COAL OF QLD
RESOURCES | EXPLORATION | MINING

nrc
northern resource consultants

Wilton Coal Project
Initial Advice Statement

APRIL 2012

prepared by
Northern Resource Consultants
on behalf of
Coal of Queensland

Contents

Contents (continued)

LIST OF FIGURES

LIST OF TABLES

Introduction

The Wilton Coal Project (Wilton Project) is located 45 km to the north east of Emerald, 50 km to the north west of Blackwater and approximately 280 km north west of Gladstone.

The Wilton Mine should commence operation in late 2013 – early 2014. It will primarily produce high value and quality coking coal suitable for the export market. Minor economic quantities of other coal products contained within the deposit will be also mined for sale.

Initial development studies show the deposit will support open-cut mining activities producing up to 10.0 Million tonnes per annum (Mtpa) of saleable product.

The Wilton Project is targeting multiple seams primarily from the Fairhill Coal Measures.

The initial three years of operation will see the mine ramp up from about 1.0 Mtpa in the first year of coal production with full production of 10.0 Mtpa expected within three years of first production.

Run-of-Mine (ROM) coal will be hauled on internal haul roads to a central processing coal handling and preparation plant (CHPP) facility where it will be crushed, washed and processed to produce hard coking coal products. Coal rejects will undergo an additional refinement process to extract the high value coking coal fines for consolidation and sale. Product coal will be transferred to a train loading facility located adjacent to the existing Blackwater railway line which runs through the project. Coal will be railed to port for export to international customers.

Infrastructure requirements for the project include a new rail loop, power transmission lines, water pipelines and potentially a bridge to cross the existing Blackwater railway line.

The mine will have a mine life of up to 50 years, inclusive of construction, operation and closure.

The Wilton Project covers an area of approximately 12,000 hectares made up of a number of freehold pastoral properties (see Table 1). Wilton Coking Coal Pty Ltd (Wilton Coal) currently holds the Exploration Permit for Coal (EPC) 1235 over the project area which is the pre-requisite tenure for Mining Lease Applications (MLA) in Queensland. Wilton Coal has recently lodged two MLAs that cover the majority of the project area.

This Initial Advice Statement (IAS) forms part of the supporting documentation required for an Application to Prepare a Voluntary EIS under Sections 70-71 of the *Environmental Protection Act 1994* (EP Act).

This IAS scopes the potential impacts (positive and negative) to be investigated in detail in an Environmental Impact Statement (EIS) (to be prepared under Chapter 5 of the *Environmental Protection Act 1994*).

This IAS will form the basis of a Terms of Reference (ToR) for the EIS. The ToR will be developed following a legislative framework using the findings from further research and studies, and community engagement.

The proponent

The proponent for the Wilton Coal Project (Wilton Coal) is Wilton Coking Coal Pty Ltd, a subsidiary of Coal of Queensland Pty Ltd (CoQ).

CoQ is a privately owned Queensland resource company based in Brisbane.

Contact details for Wilton Coal are:

Coal of Queensland Pty Ltd
PO Box 7168
East Brisbane, QLD 4169

Phone: (07) 3392-3888

Fax: (07) 3392-3800

Project need

The Wilton Project will be an open-cut coal mine located approximately 45 km north east of the township of Emerald in Queensland's Bowen Basin.

The Wilton Project consists of two mining leases located primarily in a cleared cattle-grazing area. The project area is immediately to the east of Ensham Resources Pty Ltd owned by Yongala Mine and to the west of the proposed Washpool Project owned by Aquilla Resources Limited. The area within the proposed lease boundaries – covers approximately 12,000 hectares and incorporates buffer capacity to enable protection of significant environmental values.

Exploration has been undertaken in the Wilton area since the 1960s and has resulted in the identification of several significant deposits in both the Rangal and Moranbah Coal Measures. Several of these have been developed as active mines (Ensham, Kestrel) or held as mining leases awaiting development.

Wilton Coal's exploration of EPC 1235 has defined a resource of more than one billion tonnes of economically recoverable coal, which can support the production of up to 10 Mtpa product coal for export markets.

Coal quality testing has indicated Wilton Project's coal possesses the characteristics of high value and quality coking coal, suitable for the export market. Additional minor economic quantities of other coal products are contained within the deposit and will also be mined for sale.

On November 18, 2011 CoQ submitted two mining lease applications (MLA 70464 & MLA 70465), which form the Wilton Project.

The project is expected to contribute significantly to the Queensland and local economies through state royalties, capital investment, employment and business opportunities.

Wilton Coal will directly or indirectly employ approximately 400 full-time personnel during operations and approximately 500 personnel during construction. It is proposed Wilton Project's business activities will be undertaken on a 24 hour, seven-days-per-week basis.

Purpose and scope of this Initial Advice Statement

This IAS has been submitted to the Chief Executive of the Department of Environment and Resource Management (DERM) in accordance with Section 41 of the *Environmental Protection Act 1994* (EP Act).

It has been prepared to:

- support an application for the preparation of a 'Voluntary Environmental Impact Statement'
- assist in the development of a draft Terms of Reference for the Environmental Impact Statement (EIS), and to
- enable stakeholders and the local community to determine their level of interest in the Wilton Project.

Location

Regional context

The Wilton Project is located 45 km to the north east of Emerald, 50 km to the north west of Blackwater and approximately 280 km north west of Gladstone. The location of the Wilton Project in a regional context is shown in Figure 1.

A number of coal mines operate near the Wilton Project including Oaky Creek (approximately 25 km to the north) and Ensham Mine (west of the Wilton Project). Figure 2 illustrates the location of existing mines surrounding the Wilton Project.

“Feasibility studies have identified a staged development process – progressively ramping up in production over the first three years of mine operation to a design target of 10 Mtpa of product coal”

FIGURE 1 *Regional location map*

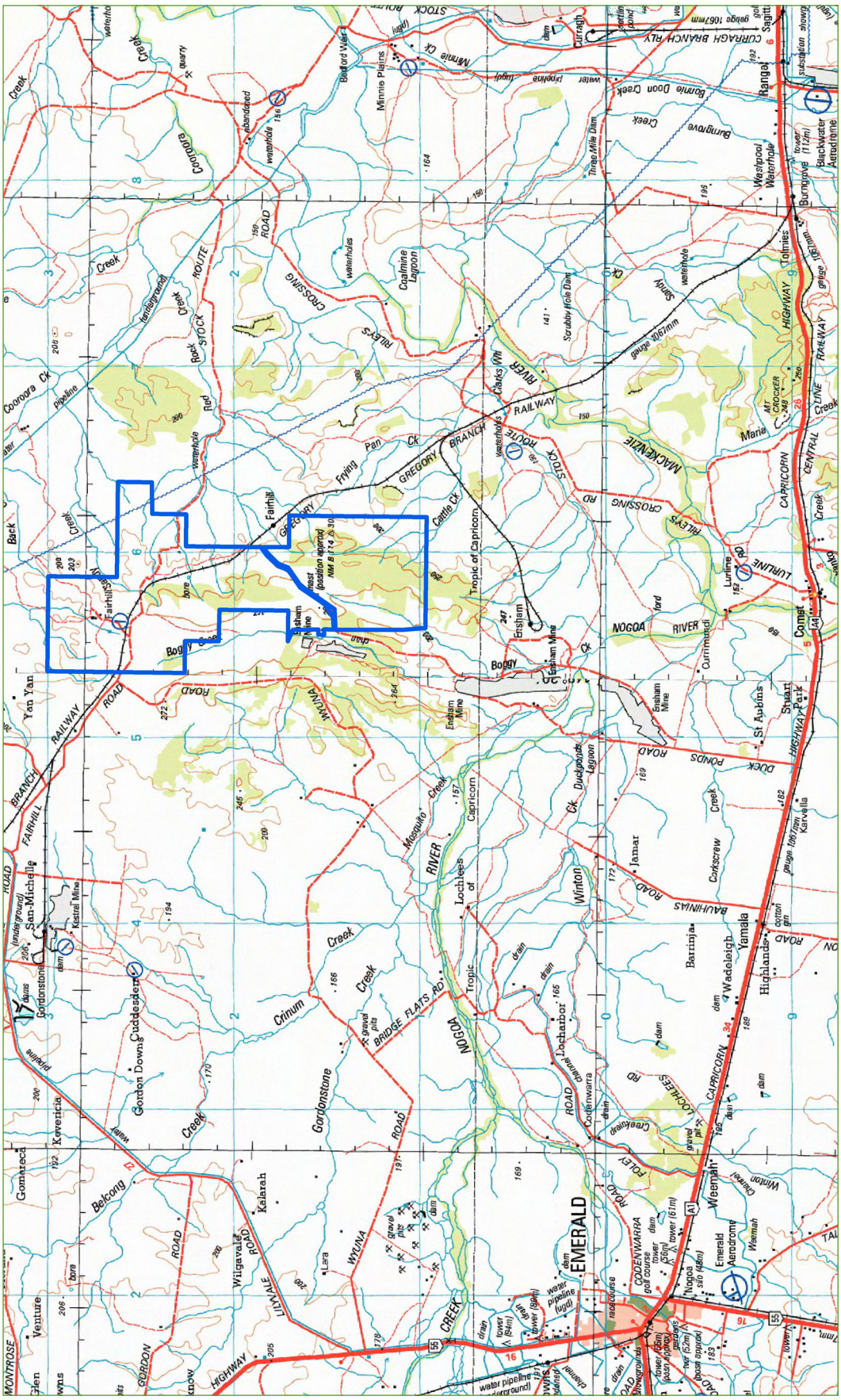
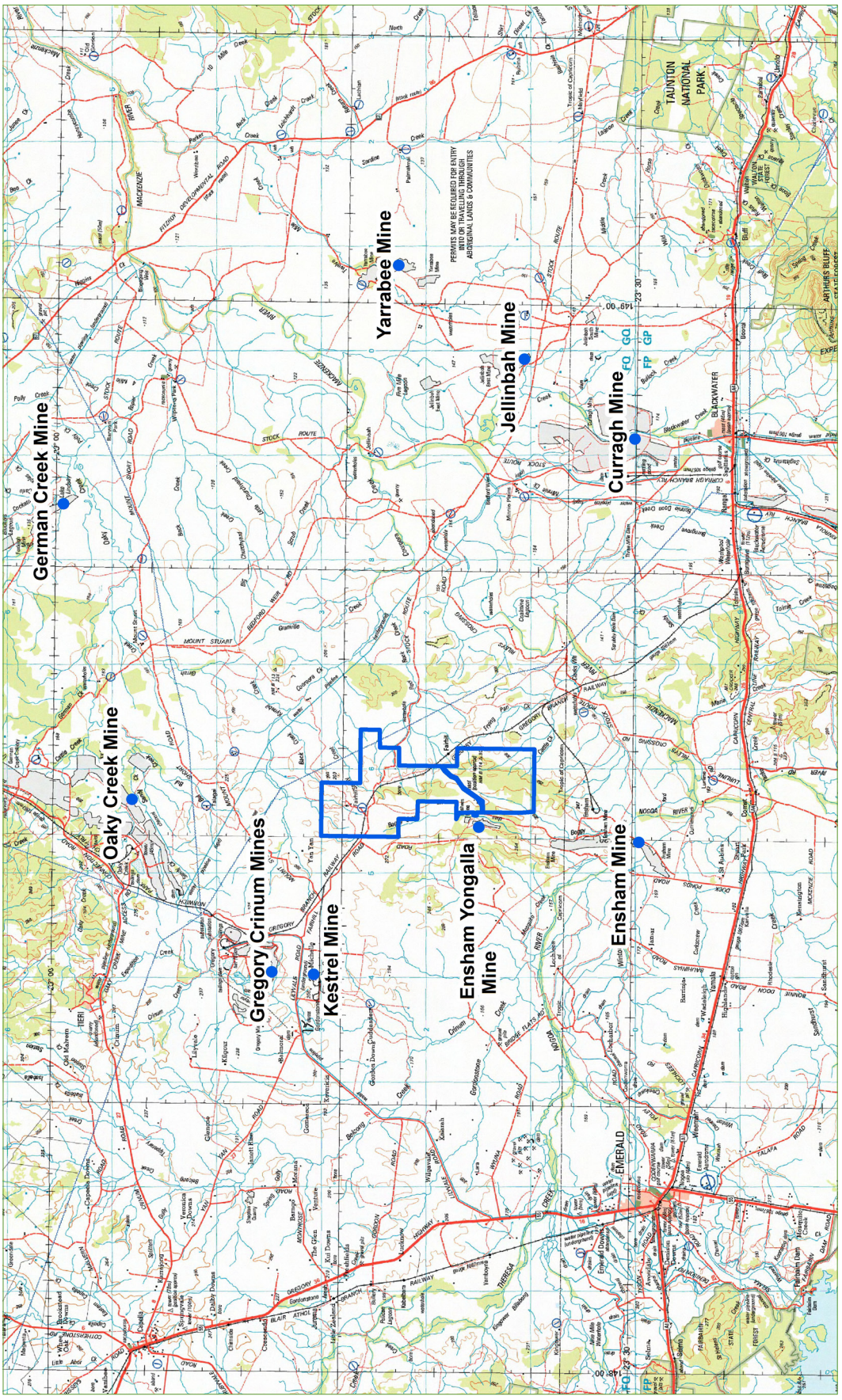


