



**Centennial Coal**



**LW 22 and 23**

**Social Impact Assessment**

**November 2016**



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## 1. INTRODUCTION

This Social Impact Assessment (SIA) has been prepared in relation to the proposed extraction of coal from LW 22 and 23 (the Project). A SIA is a systematic enquiry that focuses on the human element of the environment and identifies how individuals and communities may be affected as a result of a proposed development (or policy or program).

Social impacts may be positive and/or negative; intended and/or unintended. The purpose of the SIA is therefore to:

- Assist in establishing the full facts about the Project, to support a well-informed decision about the appropriateness of the Project.
- Assess the social impacts of the Project including any impacts on local infrastructure and services.
- Assess the impacts of the Project on future generations.
- Inform the community and facilitate participation by the community in the planning and assessment process when appropriate.
- Enhance existing data to inform the planning and development assessment process.
- Recommend mitigation measures to minimise adverse impacts and maximise benefits of the Project.

The broad steps in compiling a SIA are:

1. Profiling: This involves understanding the scale and scope of the Project and identifying the stakeholders (determined by the areas of affectation).
2. Scoping: This involves identifying the likely impacts arising from the Project and includes consultation and feedback from identified stakeholders including other specialist consultants.
3. Assessment: This involves an assessment of the extent of the identified impacts, likely to arise from the Project.
4. Management: All impacts should be identified and those that are identified as having an adverse or detrimental effect need to be managed and mitigated where possible. It is not always possible to manage all adverse impacts however identification of these impacts and how they can be managed must be taken into account. Similarly, impacts that are identified as being positive need to also be identified and capitalised upon where possible and appropriate. This allows for an assessment as to whether the proposal meets net community benefit criteria.
5. Monitoring: Strategies to monitor identified impacts may need to be identified to ensure that management strategies are adhered to and those cumulative impacts are identified, monitored and taken into account for further development.



## **1.1 AUTHORS QUALIFICATIONS**

This SIA has been prepared by James Marshall, Group Manager Stakeholder Engagement, Centennial Coal. James Marshall has over twenty years experience in the social planning sector with experience in local government (10 years), the NGO sector (5 years) and as a private consultant (7 years). During this time expert advice and support has been provided in relation to:

- Strategic social planning;
- Social Impact Assessment;
- Community and stakeholder engagement;
- Safer by Design (CPTED);
- Mediation;
- Community and social research;
- Feasibility studies; and
- Urban design and master planning.

## **2. PROJECT OVERVIEW**

Mandalong Mine is an existing underground longwall coal mining operation producing thermal coal that is supplied to domestic and export markets. It is located approximately 35 kilometres south-west of Newcastle near Morisset in New South Wales. This Social Impact Assessment (SIA) has been prepared by Centennial Coal to support a modification to the Mandalong Mine Development Consent (SSD 5144) for the extraction of coal from longwall panels 22 and 23 beyond the approved mine plan.

Mandalong Mine operates under Development Consent SSD 5144 which was granted on 12 October 2015 by the NSW Planning Assessment Commission under Part 4, Division 4.1 of the NSW *Environmental Planning and Assessment Act 1979* (NSW Government) (EP&A Act), and provided for extension of the mining area with a production limit of 6 million tonnes per annum of thermal coal from the West Wallarah and Wallarah-Great Northern Seams. The currently approved Mandalong Mine comprises the underground workings and surface infrastructure of the following:

- The Mandalong Mine Access Site, encompassing underground workings and associated surface infrastructure near Morisset;
- Delivery of run-of-mine coal from the underground workings to the Cooranbong Entry Site. The coal handling and processing facilities are approved under the Northern Coal Logistic Project (SSD-5145);



- Delivery of run-of-mine coal from underground workings to the Delta Entry Site, located near Wyee at the Vales Point Rail Unloader Facility. The coal handling facility is approved under DA35-2-2004; and
- Mandalong South Surface Site (MSSS), which is yet to be constructed, encompassing ventilation shafts, ventilation fans and underground delivery boreholes located approximately 6 kilometres south-west of the Mandalong Mine Access Site.

