



**NEW HOPE
GROUP**

New Lenton Coal Project

Initial Advice Statement

December 2013

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ABBREVIATIONS

| | |
|----------|--|
| CHPP | Coal Handling and Preparation Plant |
| DotE | Department of the Environment (Commonwealth) |
| DEHP | Department of Environment and Heritage Protection |
| DERM | Department of Environment and Resource Management (Queensland)(<i>Now DEHP</i>) |
| DNRM | Department of Natural Resources and Mines |
| DSEWPC | Department of Sustainability, Environment, Water, Population and Communities (Commonwealth)(<i>Now DotE</i>) |
| EA | Environmental Authority |
| EIS | Environmental Impact Statement |
| EP Act | <i>Environmental Protection Act 1994</i> |
| EPBC Act | <i>Environmental Protection and Biodiversity Conservation Act 1999</i> |
| EPC | Exploration Permit Coal |
| EPP | Exploration Permit Petroleum |
| ERE | Endangered Regional Ecosystem |
| MLA | Mining Lease Application |
| ML | Mining Lease |
| Mt | Million tonnes |
| NC Act | <i>Nature Conservation Act 1992</i> (Queensland) |
| NHCL | New Hope Corporation Limited |
| NHE | New Hope Exploration Pty Ltd |
| NLC | New Lenton Coal Pty Ltd |
| NSW | New South Wales |
| QLD | Queensland |
| RE | Regional Ecosystem |
| ROM | Run of Mine |
| VM Act | <i>Vegetation Management Act 1999</i> (Queensland) |
| VMR | <i>Vegetation Management Regulation 2000</i> (Queensland) |

1. Introduction

1.1 Project Background and Location

New Lenton Coal Pty Ltd (NLC), a wholly owned subsidiary of New Hope Corporation Ltd (NHCL) and Joint Venture Partners Formosa Plastics Group of Taiwan, proposes to undertake mining activities at the New Lenton Coal Project (the Project) based on a new Mining Lease Application (MLA) 70456 adjacent to its existing Mining Lease (ML) 70337. The Project will facilitate the future expansion of New Lenton Coal Mine, which is proposed to be developed on ML 70337 and is currently approved for mining up to 2 million tonnes per annum (Mtpa) of Run of Mine Coal (ROM).

The Project will involve the extension of the approved open cut mining operations on ML 70337, and associated on-site infrastructure to produce up to 8 Mtpa combined of coking and thermal ROM coal products for Australia's export market. Production from the Project is expected to commence during 2016-2017, and extend for approximately 20 to 25 years until the depletion of the identified reserve.

The Project is located in the Bowen Basin coalfields, approximately 65 kilometres north-west of Nebo, 65 km north of Moranbah and 20 km south of Glenden in Central Queensland. The nearest major regional centre is Mackay, located approximately 120 km east north east of the Project ([Figure 1](#)).

The Project site is located within the Isaac Regional Council area. The central portion of the Project area is located on gently undulating plains and slopes (1 % to 3 %), with slopes becoming more moderate (> 5 %) on the sandy foothills, rising steeply up to the sandstone plateaus to the north and south-west of the project area. The typical elevation ranges from 333 metres above Australian height datum (m AHD) on the gently undulating plains and slopes, up to 480 m AHD on the sandstone plateaus in the north.

Hill Creek captures and drains overland flow from numerous ephemeral creeks, that originate within the upper slopes of the sandstone foothills and flow in a south-east direction across MLA 70456. All the surface water drains south-east towards the Isaac River, which then flows into the Burton Gorge Dam.

The Project will use the existing rail network which will allow transport of the coal to the established coal loading ports of Dalrymple Bay near Mackay and/or Abbott Point near Bowen.