FIGURE 2 *Existing mining tenure surrounding the Wilton Project*



Local context

The Wilton Project is adjacent to the north eastern boundary of the Ensham Mine (Yongala Pit) in the Bowen Basin of Central Queensland. It is close to other existing coal mining operations' infrastructure and deposits: Kestrel, Crinum and Gregory Mines to the northwest; Oaky Creek and German Creek Mines to the north; Curragh Mine to the east and McKenzie River to the south.

Access is primarily from the west of the Fairhill Road, which links to the main sealed Lilyvale mining access road. Existing roads leading north from the Capricorn Highway allow access to the southern mining lease area. The tenement is traversed by the Goonyella-Blackwater rail line, which links to multiple coal export terminals on the Queensland coast.

Background land tenure and regional shire council

The background land tenure of the Wilton Project is detailed in Table 1 and Figure 3.

The Wilton Project is positioned across the boundary of the Issac and Central Highland Regional Shire Council areas.

TABLE 1 *Tenure holders for Figure 3 on page 7*

LOT #	PLAN TYPE	PLAN #	NAME
4	CP	843145	R&R Simmons
8	TT	357	Queensland Rail
3	CP	911006	R&R Simmons
5	TT	351	State of Queensland
2	CP	911007	M Shaw et al
2	SP	165518	R&R Simmons
1	SP	165518	CM, DM and KE Chapman
6	TT	351	State of Queensland
6	TT	74	CM, DM and KE Chapman
2	SP	127281	C&C Dunne
1	CP	911008	K&M Silvester
3	CP	911009	M Shaw et al
2	CP	911010	W&G Dickson
31	CP	864573	Bligh Coal Ltd Idemitsu Queensland Pty Ltd, J-Power Australia Pty Ltd LG International (Australia) Pty Ltd
10	SP	197246	R&V Beak
1	RP	909949	D&G Kerle
3	TT	354	State of Queensland
30	SP	130134	State of Queensland
4	SP	171144	AC & LG Lowe Holdings Pty Ltd (TTE)
1	TT	55	P&D Comiskey
2	TT	241	P&D Comiskey
1	SP	160774	D&M Haigh

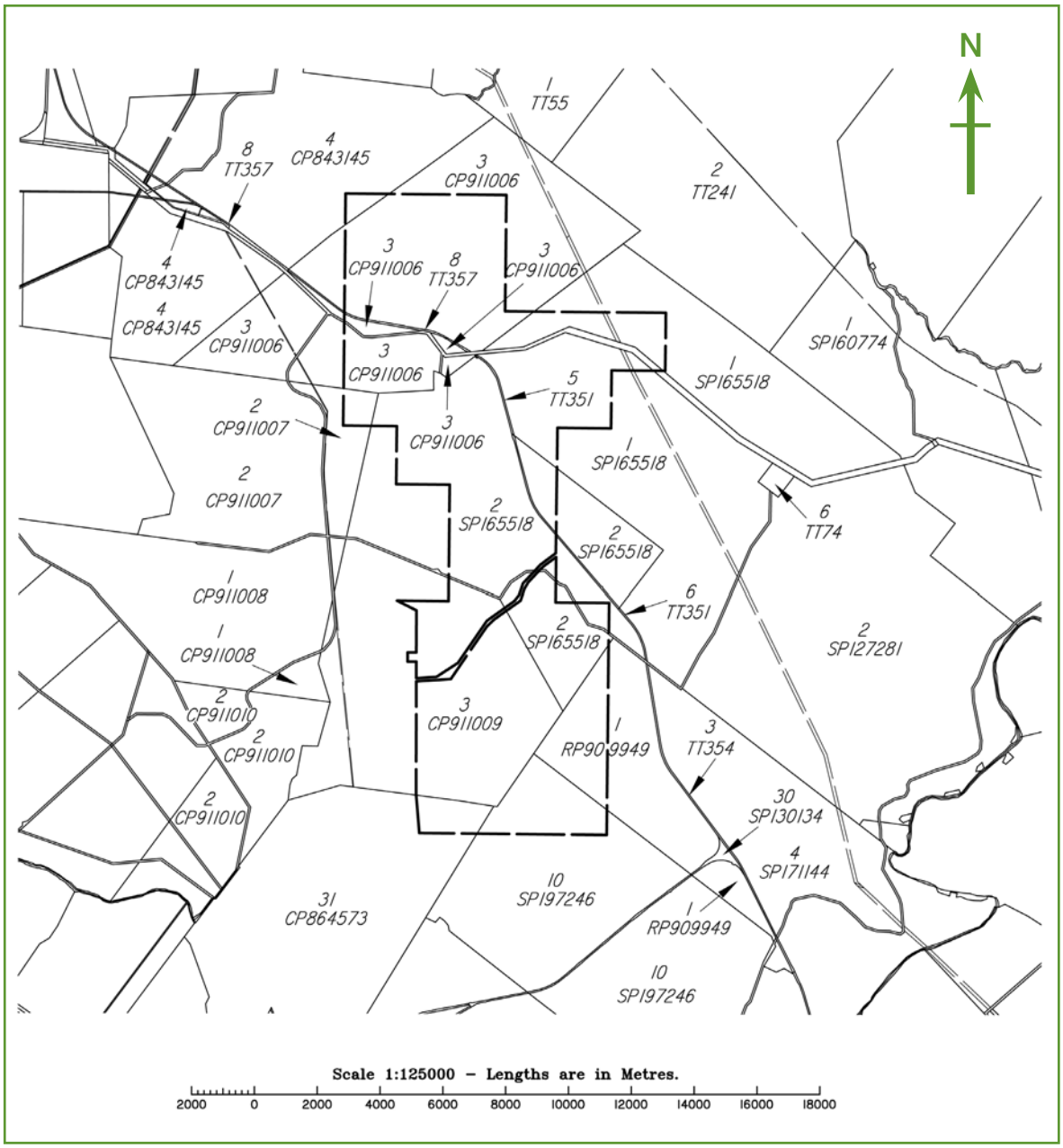


FIGURE 3
Background land tenure of the Wilton Project

Proposed development

Proposed operations

Feasibility studies have identified a staged development process – progressively ramping up in production over the first three years of mine operation to a design target of 10 Mtpa of product coal.

A potential mine life of 50 years has been identified with coal being sourced from open-cut developments.

It is likely open-cut mining will be by conventional large excavator and trucks – with the potential for large scale equipment such as electric rope shovels and draglines. The final pit designs, mining methods and schedules will be determined once detailed mine planning is complete.

Additional open-cut mining techniques, such as in-pit crushing and conveying systems, highwall and auger mining will be investigated in the future to ensure all economic coal is extracted from the deposit.

Overburden removal and mining activities will take place on a 24-hour, seven-days-per-week operation.

Mine infrastructure

The following mine infrastructure is proposed at the site:

- Site water management controls, including sediment control ponds
- Coal handling civil works, including ROM pad
- Construction and commissioning of Coal Handling and Preparation Plant (CHPP)
- Construction of the Wilton Coal Mine rail loop, load-out and connection to the existing Blackwater rail line
- Construction of Mine Infrastructure Area (MIA) including administration, ablution buildings, accommodation village (if required) and vehicle maintenance workshops
- Internal haul roads for product haulage, site access roads and a bridge over the existing Blackwater railway line (which runs through the middle of the tenement
- Construction of process water storage and distribution system, and
- Depot and magazine for an onsite blasting contractor.

Coal Handling and Preparation Plant (CHPP)

The concept study has identified the CHPP facility will require a throughput rate in excess of 2,400 tonnes per hour (tph). The CHPP design will comprise of crushing and screening facilities, dense medium cyclone and bath/spiral/reflux classifier and flotation operation and a co-disposal system for rejects management. A filter press system to remove excess water from tailings slurry may be implemented, leaving a dry, compacted end product if required. The filter press process has potential to deliver substantial environmental benefits by increasing water recovery and allowing dry disposal of tailings in spoil.

The fine tailings are pumped to sumps used at the CHPP to separate the solid material and process water. These sumps will be purpose built to maximise the dewatering of the tailings slurry and include an injection of flocculant to further advance the liquids and solids separation process. The dewatered solid material is then buried along with coal rejects, in overburden emplacements, while the process water is recycled within the CHPP.