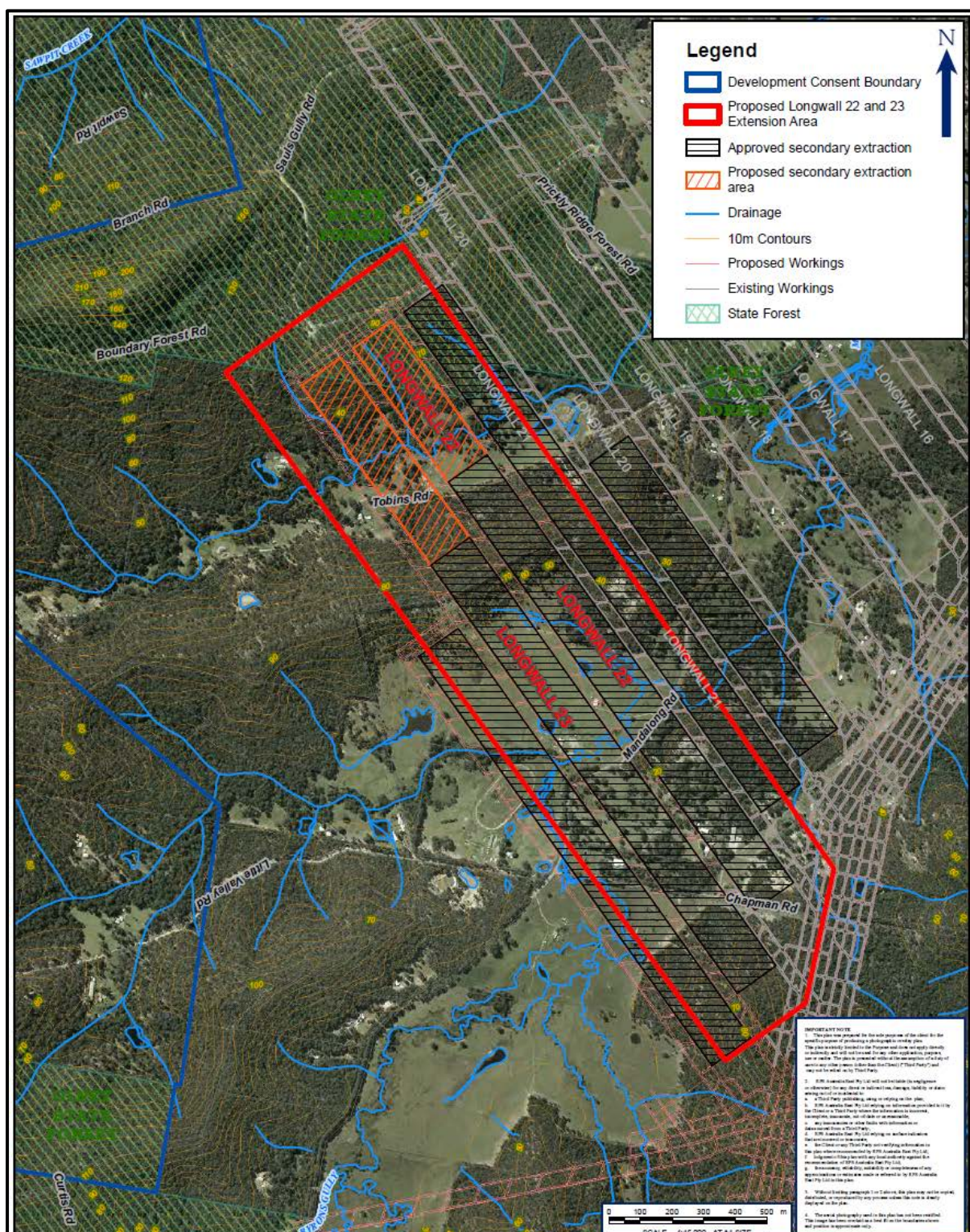
An igneous sill exists to the west of approved longwall panels 22 to 24. Due to historic uncertainty associated with the extent of the igneous sill, longwall panels 22 to 24 were shortened as a conservative measure to mitigate the sill's impact on the mine's production. In recent times through ongoing geological exploration and the successful extraction of adjacent longwall panels below the igneous sill, its extent and condition has become better understood. This has resulted in the proposed extension of longwall panels 22 and 23 within the Project Application Area of SSD-5144. Figure 1 illustrates the proposed extension of longwall mining within these two panels.

