. DA 49/94 (Rix's Creek Mine)*.

Minister for Urban Affairs and Planning, NSW (1996) *Determination of Development Application Pursuant to Section 91 of the Environmental Planning and Assessment Act 1979: Development Application 34/95 (Mt Thorley Mine)*.

Minister for Urban Affairs and Planning, NSW (2000) *Integrated State Significant Development, Determination of a Development Application Pursuant to Sections 76(A)9 & 80: Development Application No. DA 52-03-99 (Ravensworth East Mine)*.

Muswellbrook Shire Council (2003) *Determination of a Development Application for Integrated Development under Section 80 of the Environmental Planning and Assessment Act: Development Application No. 205/2002 (Muswellbrook Coal Mine)*.

Muswellbrook Shire Council (2015) *Muswellbrook Shire's coal industry* at [www.muswellbrook.nsw.gov.au](http://www.muswellbrook.nsw.gov.au) accessed 3 March, 2015.

News.com.au (2015) *Are mining towns no longer a good prospect for property investment?* 1 August, 2014 at <http://www.news.com.au/finance/real-estate/are-mining-towns-no-longer-a-good-prospect-for-property-investment/story-fncq3era-1227009797086> accessed 3 March, 2015.

Newcastle Herald (2015) *When the boom fizzles*, July 26 2013 at [www.theherald.com.au](http://www.theherald.com.au) accessed 3 March 2015.

NSW Minerals Council (2014a) *NSW Mining Industry Economic Impact Assessment 2013-2014* at <http://www.nswmining.com.au/industry> accessed 14 February, 2015

NSW Minerals Council (2014b) *NSW Minerals Council Website* at <http://www.nswmining.com.au/industry> accessed 14 February, 2015

Property Observer (2013) *Upper Hunter's Muswellbrook might not be quite so "Kevlar-clad"* 12 July 2013 at <http://www.propertyobserver.com.au/finding/residential-investment/suburb-spotlights/24462--flicker-2-muswellbrook.html> access 3 March, 2015.

Resource Strategies (2013) *Mt Arthur Coal Open Cut Modification – Environmental Assessment*.

Resource Strategies (2014) *North Wambo Underground Mine Longwall 10A Modification – Environmental Assessment*.

Realestate.com.au (2014) *Neighbourhood profiles 1 Dec 2013 – 31 Dec 2014*. Viewed 15 January 2013, Realestate.com.au

Rio Tinto Coal Australia (2014) *2013 Hunter Valley Operations Annual Environmental Review, March 2014*.

Rio Tinto Coal Australia (2014) *2013 Hunter Valley Operations Annual Environmental Review, March 2014*.

Singleton Visitor Information Centre (2012) *Singleton Accommodation*.

SLR (2013) *Liddell Coal Operations Proposed Modification to DA 305-11-01 Environmental Assessment*.

Umwelt (2003) *Bulga Coal Continued Underground Operations Environmental Impact Statement*.

Umwelt (Australia) Pty Limited (2006) *Anvil Hill Project Environmental Assessment*.

Umwelt (2007) *Environmental Assessment for Modification of Glendell Mine Operations*.

Umwelt (Australia) Pty Limited (2010a) *Modifications to Mangoola Coal Mine Plans and Relocation of 500kV Electricity Transmission Line*, for Xstrata Mangoola Pty Limited.

Umwelt (Australia) Pty Limited (2010b) *Ravensworth Operations Project Environmental Assessment*, for Ravensworth Operations Pty Ltd.

Umwelt (Australia) Pty Limited (2011) *Preliminary Environmental Assessment Bulga Coal Optimisation Project*, for Bulga Coal Management Pty Ltd.

Umwelt (2013) *Environmental Impact Statement, Bulga Optimisation Project*.

Umwelt (2015) *Environmental Impact Statement, Mount Owen Continued Operations Project*.

URS Australia Pty Ltd (2009) *Integra Open Cut Project Environmental Assessment*, for Integra Coal Operations Pty Ltd.

Wambo Coal Pty Limited (2011) *Wambo Montrose East Underground Mine Modification Environmental Assessment*.

WCPL (2014) *Wambo Coal Pty Ltd (WCPL) Annual Environmental Management Report 2013 (AEMR)*.

Wells Environmental Services (2009) *South East Open Cut Project and Modification to the Existing ACP Consent Environmental Assessment Report*.

Wells Environmental Services (2012) *Ashton Coal Project, Environmental Assessment for the Modification of DA 309-1-2001-I (MOD 10)*.

Wells Environmental Services (2012) *Environmental Assessment for the Modification of DA 309-11-2001-I (MOD 10)*.