The final design of the CHPP shall be modified based upon large scale testing results of the various coal seams.

“A potential mine life of 50 years has been identified with coal being sourced from open-cut developments”

Supporting infrastructure

In addition to the coal mining requirements, the Wilton Project will also include supporting infrastructure. A description of this is set out below.

Power supply

There are a number of existing High Voltage (HV) transmission lines directly adjacent to the Wilton Project that will be used to provide power to the mine area (refer to Figure 4). Power will most likely be fed from a feeder line originating from the Lilyvale substation.

Water supply

A number of water supply options are actively being explored with water infrastructure providers.

Rail infrastructure

The balloon loop will be constructed in the middle portion of the mine area adjacent to the existing Blackwater railway line.

Rail transportation

The Wilton Project will access rail capacity from existing tender processes from commercial providers.

Road infrastructure

Access roads will be constructed connecting site facilities with existing local roads. Main access to the site will be via the Fairhill road, which originates from the Lilyvale mining road to the north of the project. An internal haul road for product coal will also be required to transport product coal to the train loading facility.

Accommodation

It is intended a reasonable proportion of the mine workforce will reside in existing nearby townships (Emerald, Blackwater or Comet). Further detail on the accommodation infrastructure will be detailed in the Wilton Project EIS once detailed studies are completed.

Port

The Wilton Project will access the existing facilities at a number of port terminals to export coal.

FIGURE 4
Existing HV infrastructure directly adjacent to the project (courtesy of Eschelon Mining)

Mine waste management

Overburden generated in the initial phases of the Wilton Project will be placed in out-of-pit-overburden dumps. Once sufficient volume becomes available in mining voids – overburden will be switched to in-pit dumping.

In-pit crushing and conveying systems, highwall and auger mining will also be investigated to maximise the efficiency of mining activity and to limit the amount of rejects mixed in with the ROM coal to be hauled to the CHPP.

Waste streams from the CHPP will include coarse and fine rejects, and process water. A co-disposal storage facility will be established in close proximity to the CHPPs to reduce pumping distances and maximise process water reclaim.

A filter press system to remove excess water from tailings slurry may be implemented, leaving a dry, compacted end product if required. The filter press process has potential to deliver substantial environmental benefits by increasing water recovery and allowing dry disposal of tailings in spoil.

> *"Rehabilitation of disturbed areas will be progressive, with a goal of minimising disturbed areas across the site to lessen erosion"*

Water management

Waste water generated through mining activities will include mine water, process water, sediment-laden runoff and sewerage effluent.

Mine water will be contained in constructed storage facilities for reuse in mining and processing operations. Discharging to surrounding watercourses will only occur in extreme weather events with dilution occurring and under conditions specified by DERM as part of the mine's environmental authority.

A primary sewerage treatment plan (STP) will be situated on-site. Sludge and effluent from the plant will be removed by a licensed contractor to a licensed disposal facility.

Development of the proposed Wilton Project may require diversion of some ephemeral drainage lines; any diversions requirements will be further defined as design progresses.

Stormwater management will aim to divert clean stormwater from surface runoff around pits and other disturbed areas and into existing creeks and drainage lines. Scour protection works will be provided at discharge points, if required.

Stormwater from all disturbed areas including stockpiles will be collected in sediment control ponds to be established across the site. Final locations and capacity of these ponds will be determined in the detailed design stage. Water pumped from active pits will also be directed to sediment control ponds. Where possible, water collected in sediment control ponds will be reused for dust suppression or process water. Water quality criteria will be developed for releases from sediment control ponds to existing surface drainage systems.

Rehabilitation of disturbed areas will be progressive, with a goal of minimising disturbed areas across the site to lessen erosion.

Staffing and accommodation

An average of 400 people will be employed at the Wilton Mine over the life of the operation. Workers may reside permanently in a number of nearby townships or reside elsewhere when not on shift and arrive at site on a drive-in/drive-out basis.

Wilton Coal's preferred option is to house workers in local townships. Accommodation provisions will be finalised as a part of the EIS process.

Community and stakeholder consultation

A Community Engagement Strategy for Wilton Project will be developed and will encompass the following key objectives:

- Establish meaningful two-way communication between the Wilton Project team and local community and stakeholders.
- Provide the local community and stakeholders with accurate and timely information regarding the Wilton Project.
- Develop tailored stakeholder and community engagement processes and communication tools (formal and informal) that encourage the local community and different stakeholders to engage in ways that suit their communication needs.
- Proactively identify any issues and concerns the local community and stakeholders may have regarding the Wilton Project.
- Establish a mechanism for capturing community and stakeholder feedback for use in the EIS and Wilton Project development.
- Incorporate performance measures so the strategy's effectiveness can be assessed and improved.
- Identify opportunities to establish relationships and build foundations for meaningful community development that can establish economic and social development opportunities.

Existing environment

Regional climate

The climate of the proposed Wilton Project site is sub-tropical and experiences distinct seasonality. Information from the Bureau of Meteorology (*www.bom.gov.au*) indicates the average annual rainfall for the region (based on the Wollombi station) is approximately 560 mm. Rainfall is typically seasonal, with the highest average rainfall occurring in December and the lowest level in July. Temperature ranges (based on Emerald Airport station data) show a mean maximum temperature of 29.7 0C and a mean minimum temperature of 16.2 0C.

The seasonal wind roses (BOM 2011) show moderate winds dominate from the north east to easterly sector in summer and spring. The wind roses show moderate winds from the east to southerly sector dominate during autumn and winter.

Land and infrastructure

Existing land use

The existing land use in the Wilton Project area consists of cattle grazing, coal mining and natural environment (see Figure 5). The Blackwater railway line dissects the project area and is used as a major artery for transporting coal to coastal ports (see Figure 6).

> *"The climate of the proposed Wilton Project site is sub-tropical and experiences distinct seasonality"*

FIGURE 5 *Wilton Project area – grazing land use*

FIGURE 6 *Wilton Project area – Blackwater rail line that transports coal from nearby coal mines to ports*

Topography and landscape

The area is low relief, open grazing farmland traversed by a small south trending creek, which is flanked to the east by a low laterite-capped ridge and eastern scarp dissected by small creeks draining to the east. Refer to Figure 7.

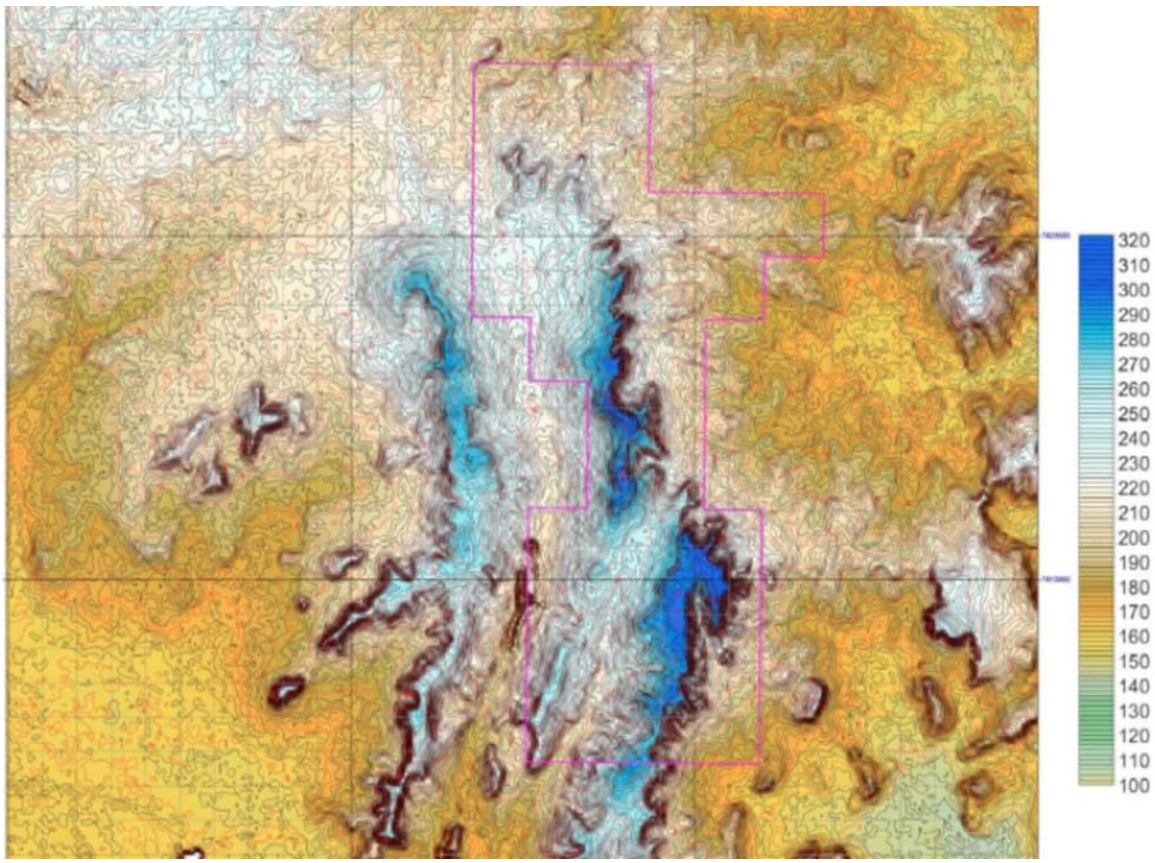


FIGURE 7
The topographical relief of the Wilton Project. Note project area highlighted by pink boundary (figure provided courtesy of Rock Knowledge)