Centennial Mandalong has prepared a Statement of Environmental Effects (SEE) to support an application seeking to modify Development Consent SSD-5144 under Part 4 of the EP&A Act. The modification is seeking to undertake the secondary extraction of longwall panels 22 and 23 within the Project Application Area of SSD-5144. Outlined below are the primary components of the Mandalong Longwall Panel 22 to 23 Modification:

- Extension of Longwall 22 from 1,630 m to 2,212 m. This yields 617,381 additional tonnes beyond 1,793,842 tonnes already approved.
- Extension of Longwall 23 from 1,631 m to 2,392 m. This yields 799,933 additional tonnes beyond 1,799,425 tonnes already approved.

There are no other operational changes associated with this proposal.





### Figure 1: Project Application Area





### 3. MANDALONG POPULATION CHARACTERISTICS

#### 3.1 OVERVIEW

The Project Application Area sits within the statistical state suburb of Mandalong. Settlement in the Mandalong area dates from the late 1800s with agricultural activities being the primary land use. Residential development occurred from the 1970's with the establishment of small holdings and hobby farms with a marked increase from the 1990's with a more intensive land use relating specifically to large lot residential development.

There is a significant amount of undisturbed natural vegetation located throughout the Mandalong Valley. The Mandalong Valley is currently occupied by:

- Mining operations from Mandalong Mine;
- Rural residential land;
- Community uses such as fire brigade shed on crown land;
- Agricultural lands including poultry operations, and
- Large pockets of undisturbed natural vegetation.

Figure 2 below illustrates the character of the Mandalong Valley.





**Figure 2: Mandalong Characteristics**

Mandalong's population has undergone some changes between the 2006 and 2011 census. Mandalong recorded a population of 388 people (2011 ABS Census) which is a decrease from the 2006 census where a population of 417 people was recorded. The median age has risen from 37 years to 38 years during this period.

The indigenous population has increased from 2.6% of the population in 2006 to 4.4% of the population in 2011.

The area remains relatively affluent with the median weekly household income being recorded at \$1,281 compared to \$1,109 in 2006. Median weekly rent has increased to \$310 per week from \$196 per week in 2006 and the median loan repayment is now \$2,400 per month compared with \$1,929 per month in 2006.

Between the 2006 and 2011 census, full-time employment participation has risen slightly from 57.4% of the workforce to 61% of the workforce and part-time employment has dropped from 28.4% of the workforce to 24.1% of the workforce. Unemployment has risen from 5.6% to 7%. Technical and Trades is the main occupation and Residential Building Construction is the main industry of employment. An overview of the population characteristics is outlined in the following Tables.




**Table 1: Overview of Key Facts**

	<b>Mandalong</b>	<b>Morisset</b>	<b>Lake Macquarie LGA</b>
Total Population	388	2,857	189,006
Males	190	1,420	92,311
Females	198	1,437	96,695
Median Age	38	55	41
Families	102	682	53,261
Average Children Per Family	2	1.9	1.8
All Private Dwellings	147	1,323	78,697
Average People Per Household	2.9	2	2.5
Median Weekly Household Income	\$1,281	\$621	\$1,117
Median Monthly Mortgage Repayments	\$2,400	\$1,647	\$1,733
Media Weekly Rent	\$310	\$220	\$255

Source: ABS Census 2011

**Table 2: Occupation: Mandalong State Suburb**

<b>Occupation</b>	<b>2011</b>
Tech and Trades Workers	25.3%
Managers	13.8%
Clerical and Admin Workers	13.8%
Professional	18.4%
Sales Workers	6.3%
Labourers	6.3%
Community and Personal Service Workers	7.5%
Machinery Ops And Drivers	4%

Source: ABS Census 2011

**Table 3: Main Industry of Employment: Mandalong State Suburb**

Industry of Employment	2011
Residential Building Construction	4.6%
Other Construction Services	2.9%
Veterinary Services	2.9%
Hospitals	2.9%
Machinery and Equipment Repair and Maintenance	2.9%

Source: ABS Census 2011

The major population settlements in this area are Morisset and Wyee. Morisset is the major town located approximately 2.5 kilometres to the east of the existing Mandalong Mine Access Site. In the Lower Hunter Regional Strategy (Department of Planning 2006) (LHRS) Morisset is identified as an “Emerging Major Regional Centre” which is defined as a centre that is “expected to grow and take on the role of major centres in the future”.