## **APPENDIX A**

### ***Draft Voluntary Planning Agreement Offer***



COAL  
201 Charlotte Street  
Brisbane 4000 Australia  
GPO Box 1410  
Brisbane 4000 Australia

13 March 2015

Mr Steve McDonald  
General Manager  
Muswellbrook Shire Council  
P O Box 122  
MUSWELLBROOK NSW 2333

Dear Steve

**Anglo Coal (Drayton South) Management Pty Limited (Drayton South)  
Drayton Mine Extension Project (Project)  
Voluntary Planning Agreement (VPA)**

We refer to our recent discussions regarding a VPA for the Project.

As you are aware Drayton South proposes to lodge a further development application with accompanying Environmental Impact Statement in respect of a revised Project under Division 4.1 of Part 4 of the *Environmental Planning and Assessment Act 1979* NSW. We are now in a position to propose a new VPA offer in connection with the development application.

This offer maintains the structure and principles of the offer dated 2 June 2014 made in connection with the now determined development application for the Drayton South Project and includes road maintenance, community contribution, environmental officer support, and commitment to apprenticeships from the local region.

As you are aware the current circumstances with regard to approvals has required Drayton to scale back operations. However, we are doing whatever we can to maintain permanent roles at the mine during this period of uncertainty. In addition we have conducted a thorough review of projected future mining costs and identified that this VPA offer is consistent with current active VPA's between various mining companies and Muswellbrook Shire Council (Council).

As such, Drayton South formally offers to enter into a VPA with Council (subject to agreement on the essential terms of the VPA) based upon the following principles.

An appropriate Contributions Schedule is attached.

Yours faithfully

  
**Rick Fairhurst**  
Project Director – Drayton South  
T: +61 (7) 3834 1286  
E: [rick.fairhurst@angloamerican.com](mailto:rick.fairhurst@angloamerican.com)  
[www.angloamerican.com.au](http://www.angloamerican.com.au)

**A member of the Anglo American plc group**

Anglo American Metallurgical Coal Pty Ltd  
201 Charlotte Street, Brisbane, 4000, Australia. T +61 (0)7 3834 1333 F +61 (0)7 3834 1390.  
ABN 93 076 059 670

**CONFIDENTIAL**

## 1. Parties to the VPA

- 1.1 The parties to the VPA would be Anglo Coal (Drayton South Management) Pty Limited (Drayton South) as the manager of and agent for the Drayton South Joint Venture in their respective proportions.
- 1.2 The Drayton South Joint Venturers and their respective proportions are as follows:
  - Anglo Coal (Drayton South) Pty Ltd ABN 20 081 072 755 as to 74.75%
  - Anglo Coal (Drayton) No.2 Pty Ltd ABN 66 004 917 177 as to 13.42%
  - Mitsui Drayton Investment Pty Ltd ABN 64 082 138 529 as to 3.83%
  - NCE Australia Pty Ltd ABN 54 001 799 444 as to 3.0%
  - Hyundai Australia Pty Ltd ABN 29 002 008 657 as to 2.5%
  - Daesung Australia Pty Ltd ABN 47 002 011 967 as to 2.5%
- 1.3 Each Drayton South Joint Venturer would provide a letter to Council guaranteeing, in their respective proportions, the performance of the obligations of Drayton South under the VPA.

## 2. Operation of the VPA

- 2.1 The VPA would operate from the time of its execution which would occur following compliance by Council with its obligation to publicly notify the proposal to enter into the VPA
- 2.2 The VPA would be subject to the grant of approval to the Project and that such approval does not contain any provision requiring contributions under section 94 of the *Environmental Planning and Assessment Act 1979 NSW (EPA Act)* other than in respect of Thomas Mitchell Drive.
- 2.3 Contributions would commence thirty (30) days after the “Effective Date” which would be the physical commencement of the Project.
- 2.4 Please note that Drayton South cannot physically commence the Project until following the:
  - (a) grant of planning approval of the Project under the EPA Act and approval by the Commonwealth Minister for the Environment for a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999 Cth*; and
  - (b) expiry of any appeal periods applying to either approvals in (a) above; and
  - (c) issue of any other necessary approval for physical commencement of the Project; and
  - (d) decision by the Drayton South Joint Venture to physically commence the Project.

DZWJQC\45593246\3





CONFIDENTIAL

- 2.5 The VPA and the joint venture guarantees would be assignable to a party entitled to exercise the approval following which the assignor would be released from its respective obligations.

### 3. Contributions

Drayton South would make the following contributions to Council under the conditions indicated.

#### 3.1 Road Maintenance

- (a) Drayton South would make an annual payment to Council of \$50,000.00 (**Road Maintenance Amount**) for road maintenance in the Council area.
- (b) The first Road Maintenance Amount payment would be made to Council thirty (30) days after the Effective Date and thereafter on each anniversary of that day.
- (c) The Road Maintenance Amount would be adjusted on each anniversary payment to reflect changes in the Consumer Price Index (all groups) Sydney (**CPI adjusted**).
- (d) The Road Maintenance Amount would be held in a separate identified account by Council to be applied to road maintenance in the Council area.
- (e) Council would, as reasonably required by Drayton South, report to Drayton South as to uses of the Road Maintenance Amount.