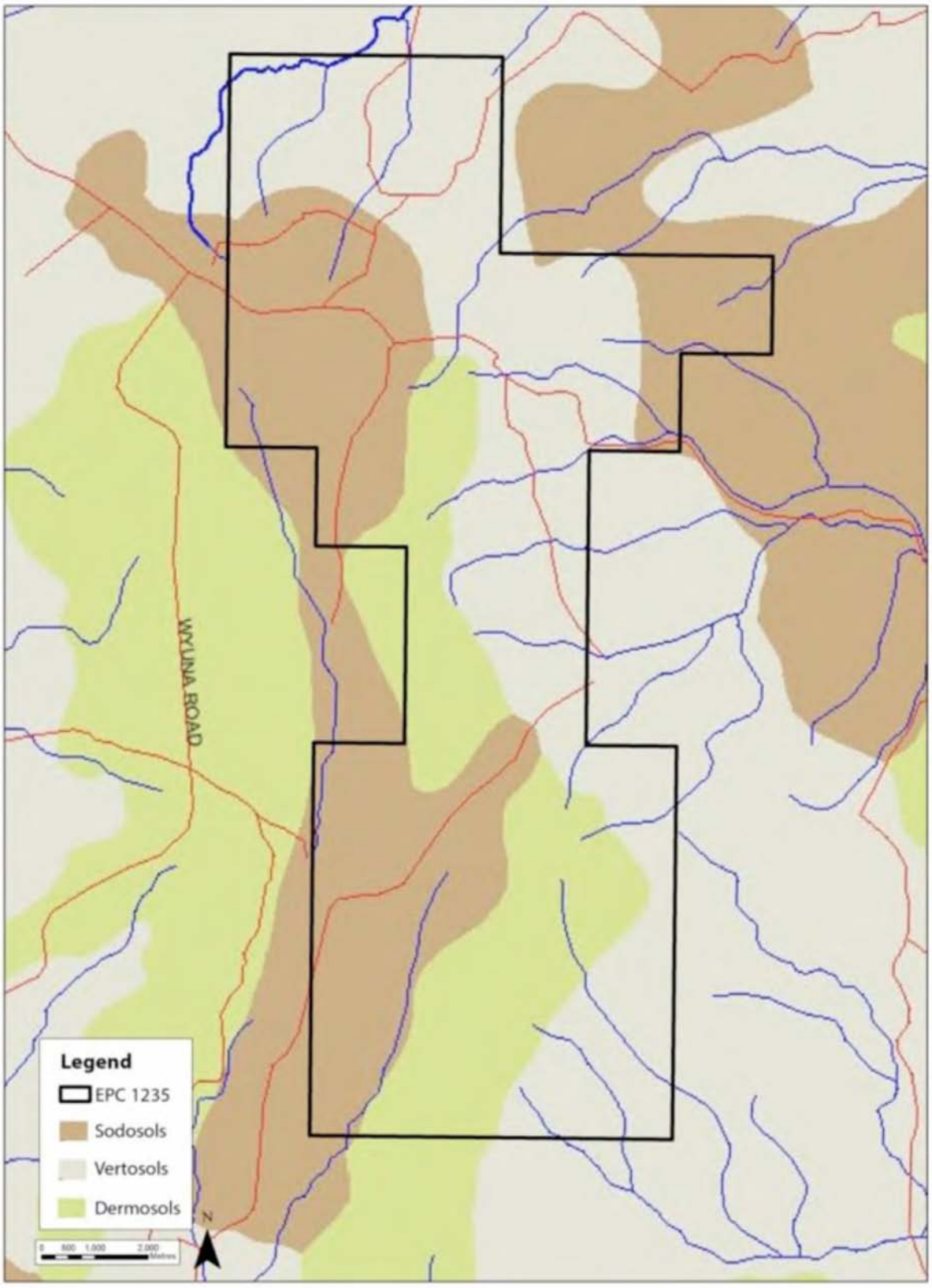


FIGURE 8
Map generated from Australian Soil Resource Information System (ASRIS) of project area (EPC 1235)

Soils

Soils data obtained from the Australian Soils Resource Information System (ASRIS) indicate Vertosols, Sodosols and Dermosols are the dominant soil types in the area (Figure 8). Preliminary site investigations appear to be relatively consistent with the soil mapping, although more prescriptive and detailed assessment is required.

Vertosols are clay soils that shrink and swell, and crack as the soil dries (see Figure 9). Australia has the largest and greatest variety of vertosols, including deep forms (up to six metres or more). Largest single area occurs in the arid and semi-arid interior of the continent. Vertosols are used for grazing of native and improved pastures, dryland agriculture (if topographical relief and climatic conditions are suitable) and irrigated agriculture (Saunders Havill, 2011).

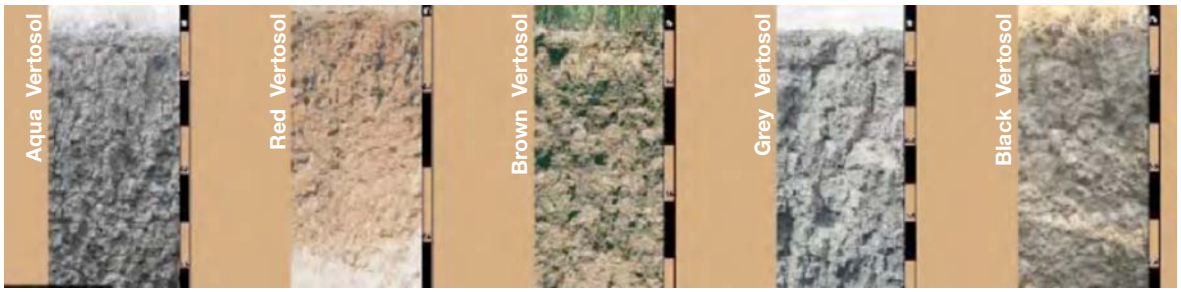


FIGURE 9
Typical profiles of Vertosols

Sodosols have an abrupt clay increase down the profile and high sodium content, which may lead to soil dispersion and instability. Seasonally perched water tables are common and subsoil horizons have a striking prismatic or columnar appearance. Sodosols are usually associated with dry climate and are widely distributed in the eastern half of Australia and the western portion of Western Australia (see Figure 10). Common land uses include grazing of native and improved pastures for both dryland and irrigated agriculture, and forestry. Many will hardset when dry and are prone to crust formation (Saunders Havill, 2011).

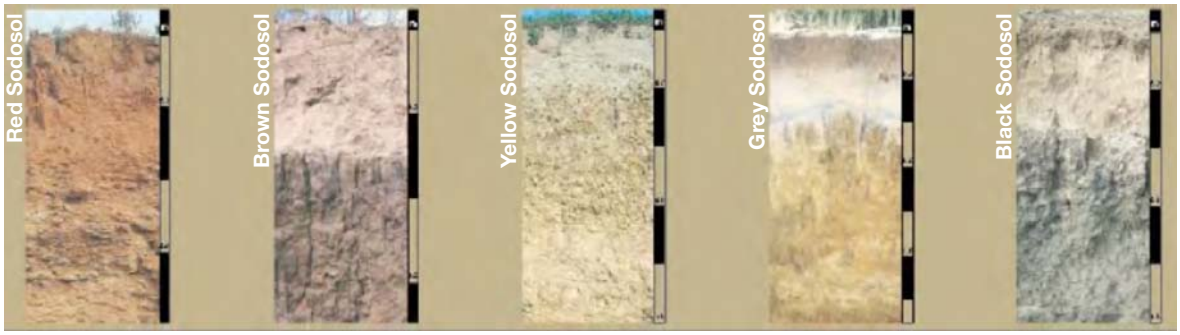


FIGURE 10
Typical profiles of Sodosols

Dermosols are moderately deep and well-drained soils (see Figure 11). They may be strongly acidic in high rainfall areas or highly alkaline if they contain calcium carbonate. Dermosols support a wide range of land uses including cattle and sheep grazing of native pastures, forestry and sugar cane (Saunders Havill, 2011).

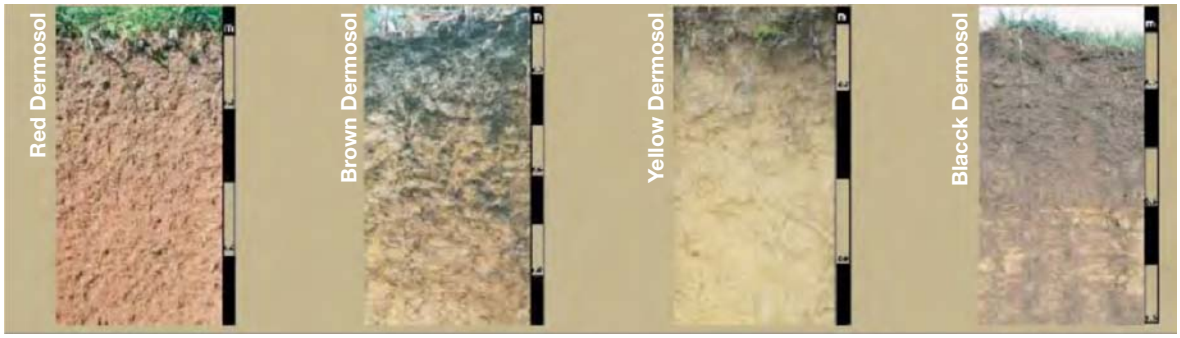


FIGURE 11
Typical profiles of Dermosols

A detailed soil assessment will be undertaken as part of the EIS.

Geology

Regional

The area is located in the Bowen Basin between two major post-depositional structural components: the Comet Platform to the east and the Denison Trough to the west. The coal sequences were deposited during the Permian Age and preserved under Triassic and younger strata. The strata dip at shallow angles typically under five degrees.

Strata on the tenement comprise, from the base upwards, the Maria, Crocker, Macmillan Formations, which are overlain by the substantive coal-bearing sequences: Fair Hill, Burngrove and Rangal. The coals of the Rangal, Burngrove and Fairhill coal sequences are targets and occur at shallow depths (Figure 12). Typically strata comprise a series of carbonaceous mudstones, siltstones, sandstones, volcanic tuffaceous units and coal seams that are described in the Geology of Australian Coal Basins (Mallett, and others, 1995).