Since the release of the LHRS in 2006, Morisset has emerged as a major commercial and retail centre for southern Lake Macquarie, complimented by a large industrial park, housing distribution and manufacturing industries. In recent times, the Morisset town centre has experienced substantial development with the establishment of the Morisset Square shopping complex in which there is a Woolworths, Coles, Target and a number of specialty shops. The current Draft Hunter Regional Plan maintains Morisset as a major regional centre for the area.

### **3.2 MANDALONG COMMUNITY**

The Mandalong community hold the environment in very high regard and as such have formed the Mandalong Community Association (the Association) which facilitates and encourages engagement of residents / landholders on a range of matters including (but not limited to):

- Environmental matters;
- Community and social events;
- Community projects, and
- Mandalong Mine and mine related impacts.

The Association has undertaken a range of community building activities including book and film clubs and a regularly updated web site.



There is a Mandalong Mine Community Consultation Committee (CCC) which meets three times a year. The purpose of the committee is to:

- Establish good working relationships between the company, the community and other stakeholders in relation to the mine.
- Provide for the ongoing communication of information on mining operations and the environmental performance of the mine, including:
  - On project assessment including scoping of issues for assessment and comment;
  - On the implementation of conditions of approval, the mining operations plan and any other management plans;
  - The results of environmental monitoring;
  - Annual environmental management reports; and
  - Outcomes of audit reports.
- Provide an opportunity for comment on the mine's environmental performance.
- Discuss community concerns and review the resolution of community complaints.
- Discuss how best to communicate relevant information on the mine and its environmental performance to the broader community.
- Work together towards outcomes of benefit to the mine, immediate neighbours and the local and regional community.

During the recent Mandalong Southern Extension Project approval process there were a number of submissions from the Mandalong Community Association and landowners. The main areas of concern were:

- Traffic and road safety;
- Noise;
- Water discharge;
- Flooding,
- Compensation.

### **3.3 CONSULTATION**

Relevant stakeholders include but are not limited to:

- Any residents / landholder who will require a Property Subsidence Management Plan (PSMP).
- Other landholders and residents who live in the area.
- The Mandalong Community Association (MCA).
- Community Consultative Committee (CCC).
- Aboriginal and cultural heritage groups.
- Infrastructure owners (public and private).





- Any individual and group who has an interest in the mine.

Consultation across these groups has been undertaken and documented within the Statement of Environmental Effects (SEE). Consultation has included notifications, dissemination of reports and inclusion of stakeholders for land use surveys as required for heritage impact assessments and the like.

In the context of this SIA, community consultation has been undertaken via Mandalong Mine's Community Consultative Committee (CCC) and specifically to affected landholders via the development of each Property Subsidence Management Plan (PSMP) for LW 22 and 23 (two affected landholders).

Consultation with the Mandalong CCC was undertaken on Tuesday 25 October 2015 in the form of presentations about the proposal to extend LW 22 and 23. Key messages about the Project included but were not limited to:

- When the initial mine plan was prepared it was not believed that mining through the sill was possible however it has been determined that it can be (and has been) mined through.
- Subsidence predictions have been tested and verified and consultations with landholders has commenced in relation to the development of a PSMP for every affected landholder.
- A modification to the existing consent (consent number SSD-5144) will be submitted for LW 22 and 23.
- The modifications for LW 22 and 23 will result in no other changes to the consent (i.e. annual tonnes mined, surface infrastructure etc.).
- A SEE is also being prepared to accompany the modification. The SEE will investigate the following:
  - Subsidence and built features
  - Ecology
  - Aboriginal and European Heritage
  - Water Resources
  - Land and agricultural Resources
  - Greenhouse
  - Economic impacts

Consultation with individual land holders has been undertaken in accordance with Mandalong Mine's Stakeholder Engagement Plan for the development of PSMP's. The key steps for developing a PSMP in consultation with each landholder is summarised below.