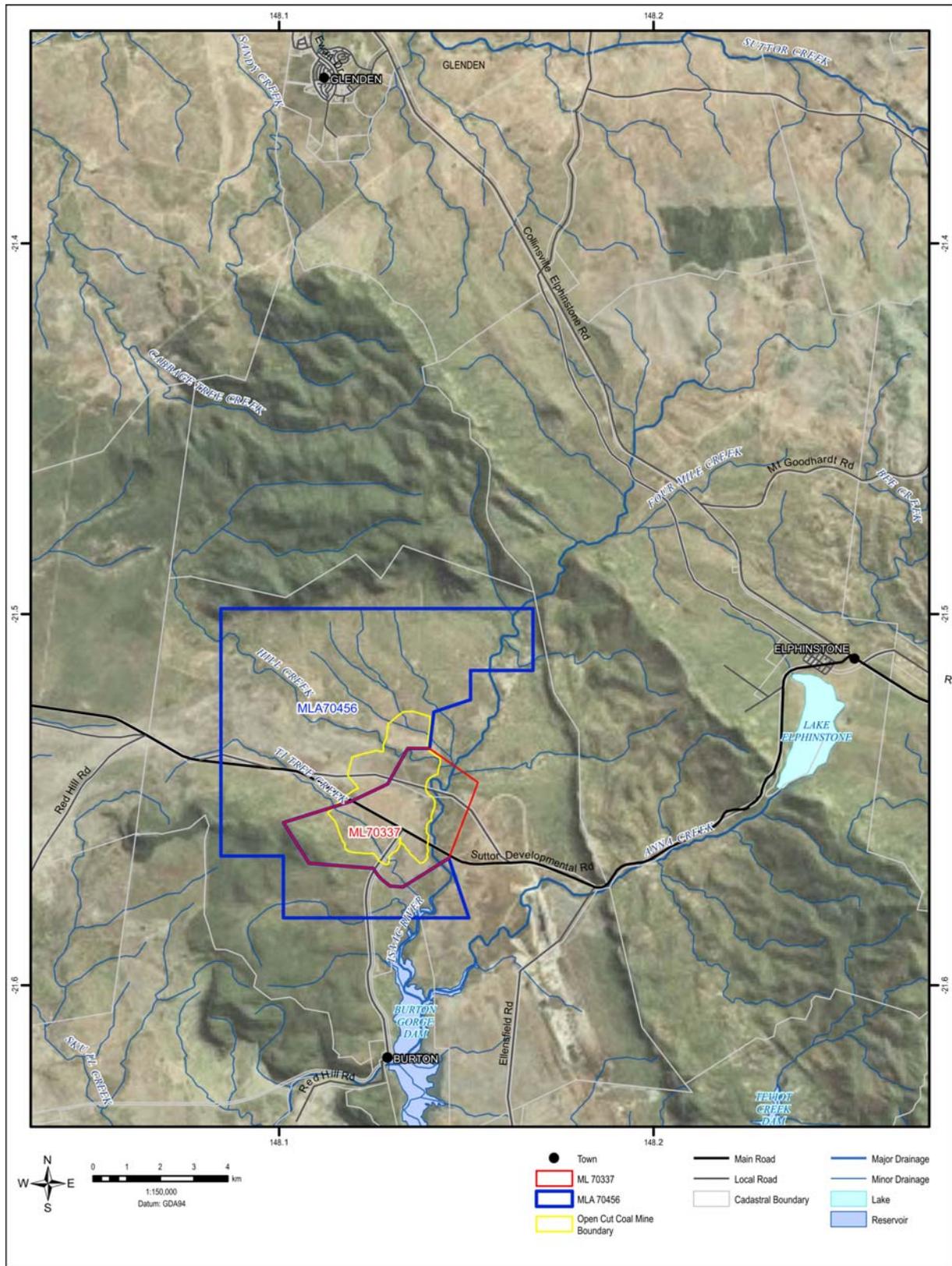


Figure 1 - Project Location

1.2 Proponent

NLC's parent company, NHCL, currently operates two open cut coal mines in southern Queensland:

- New Acland Coal Mine near Oakey on the Darling Downs; and
- Jeebropilly Coal Mine near Ipswich.

NHCL is an independent Australian company listed on the Australian Stock Exchange. NHCL has been in operation for over 50 years and holds direct interests in coal mining, coal port operations, pastoral operations, and other energy resource activities in Queensland.

NHCL's mines contribute substantially to the economy of Queensland and its communities through employment generation, use of external businesses and payments to the Queensland government and government-owned corporations. The estimated net contribution to State Product from NHCL's operations is significant in terms of capital expenditure and employment opportunities, during construction and operation of approximately 300 and 200 people respectively. This economic contribution will increase as a result of the Project.