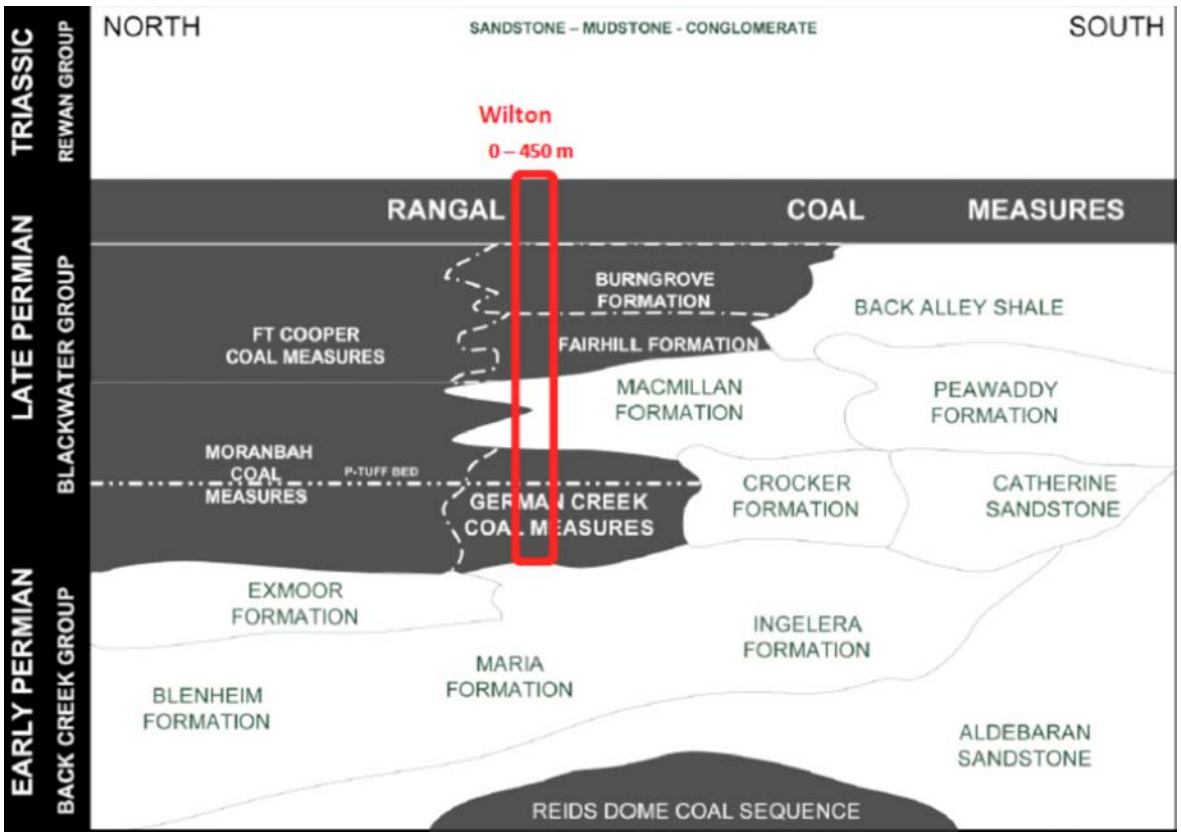


FIGURE 12
The Wilton Project Geological Stratigraphic Profile

Water

Surface water

The Wilton Project site is located in the upper Fitzroy River Basin at the headwaters of the Mackenzie River catchment. The streams (Boggy Creek and tributaries) in the south west of the project area flow into the Nogoa River just upstream of its confluence with the Mackenzie River. All other streams flow directly into the Mackenzie River (including Sandy, Cattle and Frying Pan Creeks).

The majority of the project site has been altered by agricultural practices (light to medium density cattle grazing) and road and rail tracks. The impacts of these activities, including land clearing, weed invasion and exacerbated erosion processes are observed in the project area. The project area experiences substantial temporal variability in rainfall and the drainage network is highly ephemeral.

Environmental values are the identified qualities of waterways that need to be protected from the effects of pollution, waste discharges and other threats.

Aquatic ecosystems

The aquatic ecosystem values of the Nogoa system are considered to be Slightly to Moderately Disturbed (SMD) as a consequence of the surrounding land use (ie largely grazing and agriculture) and flow modification. However, the biological communities are thought to remain in a healthy condition and ecosystem integrity is likely to be largely retained.

Irrigation

Cropping and agricultural activities are extensively conducted in the Nogoa catchment.

Recreation

The human use environmental values of the subcatchment could include swimming, fishing and visual appreciation.

Stock watering

Opportunistic water supply for production of healthy livestock may occur upstream and downstream of the project. Stock grazing is the dominant land use of subcatchment, comprising some 96% of all activities.

Industry

Currently, there is one other mining project (Ensham Coal Mine) within the subcatchment.

Drinking

Town water for downstream towns is extracted from the Fitzroy River basin (of which the Nogoa River system is part).

Cultural and spiritual values

Custodial use of water resources by the traditional owners, upstream and downstream.

Further investigation in surface water quality, users and resource will be conducted as a part of the proposed EIS studies.

Groundwater

A recent study of the groundwater regional resources conducted by Australasian Groundwater and Environmental Consultants (2006) identified only limited use of the groundwater resources. This indicates there is potentially a limited groundwater resource or the water quality of the resource is poor. The study identified most of the bores were targeting the coal seam aquifiers. Coal seam aquifiers are typically low yielding (0.1-0.8 litres per second) and of poor water quality (moderately saline waters).

A detailed study of the nature, extent and users of groundwater will be undertaken as part of the EIS process.

Ecology

Flora

The land in the area has been largely disturbed by cattle grazing and farming activities. Pasture improvement has led to the clearing and raking of timbered areas, generally in undulating to flat areas. The north-south ridge which dominates the topography of the area is less disturbed and still supports some areas of remnant open woodland. The only other remnant vegetation on the project area is the associated riparian areas of drainage lines.

A desktop study of the vegetation communities belonging to the project area was conducted using the DERM regional ecosystem (RE) mapping. Ten regional ecosystems displaying different vegetation were identified as existing on the project site from the RE mapping (see Table 2 and Figure 13). Of the ten RE's, there are three 'Endangered' RE (EREs) and one 'Of Concern' RE. The remaining six REs are classified as 'Least Concern'.

TABLE 2 *List of Regional Ecosystems occurring on the Project*

REGIONAL ECOSYSTEM CODE	SHORT DESCRIPTION	VMA AND BD STATUS
11.3.3	*Eucalyptus coolabah* woodland on alluvial plains	Of Concern, Of Concern
11.3.25	*Eucalytus tereticornis* or *E. camaldulensis* woodland fringing drainage lines	Least Concern, Of Concern
11.4.8	*Eucalyptus cambageana* woodland to open forest with *Acacia harpophylla* or *A. argyrodendron* on Cainozoic clay plains.	Endangered, Endangered
11.9.1	Acacia *harpophylla-Eucalyptus cambageana* open forest to woodland on fine-grained sedimentary rocks	Endangered, Endangered
11.9.2	*Eucalyptus melanopholia* +/- *E. orgadophila* woodland on fine-grained sedimentary rocks	Least Concern, Not of Concern
11.9.3	*Dicanthium spp*., *Astrebla spp*. grassland on fine grained sedimentary rock	Least Conern, No concern at present
11.9.5	*Acacia harpophylla* and/or *Casuarina cristata* open forest on Cainozoic fine-grained sedimentary rock	Endangered, Endangered
11.7.2	Acacia spp. woodland on lateritic duricrust. Scarp retreat zone	Least Concern, No concern at present
11.7.4	*Eucalyptus decorticans* and/or Eucalyptus spp., Corymbia spp., Acacia spp., *Lyscarpus angustifolius* on lateritic duricrust	Least Concern, No concern at present
11.5.16	*Acacia harpopylla* and/or *Casuarina cristata* open forest in depressions on Cainozoic sand plains/remnant surfaces	Endangered, Endangered
11.5.9	*Eucalyptus crebra* and other Eucalyptus spp. and Corymbia spp. woodland on Cainozic sand plains/remnant surfaces. Plateaus and broad crests	Least Concern, No Concern at Present
11.4.8	*Eucalyptus cambageana* woodland to open forest with *Acacia harpophylla* or *A. argyrodendron* on Cainozoic clay plains	Endangered, Endangered

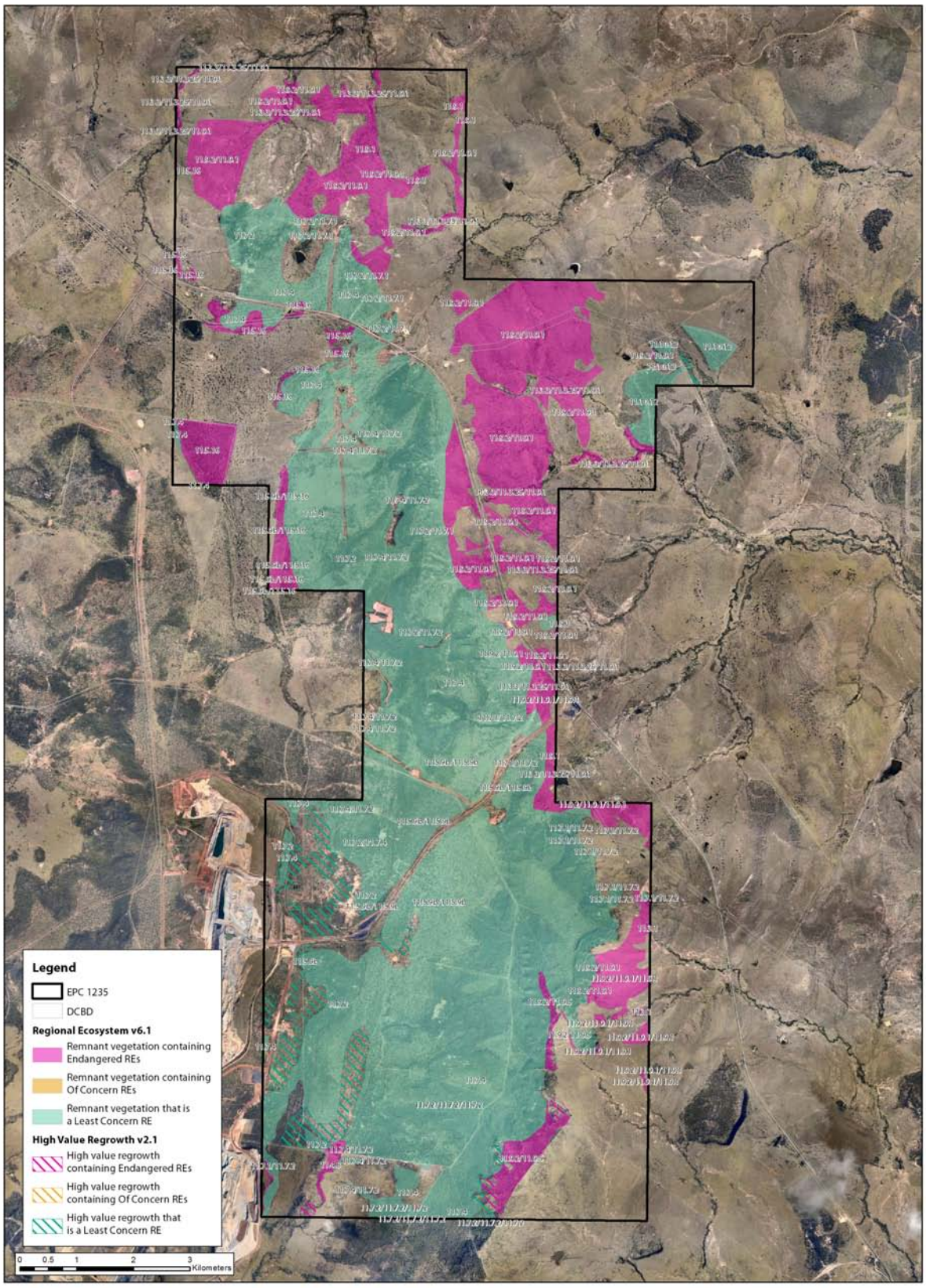


FIGURE 13
A regional ecosystem map

Flora and fauna studies of the project area have commenced and survey results observed that RE 11.9.1 was highly disturbed due to intensive cattle production and had an understorey comprised of the exotic grass Pennisetum ciliare (Buffel Grass). A large quantity of dead standing timber was observed throughout the area. The Acacia harpophylla (Brigalow) observed was in very poor quality, exhibiting signs of die-back and senescence.