### **3.3.1 PSMP Phase 1: Initial Contact**

The first contact with the landowner is a means of introduction and is undertaken to make a suitable time to meet to discuss the mine operations and the PSMP process. This contact will be followed up by written notification which will provide information relating to:

- Plan of the proposed longwall mining;
- The expected subsidence impacts of longwall mining below the landowners property based on the best available information;
- An offer to pay any reasonable costs for the landowner to obtain legal or other advice on the PSMP;
- The timing for later phases of landowner consultation, including finalising any relevant PSMP;
- Mine planning, Extraction Plan application and approval process;
- The relevant conditions of consent;
- Extraction Plan approvals process diagram;
- Arranging access to collect background information to assist in the production of a draft PSMP. Such information may include:
  - A detailed survey of the property, including soil and slope stability assessment;
  - Structural inspection of buildings / structures; and
  - Land use studies;
- Other relevant information requested by the landholder.

Phase 1 may commence 18 / 24 months prior to the commencement of coal extraction from the particular longwall for which the PSMP is being developed.

### **3.3.2 Phase 2: Draft PSMP**

Each relevant landowner will be given a draft PSMP for discussion. The draft PSMP (where possible) will be presented to the Landowner in person by the appointed representative of Mandalong Mine. This will allow any immediate concerns to be addressed and any further issues to be raised and discussed including:

- Predicted impacts and predicted consequences to any dwelling, improvement or land;
- Proposed mitigation / remediation measures for the individual property; and
- Information identifying the landowner's legal rights to acquisition and compensation in accordance with the consent, Mining Act 1992 and Mine Subsidence Board Compensation Act 1961.

### **3.3.3 Re-issue Draft (if required)**

If required a revised PSMP will be prepared to address any matters that are raised in Phase 2. The revised PSMP will be re-issued as a draft to the landholder. Note there may be multiple revisions required in Phase 3.



### **3.3.4 Final PSMP**

The PSMP will reflect the final position of the Landowner and Mandalong Mine in relation to the proposed longwall mining or secondary extraction.

## **4. SCOPING OF POTENTIAL SOCIAL IMPACTS**

### **4.1 OVERVIEW**

As stated in the introduction of this report, a SIA focuses on the likely impact on the human element of the environment and what likely changes may occur. The scoping of the potential social impacts arising from the extension of LW 22 and 23 has involved the following:

- Site visit;
- Understanding of the Project components including:
  - Project Application Area;
  - Location of sensitive receptors (residences); and
  - Project characteristics, including review of the PSMP and predicted subsidence.
- Feedback from the Project team in relation to consultation with land holders and the community via the CCC;
- Review of the following specialist consultants reports:
  - Subsidence and built features
  - Ecology
  - Aboriginal and European Heritage
  - Water Resources
  - Land and agricultural Resources
  - Greenhouse
  - Economic Impacts
- Determination of the likely amenity impact / change arising from the Project and the scale of this impact.

### **4.2 ASSESSMENT OF IMPACT**

A summary of all assessment reports has been undertaken in the preparation of this SIA. It is not the intent of the SIA to repeat what is documented in other reports but rather identify what social impacts are likely to arise from the Project. The SIA has also considered findings from the Mandalong Southern Extension Project and the TL 24 Relocation Project.



**4.2.1 Biophysical Strategic Agricultural Land (BSAL) Assessment (SLR October 2016)**

The Study Area for the BSAL Assessment is the LW22-23 Study Area, plus a 100 metre buffer totalled 246 hectares. It is concluded that there is no qualifying BSAL within the Study Area.

**4.2.2 Agricultural Impact Assessment (SLR October 2016)**

The assessment found that any impacts resulting from longwall mining are expected to be minor and temporary, and can be managed through application of appropriate mitigation measures and management strategies. The Project is found to provide considerable economic benefits to the region whilst having negligible impact on agricultural resources, enterprises or related industries.

**4.2.3 Heritage Impact Assessment (RPS September 2016)**

Based on the predicted subsidence there is no impact identified for the four Aboriginal sites as a result of the extraction of Longwalls 22 and 23. There is no change in the level of impact from the original Development Consent (SSD 5144) as a result of these proposed longwalls. No historic heritage sites were located within or are predicted to occur within the Study Area.