#### 3.2 Community Fund

- (a) Drayton South would make an annual payment to Council of \$290,000.00 (**Community Fund Amount**).
- (b) The Community Fund Amount would be made to Council thirty (30) days after the Effective Date and thereafter on each anniversary of that day.
- (c) The Community Fund Amount would not be payable on any date that it would otherwise be payable when in the previous twelve months no product coal was produced from the Project.
- (d) The Community Fund Amount would be CPI adjusted on each anniversary payment.
- (e) The Community Fund Amount would be held in a separate identified account by Council and applied by Council to "Community Purposes" in the Council area.
- (f) "Community Purposes" would be purposes directly related to the promotion of the economic and social health [health and education] or environmental benefit for the community in the Muswellbrook Shire Council area which may be determined by Council which must in doing so pay due regard to any purpose or purposes proposed to Council by the Project Community Consultative Committee.

DZWJQC\45593246\3



**CONFIDENTIAL**

- (g) The contribution of Drayton South to the performance of the Community Purposes would be publically acknowledged and recognised as reasonably required by Drayton South.
- (h) Council would, as reasonably required by Drayton South, report to Drayton South as to the application of the Community Fund Amount.

### **3.3 Environmental Works**

- (a) Drayton South would make an annual payment to Council of \$15,000.00 (**Environmental Contribution Amount**).
- (b) The Environmental Contribution Amount would be made to Council thirty (30) days after the Effective Date and thereafter on each anniversary of that day.
- (c) The Environmental Contribution Amount would be CPI adjusted on each anniversary payment.
- (d) The Environmental Contribution Amount would be held in a separate identified account by Council and applied to assist in environmental monitoring of mining and environmental works as reasonably determined by Council and related to mining in the Council area.
- (e) Council would, as reasonably required by Drayton South, report to Drayton South as to the application of the Environmental Contribution Amount.

### **3.4 Apprentices**

Drayton South would, after the Effective Date, use its reasonable endeavours to engage three (3) apprentices in each year of operations under the Project Approval from residents of the Muswellbrook Shire Council area, Aberdeen or Jerrys Plains.

The above implements the principles and requirements of the *Environmental Planning and Assessment Act 1979* NSW regarding VPAs.

You will be aware that the VPA will require an “Explanatory Note” to provide the planning law context of the VPA. This would normally be prepared by Council. Drayton South will be happy to assist in that regard if required.

There would also be a number of other legally required and operational provisions in the formal VPA. The formal VPA would also contain provisions making the agreement subject to Drayton South Joint Venture approval.

I am happy to discuss any issue with you and Council and look forward to hearing from you as soon as is convenient. It would be envisaged that once agreement is reached with Council as to the essential terms of the VPA Drayton South would arrange for its lawyers to prepare and submit the formal agreement for settling with Council and its lawyers.

You will also be aware that the proposal to enter the VPA must be publically exhibited which cannot be done until the agreement is finalised. We would hope that the final form of the VPA can be settled in the near future to enable the public exhibition of the VPA to occur before project approval.

DZWWJQC\45593246\3



CONFIDENTIAL

## Muswellbrook LGA Voluntary Planning Agreement

### Contribution Schedule

| Development Contribution | Intended Use                                                                                                                                                                                                          | Payment Details                                                                                                                                                                                                                           |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| \$50k per annum + CPI    | Contribution to MSC road maintenance program.                                                                                                                                                                         | First annual payment payable thirty days after the <b>effective date</b> .<br><br>Thereafter on each anniversary of that date.                                                                                                            |
| \$290k per annum + CPI   | Community Fund Amount. A proposal which will have an economic, social (health & education) or environmental benefit for the community in the Muswellbrook Local Government Area and surrounds (namely Jerrys Plains). | First annual payment payable thirty days after the <b>effective date</b> .<br><br>Thereafter on each anniversary of that date.<br><br>This contribution would not be payable for any year that the Project has not produced product coal. |
| \$15k per annum + CPI    | Environmental contributions to assist in the monitoring of planning impacts of the development.                                                                                                                       | First annual payment payable thirty days after the <b>effective date</b> .<br><br>Thereafter on each anniversary of that date.                                                                                                            |
| 3 Apprentices per annum  | Anglo American to use its best endeavours to engage 3 apprentices per annum for the life of the mine sourced from residents within the Muswellbrook Shire, Aberdeen or Jerrys Plains.                                 |                                                                                                                                                                                                                                           |

DZW\JQC\45593246\3