Vegetation communities and species of Commonwealth significance

The Federal Government provides listing advice regarding Brigalow TECs. The advice identifies a number of State mapped vegetation communities that potentially contain Brigalow as relevant to the *Environmental Protection Biodiversity Conservation Act 1999* (Cth). Within EPC 1235 the majority of these REs form part of composite regional ecosystems which contain a mixture of RE types.

REs potentially containing 'Brigalow' TECs and within the vicinity of the EPC include:

11.5.16 *Acacia harpophylla* and or *Casuarina cristata* open forest in depressions on Cainozoic sand plains/ remnant surfaces

11.9.1 *Acacia harpophylla – Eucalyptus cambageana* open forest on Cainozoic fine-grained sedimentary rocks

11.9.5 *Acacia harpophylla* and/or *Casuarina cristata* open forest on Cainozoic fine-grained sedimentary rock, and

11.4.8 *Eucalyptus cambageana* woodland to open forest with *Acacia harpophylla* or *A. argyrodendron* on Cainozoic clay plains.

It should be noted state based RE mapping does not necessarily directly correlate to the presence of a Brigalow TEC. The mapping acts as an indicator only, with any Brigalow present required to meet strict threshold criteria before it can be considered relevant to the listed EPBC community.

Threshold conditions

Brigalow TECs protected under the EPBC Act are listed and characterised by the presence of Brigalow as one of the three most abundant tree species in the community (Butler 2007). Brigalow is usually dominant in the tree layer or co-dominant with other tree species such as Casuarina cristata (Belah), other species of Acacia, or species of Eucalyptus. Occasionally Belah or species of Acacia or Eucalyptus may be more common than Brigalow within the broad matrix of Brigalow vegetation.

Butler (2007) considers a "Brigalow" ecological community can be excluded from the list of Brigalow communities if it meets any one of the following three criteria:

- vegetation has been comprehensively cleared (not thinned) within the past 15 years,
- vegetation in which the exotic perennial plants have more than 50% cover, assessed in a minimum area of 0.5ha (100m by 50m), and
- individual patches of "Brigalow" that are smaller than 0.5ha.

Assessment of condition

Figure 14 illustrates the location of confirmed Brigalow TECs present within the project area as well as areas where detailed survey is still required to confirm the presence / absence of Brigalow. Within the unsurveyed areas, existing data suggests these locations are highly unlikely to support any Brigalow TEC due to the historical agricultural disturbance.

These findings have been made as a result of extensive survey effort where 35 transects equating to five km of data has been collected. In addition, large areas of potential habitat have been traversed by foot and vehicle. High value Brigalow habitat with associated micro relief was described during field surveys toward the west of the study site.

Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin

Vegetation communities potentially containing 'Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin Community' TECs and within the vicinity of the project area are mapped as RE 11.9.3 *Dicanthium spp*., *Astrebla spp*. grassland on fine grained sedimentary rock. Desktop analysis shows this RE is restricted to a small pocket to the east of EPC 1235.

Threshold conditions

There are very few patches of undisturbed native grasslands remaining. Most patches now have some degree of disturbance and degradation. The listed natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin ecological community comprises those patches that meet the key diagnostic characteristics listed in Table 3. This table identifies the threshold condition requirements required and categorises the quality of the grassland into 'Best Quality' and 'Good Quality'. Both the 'Best quality' and 'Good quality' patches are included in the listed TEC.

If grassland areas do not meet the quality criteria they cannot be considered to be at TEC. Sampling should be based upon a quadrat size of 0.1ha (e.g. 50 m x 20 m) selected in an area with the most apparent native perennial grass species. Unless exceptional circumstances apply, to maximise the assessment of condition, sites must be assessed during a good season, two months after cessation of disturbance (fire/grazing/mowing/slashing) and within two months of effective rain.

Assessment of condition

The area mapped as potentially containing "Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin Community" contains a set of cattle yards and has been and continues to be used for grazing. The identification of grass species within the vegetation polygon 11.9.3 was difficult due to the absence of reproductive material and the general conditions of the plants.

Pennisetum ciliare was present in large quantities and therefore the vegetation community is unlikely to meet the criteria that less than 30% of the area is to contain perennial non-woody introduced species.

Further assessment will occur two months after cessation of disturbance (fire/grazing/mowing/slashing) and within two months of effective rain as specified within sampling conditions specified in threshold conditions.

The results of further investigation into Threatened Ecological Communities will be included in the forth coming EIS.

TABLE 3 *Condition classes for the natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin Ecological Community*

	BEST QUALITY	GOOD QUALITY
Patch size	At least 1ha; and	At least 5ha; and
Grasses	At least 4 native perennial grass species from the list of perennial native grass indicator species; and	At least 3 native perennial grass species from the list of perennial native grass indicator species; and
Tussock cover	At least 200 native grass tussocks; and	At least 200 native grass tussocks; and
Woody shrub cover [1]	Total projected canopy cover of shrubs is less than 30%; and	Total projected canopy cover of shrubs is less than 50%; and
Introduced species	Perennial non-woody introduced species are less than 5% of the total projected perennial plant cover.	Perennial non-woody introduced species are less than 30% of the total projected perennial plant cover.

[1] The shrub layer is typically absent. However, where shrubs are present, they are defined as woody plants, more than 0.5 m tall that occupy the mid vegetation layer. The upper, or tree canopy layer, also is typically absent but may comprise scattered trees to less than 10% projective crown cover.

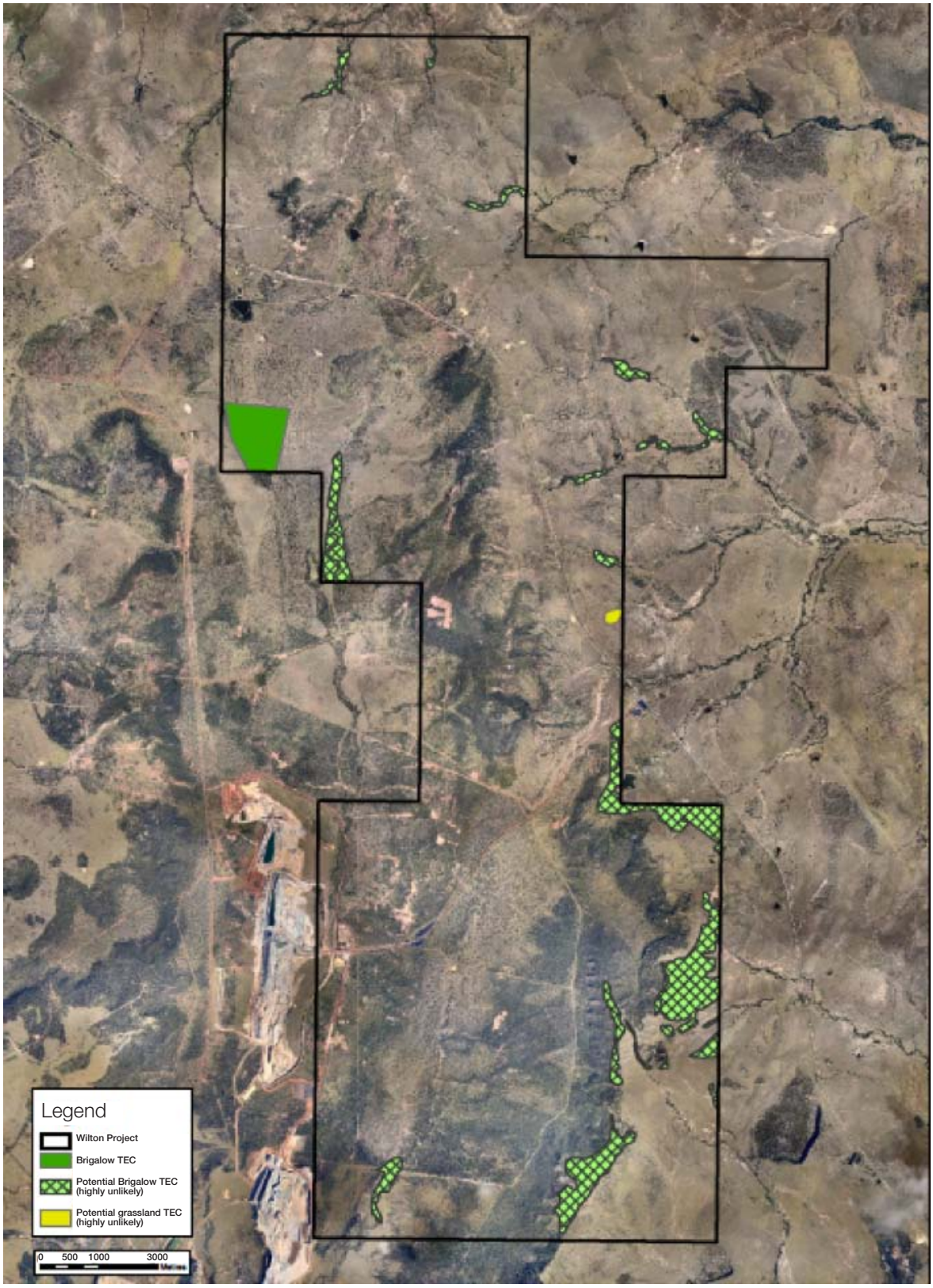


FIGURE 14
Threatened ecological communities (post initial survey)

Weeds

Five "Declared Plant" species under the *Land Protection (Pest and Stock Route Management) Act 2002* are known to exist within the project area region. These are:

- Harrisia Cactus *Eriocereus martinii* (Class 2 pest plant)
- Prickly Pear *Opuntia stricta* (Class 2 pest plant)
- Velvet Tree Pear *Opuntia tomentosa* (Class 2 pest plant)
- Parkinsonia *Parkinsonia aculeata* (Class 2 pest plant), and
- Parthenium *Parthenium hysterophorus* (Class 2 pest plant).

Although these weeds are known to exist, there is little weed invasion of the tree and shrub layers of remaining remnant vegetation. The ground layer, particularly in or adjoining cleared areas, is dominated by grassy environmental weeds, particularly *Pennisetum ciliare* (Buffel Grass) and other introduced grasses.

Prickly Pear *Opuntia stricta*

Fauna

The methodology employed for Fauna surveys included a trap/release program and passive recording conducted over five days and four nights from September 26 to 30, 2011.

Passive recording involved: visiting and assessing representative faunal habitats over the study area; recording the fauna species by observations of actual animals; recognition of characteristic vocalisations; and identification of animal signs. Five systematic trapping sites were selected based on RE mapping and field reconnaissance.