**4.2.4 Ecological Impact Assessment (RPS September 2016)**

The assessment found that subsidence related impacts upon terrestrial biodiversity, including threatened flora and fauna, EECs and GDEs, concluded that no significant impacts are expected to occur.

**4.2.5 Economic Impact Assessment (Aigis Group October 2016)**

The Modification will yield the benefits of additional production in terms of royalties, with associated positive socioeconomic outcomes for NSW, along with an unquantified income tax effect that would notionally accrue to the State. The additional period of employment generated by the increased production within the existing approved LOM will also support a modest increase in economic activity concentrated in the local/regional areas during the brief duration of the Modification works. The Modification would result in an increase in economic benefit of approximately \$15 million. The labour surplus estimate represents the residual benefit of Mandalong Mine employee incomes assumed to be largely spent in the local economy, net of alternative employment outcomes (substitute employment or unemployment) and taking into account the wage premium of the mine's employees.

**4.2.6 Subsidence Impact Assessment (Seedsman Geotechnics October 2016)**

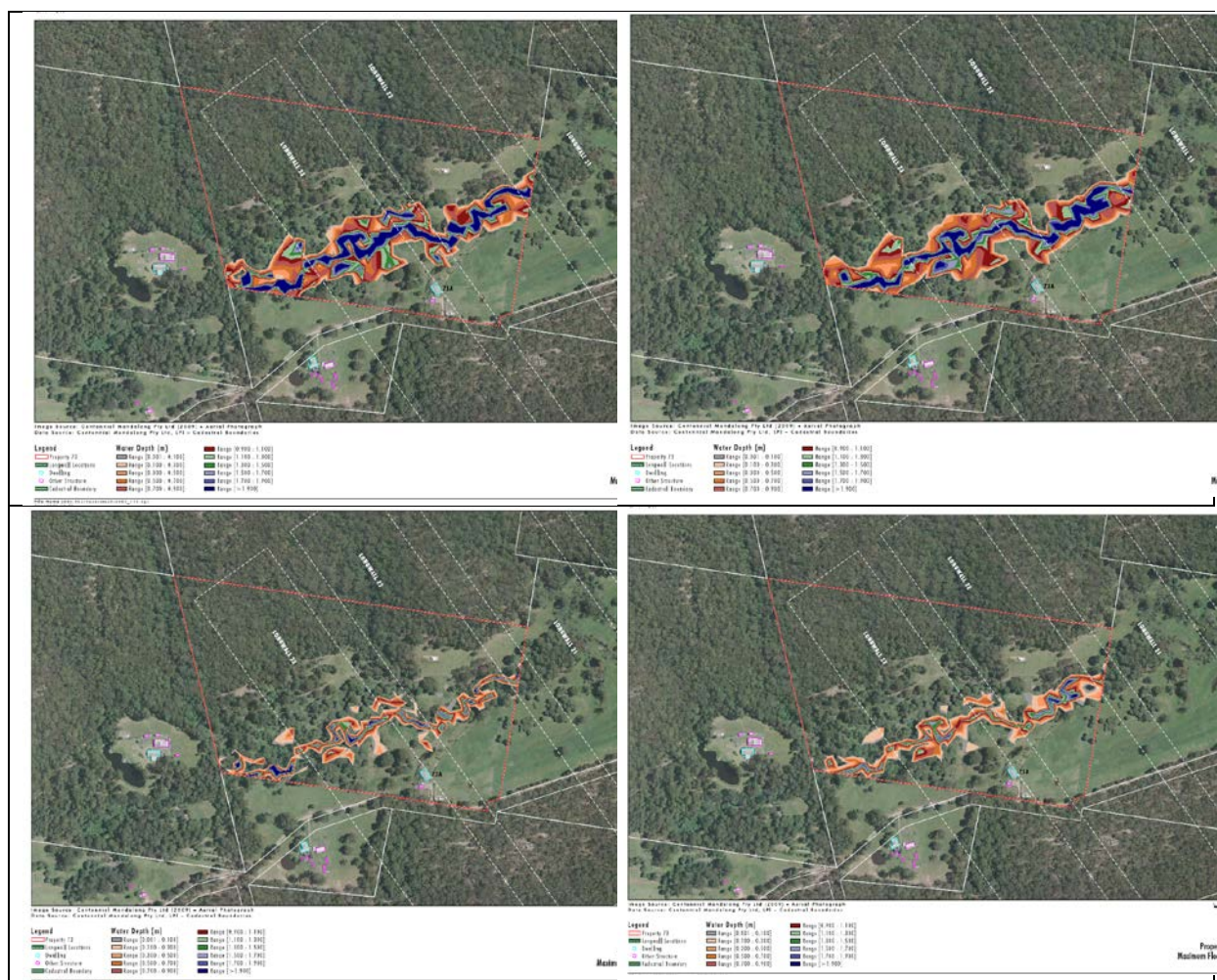
The Subsidence Impact Assessment has found that it is unlikely that there will be any tensile cracking or compressive buckling developed in soil or rock. The compressive strains may be sufficient to cause bulging of sealed roads. With the low values of tilt and strain combined with the relatively gentle topography, there will be no far-field movements (defined as measurable horizontal movements without vertical movements in excess of 20 mm) and