1.3 Purpose and Scope of Document

This Initial Advice Statement (IAS) has been prepared to enable advisory agencies and other stakeholders to have effective input into establishing the Terms of Reference (ToR) for an Environmental Impact Statement (EIS) for the Project.

In general, this IAS provides an overview of the Project and its potential impacts, and describes:

- project overview;
- a project physical setting; and
- potential environment and social effects

2. Project Description

2.1 The Resource

The Project's high quality coking coal deposit is located within the Rangal Coal Measures of the Bowen Basin with a current estimated resource (JORC) of 741 million tonnes (Measured, Indicated & Inferred). NLC's proposed open-cut mine plan will primarily target the Leichardt and Vermont coal seams within the Rangal Coal Measures.

2.2 Project Investment and Significance

NLC's preliminary estimate of the capital expenditure required to take the Project to full production is approximately AUD \$700 million, which includes infrastructure costs and the purchase of a production fleet. The Project is expected to contribute significantly to the local and State economies through associated mining related expenditure, royalties, investment, employment and opportunities for external support businesses.

2.3 Employment Opportunities

The construction phase of the Project will involve the establishment of the surface infrastructure, and is expected to take between 12 and 24 months to complete. The construction phase will provide opportunities for local employment in construction, transport, and the supply of goods and services. NLC envisages that the construction phase of the Project will employ approximately 200 people at its peak.

At full production the Project will directly employ approximately 300 people. In addition to direct employment opportunities, approximately another 1500 people are expected to be indirectly employed as a result of the flow on effects to other businesses – the economic multiplier.

2.4 Project Design

NLC is currently evaluating the most cost effective and efficient designs for the open cut mining operation, as part of on-going feasibility work for the Project. These investigations include the extent of the open cut operations, out-of-pit dump designs, and the infrastructure requirements including location and general layout. The current conceptual plan for these Project elements is shown in [Figure 2](#).

2.4.1 Stage 1 - Open Cut Mining within ML70337

NLC is planning to commence mining operations within ML 70337 under the current environmental authority (EA) within the next two years (Stage 1). This preliminary stage of development will be at a nominal production rate of up to 2.0 Mtpa Run of Mine (ROM) coal in accordance with the current EA. Stage 1 will continue until Stage 2 is approved.

2.4.2 Stage 2 – Expansion of Open Cut Mining within ML70337 and MLA70456

The Project involves an increase in production tonnage within the current ML 70337 and an expansion over a new adjoining area MLA 70456 to mine a combined tonnage of up to 8 Mtpa ROM (Stage 2). The Project will allow the future continued expansion of mining operations and will comprise open cut mining operations, out-of-pit dump areas and supporting infrastructure as detailed in **Section 2.5**.

The majority of NLC's open cut mining operations will be contained within ML 70337. The Project will provide an opportunity for the continuation of open cut mining operations into MLA 70456. Based on the successful grant of the MLA 70456 and its associated environmental approvals, NLC envisages the Project will involve a staged expansion, commencing during 2016-2017. This expansion will allow the established mining operations to continue development of the coal resource outside of ML 70337 as shown in [Figure 2](#), and increase production up to 8 Mtpa of ROM coal. The Project will also involve the construction and operation of a Coal Handling and Preparation Plant (CHPP), which will facilitate the on-site processing of the ROM coal for the production of various coal qualities for direct sale by NLC to a range of overseas market opportunities.

This planned expansion of open cut mining operations into MLA 70456 will be determined by future economic factors. NLC is continuing to conduct economic analysis on the potential open cut design options, as it progresses through a feasibility study.

NLC's open-cut infrastructure and out-of-pit dumps are expected to extend into MLA 70456. The current open-cut mine design will be based on a traditional truck and shovel operation. NLC is investigating other innovative methods of mine waste removal from the open cut pit to better manage the significant depths of mining proposed.

2.5 Infrastructure Requirements

The Project infrastructure will include offices (administration, technical services and amenities), sewage and potable water treatment plants, a CHPP (and associated infrastructure), a co-disposal or tailings storage facility, roads, a fuel farm, a workshop/warehouse, wash bays, equipment lay down pad, environmental dams, and other water management structures (e.g. diversion drains, etc.).