The study area is located within a woodland setting partially cleared in the past for livestock grazing. One hundred and forty (140) terrestrial vertebrate species were recorded during the field surveys of the Study Area, including two species not identified in the database searches, namely *Gallirallis philippenis* (Buff-Banded Rail) and *Rediparra gallinacea* (Comb-Crested Jacana).

The following conservation significant terrestrial fauna species were recorded in the study area:

- *Denisonia maculate* (Ornamental Snake) (EPBC Act: Vulnerable; NCA: Vulnerable)
- *Nettapus coromandelianus* (Cotton Pygmy-Goose) (NCA: Near Threatened; EPBC Act: Migratory)
- *Tachyglossus aculeatus* (Short-Beaked Echidna) (NCA: Special Least Concern (Culturally significant))
- *Lagorchestes conspicillatus* (Spectacled Hare-Wallaby) (Biodiversity Assessment and Mapping Methodology (BAMM) non-EVR priority species for the Brigalow Belt North bioregion).

The ANABAT surveys recorded at least eight micro-bat species, of which six could be definitively identified. Calls at a frequency of around 40 kHz that could have been either *Chalinolobus picatus* (Little Pied Bat) (NCA: Near Threatened) or *Scotorepen greyii* (Little Broad-Nosed Bat) were recorded at each of the five survey sites. These calls were not of high enough quality to definitively identify Little Pied Bat; however, Little Pied Bat is considered likely to occur in this region.

The following species listed as Migratory under the EPBC Act were recorded in the study area:

- *Nettapus coromandelianus* (Cotton Pygmy-Goose)
- *Ardea modesta* (Eastern Great Egret)
- *Gallinago hardwickii* (Latham's Snipe)
- *Acrocephalus australis* (Australian Reed-Warbler).

Three common (Non Wetland) migratory species were identified to potentially occur within the project area. These include:

- *Merops ornatus* (Rainbow Bee-Eater)
- *Apus pacifus* (Fork Tailed Swift)
- *Haliaeetus leucogaster* (White Bellied Sea Eagle).

Five EVNT fauna species of relevance to the EPBC Act conservation terrestrial fauna species had the potential to occur within the study area due to the habitat's present ie Intact Brigalow and Gilgaied areas, woodland and non-remnant areas and Eucalypt and Acaia woodlands associated with Rocky Outcrops. These species include:

- Ornamemtal Snake (confirmed)
- Brigalow Scaly Foot
- Dunmall's Snake
- Yakka Skink
- Squatter Pigeon.

All other species were considered unlikely to occur due to a lack of suitable habitat and/or absence of historical records for the region and the fact the study area falls outside the known range.

Further detailed surveys will be undertaken in the summer (optimal time for locating individuals, if present) and will confirm the relevance of these species.

From the initial field studies the following NCA conservation terrestrial fauna species were either confirmed or considered to have the potential to occur within the project area:

Birds

- Cotton Pygmy-Goose
- Radjah Shelduck
- Black-necked Stork
- Australian Painted Snipe
- Square-tailed Kite
- Squatter Pigeon (southern subspecies)
- Black-Chinned Honeyeater

Reptiles

- Ornamental Snake
- Brigalow Scaly-Foot
- Yellow-naped Snake
- Dunmall's Snake
- Golden-Tailed Gecko
- Yakka Skink

Frogs

- Rough Frog

Mammals

- Little Pied Bat

Black-necked stork

Six introduced terrestrial vertebrate species were recorded within the study area, five of which are declared pest species under the *Land Protection (Pest and Stock Route Management) Act 2002*.

Habitat type is a significant factor in determining the composition of the fauna species assemblage of a certain area. Three principal fauna habitat types are present within the study area:

- Eucalypt and Acacia woodland to open-forest,
- Wetlands, and
- Non-remnant – grassland with scattered tress and shrubs on previously cleared areas.

Further detailed investigations will be undertaken as part of the EIS.

Air quality

Air quality values within the vicinity of the Wilton Project area are expected to be primarily consistent with pastoral activities. There is already mining activity close to the western boundary of the project area and this activity may contribute to the air quality values currently observed. The major sources of dust in the project area are likely to be stock movement, working cattle yards and vehicular traffic on unsealed roads, including adjacent mining haul roads and mining activities such as blasting and overburden removal.

Climate is a strong influence on dust generation potential, with the drier winter months more susceptible to dust generation. The seasonal wind roses (BOM 2011) show moderate winds dominate from the northeast to easterly sector in summer and spring. The wind roses show moderate winds from the east to southerly sector dominate the winds during autumn and winter.

A more detailed monitoring program will be required to establish background dust levels. This information will be used in the EIS process.

Noise and vibration

Noise levels within the Wilton Project area are mainly influenced by pastoral activities, rail, and mining activities. Noise from mining activities is generated from the nearby Ensham Coal Mine and other coal mines to the north of the project area (eg. Gregory Crinum). The Blackwater railway line is situated through much of the MLA area and will also be an additional noise and vibration source in the area.

The nearest township is over 30 kilometres away (Comet) and is unlikely to be affected by noise from the Wilton Project. There are no nearby homesteads within five kilometres of the proposed mine.

Additional studies will be required to determine the existing noise environment, the impact of project activities and to develop noise mitigation strategies on sensitive receptors close to the project area.

Indigenous cultural heritage

The Kangoulu People were the most recent applicants for a Native Title Claim over the proposed project area. A Cultural Heritage Study will be conducted for the project area.

Non-Indigenous cultural heritage

A Non-Indigenous Cultural Heritage Study will be conducted as part of the EIS process.

Social impacts

The Wilton Project is positioned across the boundary of the Issac and Central Highland Regional Shire Council areas. The closest township to the Wilton Project is Comet, which is located approximately 30 kilometres to the south. The major regional centre is the township of Emerald, which is approximately 45 kilometres south west.

Emerald was established in 1879 as a base for the railway line, which was expanding out from Rockhampton into the central west.

Mining is now a significant force within the local economy. There is a large mining workforce residing within the Emerald township that commutes daily to coal mines within the district.

Mining in the region has also provided employment, business and social development opportunities. There are a number of wide-ranging support industries providing the services and facilities to meet the needs of the mines, related commercial growth and the subsequent increased population (short and long term).

A Social Impact Assessment will be undertaken to determine the social and economic impacts of the Wilton Project. The assessment will involve consultation and engagement with stakeholders.

As part of this process a Social Impact Management Plan will be developed. It will apply to the construction, commissioning, operation and the decommissioning of the Wilton Project. The plan will encompass Wilton Project's potential impacts (positive and negative), mitigation and management strategies, implementation actions and the roles and responsibilities of the proponent, government, service providers and communities.

For example, the Wilton Project will positively contribute to the local socio-economic environment through employment and commercial opportunities such as associated service industry growth. This will have a flow-on effect by generating training and community development opportunities. However, the project will also add to existing pressures on short-term and long-term accommodation and access to community services. As a result, management strategies will need to be developed that enable the community to benefit from these economic opportunities while at the same time attempting to mitigate other impacts which could negatively impact community values and lifestyles.

Potential impacts

Land

The existing land use in the Wilton Project area is low intensity cattle grazing. Due to the nature of the proposed activities, grazing land use will be reduced progressively in the mining area for the duration of the mine life. However, ultimately rehabilitation objectives for the project will restore grazing land use.

The Wilton Project site landscape varies from undulating land in the north and eastern parts of the project area, to lateritic ridges and outcrops in the west area.

The likely impacts on landscape and topography will include:

- landform changes
- final voids
- changes to drainage pathways and geomorphology, and
- aesthetic values as a result of changing land form.

While these impacts are unavoidable due to the nature and extent of the proposed mining activity, the EIS will assess these impacts and develop appropriate mitigation measures (such as progressive rehabilitation) to manage impacts.

“Due to the nature of the proposed activities, grazing land use will be reduced progressively in the mining area for the duration of the mine life. However, ultimately rehabilitation objectives for the project will restore grazing land use”

Water supply and hydrological impacts

Once the project has progressively ramped up to a full production rate of 10 Mtpa, a significant amount of water will be required. Sources of water to sustain this production include commercial allocations, mine affected water captured on-site and potentially mine affected water captured at nearby mines. Ultimately the project intends to maximise water efficiency and recovery in the process circuit.

All watercourses within the project area are ephemeral. Some of the potential impacts on water quality as a result of the proposed mining activity include:

- increased suspended sediment loads from disturbed ground, coal handling and general mine activity,
- hydro-carbon or other trace element contamination,
- discharges of mine affected water from extreme rainfall events, and
- discharges of effluent from sewage or ablution facilities.

All the impacts will be assessed as part of the EIS process. Management strategies to prevent the impacts from occurring will be developed and as part of the EIS process a Water Management Plan will be developed.

Groundwater

The potential impacts on groundwater from the Wilton Project include:

- groundwater drawdown and changes in the coal seam and alluvial aquifers, and
- groundwater contamination.

Groundwater analysis will be used to assess the current groundwater environment and to help predict regional impacts on groundwater users and the environment resulting from mine related groundwater extraction and any final voids left after mining ceases.

Ecology

Clearing of regrowth and natural vegetation for mining activities will be one of the most significant impacts on flora and fauna in the Wilton Project area. As mining progresses, previously cleared land currently used for cattle grazing will become unavailable until a stable rehabilitated landform is created that enables grazing to recommence.

Detailed flora and fauna investigations have commenced across the project area and will be used to develop flora and fauna management plans as a part of the EIS process.

Vegetation within the proposed mining and infrastructure footprint will be progressively cleared to allow mining to progress. Vegetation outside the mining footprint will be retained and enhanced through weed control and other measures.

The potential impacts of this clearing include the loss of habitat for fauna, weed invasion and secondary impacts associated with dust and changes to surface hydrology and groundwater. Mitigation measures will be developed to assist in ameliorating the impacts of the proposed mine, particularly to sensitive areas.

Noise

Noise and vibration sources from the project will include mining (equipment, machinery, and vehicles) and processing activities. The proposed operation will be required to meet noise standards from both the *Coal Mining Safety & Health Act 1999* and the *Environmental Protection Act 1999*.

A baseline noise study will be conducted as a part of the EIS process.

Air quality

The principal source of dust will be from exposed surfaces and mining. During mining activities, dust generation will be mitigated though dust suppression techniques. The proposed operation will be required to meet air quality standards from both the *Coal Mining Safety & Health Act 1999* and the *Environmental Protection Act 1999*.

A detailed air quality survey will be conducted as a part of the EIS process.