there will be no ‘upsidence” in the water courses. There are no cliffs in the area so there can be no cliff falls induced. The mining-induced changes in the slope of the terrain will not be sufficient to generate rock falls or rock rolls.

The mine layout was selected so that any impact to dwelling would be less than safe, serviceable and repairable and this has been demonstrated to date.

#### 4.2.7 Flood Assessment (Umwelt: September 2016)

Two properties (identified as property 73 and 207) are within proximity to LW 22 and 23. Property 73 will be undermined and property 207 is within the angle of draw. Both of these properties are within proximity to Tobins Creek and therefore subject to potential flood and / or ponding increase. The Flood Assessment has found that there will be no impact to each dwelling or access to either property. A PSMP has been prepared for each both properties.



### Figure 3: Flood Modelling Property 73

**4.2.8 Greenhouse Gas Emissions Summary (SLR November 2016)**

It is noted that the emissions associated with the Longwall 22 and 23 extensions represent the contribution of the extraction of this additional resource to the life of mine emissions which are based on the maximum production rate of 6.5 Mtpa and the full 25 year life of the mine. The 1.4 Mt coal proposed to be extracted as part of the Longwall 22 and 23 extensions will be achieved within this current approved annual extracted rate and mine life.

**4.3 COMMENT ON POTENTIAL SOCIAL IMPACTS**

Based on the assessment of specialist reports and understanding of the scope of the Project and land use characteristics, the assessment of social impacts is undertaken in the following tables. This allows anyone who reviews the SIA to understand how potential impacts have been assessed and the likelihood of social risk arising from the Project. Each area of assessment is ranked according to potential risk and allocated a score of 0, 1, 2 or 3. If no impact or a positive impact is identified a zero score is allocated.





Table 4: Population Characteristics

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
The development will change the characteristics of the general population or persons who live or interact in or around any site in question.	Purchase property due to adverse social amenity impacts that cannot be mitigated.	0			
	Existing landholders relocate from the area due to mine operations and loss of social fabric, knowledge, networking and sense of community.	0			
	Increased in the number of tenancies across the area due to property in mine ownership. This results in different values to the area, land management practices and loss of social fabric, neighbouring etc.).	0			
	FI/FO or DI/DO workers coming to the area resulting in positive financial contribution to some sectors however do not contribute to the sense of community and create other impacts such as increased housing costs.	0			
Total Score		0			



Table 5: Disadvantage and Benefit

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
It is likely the development will disadvantage or benefit individuals or groups (including specific target/population groups).	Positive pay packet effect in the immediate local area to some / all sectors.	0			
	Positive pay packet effect however not in the immediate area, but on a broader regional level.	0			
	Increase in housing rental and housing purchase prices due to demand brought about by the project.	0			
	Increased number of housing investors taking advantage of accommodation demand for mine personnel.	0			
	Artificial increase in pricing for certain commodities / goods / housing.	0			
	Sterilisation of land for private development.	0			
	Reduced access to publicly accessible land.	0			
<b>Total Score</b>		0			



Table 6: Employment

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
Changes to employment opportunities	Direct and indirect employment created by the project.	0			
	Longevity / certainty of employment for existing employees and indirect employment.	0			
	Redistribution of employment patterns – i.e. mining attracting people due to higher wages whereas other sectors may not have this advantage.	0			
	Increased trade in other services (i.e. accommodation, retail) resulting in additional employment opportunities.	0			
<b>Total Score</b>		0			





Table 7: Housing

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
Impacts on existing housing stock will occur	Increase in demand from FI/FO or DI/DO workers.	0			
	Increased demand for tenancies.	0			
	Increased / inflated housing costs making housing unaffordable for a larger cohort of the community.	0			
	Decrease in the availability of and access to affordable housing stock.	0			
<b>Total Score</b>		0			

Table 8: Community Infrastructure

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
Additional utilisation of community infrastructure will occur (roads, community halls, child care facilities, sporting and recreation etc.)	New services and facilities required ancillary to the project due to population increase arising from the project.	0			
	Increase in employee traffic to and from the site.	0			
	Ongoing use of existing services by existing workforce.	0			
<b>Total Score</b>		0			



**Table 9: Community Support Services**

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
Additional support services will be required to meet the demands of any identified changes	New services and facilities required ancillary to the project due to population increase or decrease (in the case of mine closure).	0			
<b>Total Score</b>		0			

**Table 10: Service Demand**

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
Existing support services will be utilised to an extent where they are unable to meet the demand	Ongoing use of existing services however demand increased as a result of mine closure.	0			
<b>Total Score</b>		0			

**Table 11: Conflict**

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
The proposal is likely to cause conflict within the community (i.e. is not supported, or there is conflict between supporters and non-supporters)	Visual impact caused by the location of infrastructure, lighting etc.	0			
	Change in environmental conditions (e.g. adverse noise and air quality impacts from the mines operations, changes to water quality and availability).	0			
	Transport noise caused by rail / trucks and employee movements.	0			
<b>Total Score</b>		0			

**Table 12: Community Identity**

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
An impact on community identity is likely	Caused by: Change in population structure (i.e. relocation of landholders due to property purchase).	0			
	Change in land characteristics that prevent use, development and / or access to certain areas.	0			
	Change to the social amenity due to noise, air quality, visual etc.	0			
<b>Total Score</b>		0			

**Table 13: Cultural Identity**

Affect	Causes	Score			
		No / positive impact	Low Impact	Medium Impact	High Impact
		0	1	2	3
An impact on cultural identity is likely	Loss of community / public access to certain areas.	0			
	Loss of or reduced access to sites of significance (indigenous and European)	0			
	Threat of a change in lifestyle for land holders.		1		
	New project proposed within an existing community	0			
<b>Total Score</b>			1		





As identified above the Project will result in no broad scale change to the land use and / or environment characteristics. The assessment of impacts arising from LW 22 and 23 has concluded that the primary social impact relates to properties identified as 73 and 207 due to the direct relationship to the proposed longwall mining.

Property 73 is utilised as a residential dwelling with agricultural activities including orchards (citrus and berries), biodynamic farming and hobby farm activities (cattle and horses). Property 207 is again utilised for residential purposes with hobby farm activities (horses).

For both properties 73 and 207 it is determined that there will be no impact on the current land uses or lifestyle of these residents.

Through this process and despite little impact identified, it is reasonable to assume that affected residents will have a degree of angst in relation to the effect of subsidence. Ongoing consultation is to occur via the Property Subsidence Management Plan process with any exceedances of the risk ratings identified in Tables 4 to 13 triggering the need for the implementation of management and mitigation activities contained in the relevant Trigger Action Response Plans. Consultation with the affected landholders will be undertaken prior to and post mining in order to monitor the effect of subsidence and maintain contact with the landholder. Mitigation strategies documented in the Property Subsidence Management Plans are to be adhered to.

## **5. CONCLUSION**

This SIA has been prepared in relation to the proposed extension to LW 22 and 23. The potential impacts have been identified using a worst case scenario, meaning that potential impacts may be less than predicted.

The Project is being undertaken to achieve maximum coal extraction and is deemed possible due to knowledge that the sill does not pose a constraint to mining as previously thought.

It is found that there are no adverse impacts to amenity, land uses or residential dwellings. On that basis it is considered that the overall social impact is negligible. However ongoing consultation with each landholder is required to keep each landholder informed of the mining progress and any changes to the predicted impacts (although considered unlikely).