Socio-economic impacts

Socio-economic impacts associated with the construction and operations of the proposed Wilton Project are likely to include:

- Employment opportunities for skilled and unskilled workers, particularly in engineering and technical trade areas.
- An increase in local population where workers and families may relocate to Emerald.
- An increase in workers and families relocating from outside the region to centres such as Mackay.
- Greater demand for local community services and facilities.
- Increased demand for short and long-term accommodation in Emerald and Blackwater.
- Increased business opportunities for local and regional suppliers.
- Increased revenue to the government sector from infrastructure charges, taxes and royalties.
- Increased pressure on existing health and other community services due to short and long-term population growth.
- Community development particularly through the provision of economic and social development opportunities.
- Contribution to long-term development objectives and opportunities with Traditional Owner groups.

An assessment of socio-economic impacts will be undertaken and linked within information gathered through community engagement activities.

Mitigation and monitoring measures will be developed to:

- mitigate any significant adverse impacts identified.
- maximise benefits, particularly at the local and regional scale.
- continue to monitor throughout the various stages of the project to validate impact predictions made.
- manage the process in a structured manner that has been approved by project stakeholders.

Cultural heritage

A Cultural Heritage Management Plan (CHMP) will be negotiated with the Kangoulu People in accordance with the requirements of the *Aboriginal Cultural Heritage Act 2003*.

All activities undertaken on site will be in accordance with the approved CHMP.

Mine waste

General waste will be created during the construction and operational stages. General waste likely to be generated during construction includes green waste, concrete and rubble, metals, waste hydrocarbons, timber, tyres, sealant/resin and paint materials, sewage, wash-down water and exhaust emissions. Waste generated during the operational phase will include green waste, batteries, paper and cardboard products, scrap metal, tyres, oily waste such as rags and filters, water treatment plant waste, sewage and domestic rubbish.

A Waste Management Plan (WMP) will be developed and included in the EIS process. The goal of the WMP is to reduce potential health and environmental hazards occurring from waste generation and disposal. Disposal of waste is to be considered when no other economically feasible option for reuse or treatment exists. The disposal method will seek to minimise environmental effects and the potential for land contamination.

The following principles, in preferential order, will be applied to management of waste at the activity:

1. Waste avoidance and minimisation
2. Waste reuse
3. Waste recycling
4. Energy recovery from waste, and
5. Waste disposal.

Hazardous materials

It is unlikely hydrocarbons, chemicals and detergents will be stored on-site in significant quantities during the construction and operational phases of the project. Only quantities required for day-to-day operation will be stored on-site and will be stored in accordance with the requirements of the relevant Australian Standard.

Traffic and transport

The major roads likely to be used to access the project include the Gregory Development Road, the Lilyvale Mining Road and Fairhill Road. All roads are sealed or partially sealed and currently carry traffic for a number of existing mines in the vicinity of the project area.

As a part of the EIS process a traffic/transport impact assessment will be undertaken in accordance with the Department of Main Roads' Guidelines for the Assessment of Road Impacts of Development Proposals. The assessment will look at both the construction and operational phases of the project and assess likely impacts on the existing road network and identify any required mitigation measures.

Environmental management

An Environmental Management Plan (EMP) for the Wilton Project will be developed and form an integral part of the EIS. The EMP will be developed from the information in the EIS and set commitments to environmental management in order to protect the identified environmental values. The EMP will be based on these commitments.

> *"The general contents of the EMP will comprise the project's commitments to acceptable levels of environmental performance"*

The general contents of the EMP will comprise:

Project's commitments

The project's commitments to acceptable levels of environmental performance, including environmental objectives like levels of expected environmental harm, performance standards and associated measurable indicators, including progressive and final rehabilitation, performance monitoring and reporting.

Impact prevention

Impact prevention and control strategies to satisfy the commitments.

Corrective actions

Corrective actions to rectify any deviation from performance standards.

The EMP will be developed as stand-alone documentation and will contain management plans, procedures, strategies and supporting information in the appendices.

Rehabilitation

The rehabilitation objectives for the Wilton Project are:

- Return the majority of disturbed land to a condition similar to the pre-existing condition of grazing or native habitat or to an agreed beneficial use.
- Upon rehabilitation of the project, make disturbed areas stable to ensure the proposed subsequent land use is not compromised by surface instability or erosion.
- Ensure constructed landforms are geo-chemically stable to the extent they do not impact on surface water or groundwater quality and downstream water users.

Rehabilitation trials during the operational phase of the Wilton Project will be conducted to provide further information to select the most appropriate rehabilitation techniques suited to the local environment and landforms. The rehabilitation strategy will remain flexible and will be amended as new rehabilitation techniques are proven to be preferable.

The rehabilitation of disturbed areas will be carried out progressively throughout the life of the mining project, where possible, consistent with operational requirements. Advantages to progressive rehabilitation include:

- minimisation of the amount of land disturbed at any one time
- decreased generation of dust and contaminated runoff
- improved visual amenity
- decreased chance of colonisation of weeds and pest species, and
- opportunity for trials to be undertaken over time to ensure the best possible rehabilitation techniques are used.

During the decommissioning phase all non-permanent structures including accommodation units, offices, administration buildings, laboratories, ablutions, and recreational buildings will be on-sold, packed down and removed from site.

Any permanent structures remaining will be demolished and scrap materials will be recycled where practicable. Concrete footings will be broken down and removed from site. Roads may remain by agreement with the landholders. If site or access roads are not needed post decommissioning, the concrete/bitumen base will be removed and the area will be ripped, topsoiled and revegetated.

References

- Eschelon Mining Services, August 2011, 'EPC 1235 (Wilton Project), Project Description'.
- Northern Resource Consultants, 18 January 2012, 'Wilton Project EPBC Referral'.
- Saunders Havill Group, 25 November, 2011, 'Wilton Coal (EPC1235) Flora and Fauna Technical Report'.
- Saunders Havill Group, 1 December 2011, 'Wilton Coal (EPC1235) Flora Survey – Regional Ecosystem Mapping Amendment Request'.
- Department of Industry, Tourism and Resources 2006, *Community Engagement and Development: Leading Practice Sustainable Development Program for the Mining Industry*, Commonwealth of Australia, Canberra.
- Australian Soil Resource Information Centre (2009) Available from http://www.asris.csrio.au/index_it.html. Accessed December 12, 2011.
- Australasian Groundwater & Environmental 2006, 'Ensham Central Project – EIA Groundwater Impact Assessment'.
- *Environment Protection Act 1994* (EP Act) (Qld)
- *Stock Routes Land Protection Management Act 2002* (Qld)
- *Environmental Protection Biodiversity Conservation Act 1999* (Cth)
- *Coal Mining Safety & Health Act (1999)* (Qld)
- *Aboriginal Cultural Heritage Act 2003* (Cth)

Appendices

1.1 Directly affected stakeholders

STAKEHOLDER	PROPERTY	CONTACT DETAILS
Ron & Valda Beak	Lot 10, SP197246	Riverview
Gary Ohl	Lot 10, SP197246	Riverview
Richard & Robyn Simmons	Lot 4, CP 843145 Lot 3, CP911006 Lot 2, SP165518	Fairhill
Mark MacFarlane	Lot 4, CP 843145 Lot 3, CP911006 Lot 2, SP165518	Fairhill
Michael, John, Edward, Simone & Margaret Shaw	Lot 2, CP911007 Lot 3, CP911009	Wanditta
Carolyn & Keith Chapman, and Debra & Murray Haigh	Lot 1, SP165518 Lot 6, TT74 Lot 1, SP160774	Red Rock
David & Geoffrey Kerle & Megan Daniels	Lot 1, RP909949	Billabong Plains
Bligh Coal Ltd, Idemitsu Queensland Pty Ltd, J Power Australia Pty Ltd, LG International (Australia) Pty Ltd	Lot 31, CP864573 (Ensham)	c/o Colin Moffat Ensham Resources GPO Box 814, Brisbane Qld 4001
Powerlink	Lot 1, SP165518	Property Services PO Box 1193, Virginia Qld 4014
SunWater		Tom Wallwork Area Operations Manager 87 Emerald Street, Emerald Qld 4720
Kangoulu People		Jonathon Malone Lumburra Bimbi Pty Ltd PO Box 637, The Gap Qld 4061
QR National (railway easement)		Cole Arnold, Supervisor Small Street, Emerald Qld 4720
QGC (OME Resources)	EPP806 (ATP)	Darryl Morrissy OME Resources Australia Pty Ltd 275 George Street GPO Box 3107, Brisbane Qld 4001
Xstrata Coal	EPC713 (Shares northern boundary of project tenement)	Level 13 Riverside Brisbane Qld 4001
Argos Proprietary Ltd (Subsidiary of Aquila)	EPC966 (Shares eastern boundary of project tenement)	GPO Box 2591 Brisbane Qld 4001
Stanmore Coal	EPC2177	GPO Box 2602 Brisbane Qld 4001
BNG (Surat) Pty Ltd	EPP684	Qld Gas Company GPO Box 3107, Brisbane Qld 4001
Lowell Petroleum	EPP564	Molopo Energy Ltd PO Box 223, Melbourne Vic 3001

1.2 Interested stakeholders

STAKEHOLDER	CONTACT DETAILS
LOCAL GOVERNMENT	
Mayor Peter Maguire Central Highlands Regional Council	PO Box 21 65 Egerton Street Emerald Qld 4720
Mayor Cedric Marshall Isaac Regional Council	PO Box 97 Moranbah Qld 4744
LOCAL INTEREST GROUPS	
Central Highlands Regional Resources Use Planning Cooperative (CHRRUP)	Megan Daniels PO Box 115 Emerald Qld 4720
Central Highlands Cotton Growers and Irrigators Association	Ross Burnett PO Box 33 Emerald Qld 4720
Central Highlands Development Corporation	Sandra Hobbs PO Box 1425 Emerald Qld 4720
Fitzroy Basin Association	Suzie Christensen PO Box 139 Rockhampton Qld 4700
Fitzroy Basin Foods and Fibres	Ced Loch 26 Old Airport Drive Emerald Qld 4720
AgForce	PO Box 13186 North Bank Plaza Brisbane Qld 4003
STATE GOVERNMENT	
Department of Environment and Resource Management (DERM)	James Monkivitch Manager, Statewide Environmental Assessments GPO Box 2454 Brisbane Qld 4001
Department of Communities	Emerald Client Service Centre PO Box 37 Emerald Qld 4720
Department of Transport and Main Roads	GPO Box 1412 Brisbane Qld 4001
Department of Employment, Economic Development and Innovation	99 Hospital Road Emerald Qld 4720
Department of Local Government and Planning	PO Box 15009 City East Qld 4002

COAL OF QLD
RESOURCES | EXPLORATION | MINING

nrc
northern resource consultants

CONTACT DETAILS

Coal of Queensland Pty Ltd

PO Box 7168
East Brisbane QLD 4169

phone (07) 3392 3888

fax (07) 3392 3800

web www.qldcoal.com

Northern Resource Consultants

PO Box 387
Belgian Gardens QLD 4810

phone 07 4772 6500

fax 07 4772 2441

web www.northres.com.au