Indicative locations of infrastructure associated with the proposed mining activity are presented in [Figure 2](#). Impacts associated with siting and operation of mine infrastructure detailed below will be included in the scope of the EIS.

2.5.1 Coal Handling and Preparation Plant

The Project will require a Coal Handling and Preparation Plant (CHPP for coal processing, and a co-disposal facility for containment of the fine tailings and coarse rejects waste streams produced.

In general, the CHPP infrastructure will comprise a ROM pad, ROM coal delivery system, coal washery module, coal waste delivery system (tailings and coarse rejects), clean coal delivery system, clean coal stockpile, power supply system, offices and workshops. The CHPP will be suitably sized to accommodate the planned clean coal output. NLC is currently evaluating the design and operation of the CHPP, including the key factors of product and waste management, power supply, water supply and water recovery/ recycling. It is envisaged that during the early years of project operation, an out-of-pit tailings dam will be required to store the fine and possibly coarse waste streams from the CHPP. Depending on the mine sequencing and available pit area, NLC will then seek to divert the CHPP's fine and possibly coarse waste streams into an in-pit storage cell, as the initial tailings dam reaches capacity. NLC will undertake further studies to determine methods of management for the CHPP's two waste streams, which may involve a single co-disposal system, or two separate containment systems.

NLC is currently examining options for the location of the CHPP, which will influence its associated infrastructure requirements.

2.5.2 Power

NLC has commissioned power supply investigations for the Project to examine network/grid supply options, particularly in relation to new infrastructure, upgrade requirements and alternative supply arrangements.

NLC will consult with Powerlink to commence discussions over possible access arrangements for the Project power supply.

2.5.3 Rail

The Project's product coal will be transported by truck to a product stockpile pad, from where it will either be loaded directly onto trains on a rail spur using an onsite rail load-out facility, or loaded onto trucks to be transported off site to a remote rail load-out facility. Further research will determine whether an on or off-site rail load-out facility will be constructed, considering all economic factors (e.g. a comparison of capital expenditure versus operating costs). Another factor influencing the decision will be the port location where export capacity is obtained (e.g. Dalrymple Bay, south of Mackay or Abbot Point, northwest of Bowen).

The Project will utilise the existing rail network to transport the product coal to the selected port facility. NLC has commenced preliminary negotiations with Aurizon for access to the rail network and with the relevant Ports Corporation for access to one of the existing port facilities.

2.5.4 Water

NLC has conducted preliminary negotiations with SunWater to access a suitable water supply for the Project. SunWater has provided preliminary advice on four possible water supply options to meet Project requirements. NLC will continue to consult with SunWater in relation to this matter, and in the near future will commission a feasibility study into the potential water supply options for the Project.

2.5.5 Roads

NLC will access the Project site via the Suttor Developmental Road, which connects to the Peak Downs Highway north of Nebo, and the Bowen Development Road at Mt Coolon. The Suttor Developmental Road bisects the Project's coal resource area. Therefore, this road will be relocated to access the underlying coal resource. A study will be undertaken to determine the optimum design and timing of the proposed road realignment. NLC will ensure the Department of Transport and Main Roads, the Isaac Regional Council and all other relevant stakeholders are adequately consulted in relation to this matter.

2.5.6 Accommodation

NLC will investigate the available accommodation options for the Project's construction and operational phases. Workforce management will be an important issue for the Project. NLC will consult on this matter with the Isaac Regional Council, and all other relevant stakeholders as part of this investigation.

2.6 Project Tenure and Land use

2.6.1 Project Tenure

The proposed MLA boundary lies within Exploration Permit Coal (EPC) 766, EPC 865 and EPC Application 1675 and adjacent to the existing Mining Lease (ML70337) for the New Lenton Coal Mine ([Figure 2](#)). Tenement details are described in Table 1).

Table 1 - Tenement Details

| Tenement | Name | Holding Company | Share | Status |
|-----------|----------------------|---|-------|--------------------------------|
| ML 70337 | New Lenton Coal Mine | New Lenton Coal Pty Ltd | 90% | Granted |
| | | MPC Lenton Pty Ltd (JV Partner Formosa Plastics Group) | 10% | |
| MLA 70456 | New Lenton Coal Mine | New Lenton Coal Pty Ltd | 100% | Application lodged 6 June 2011 |
| EPC 766 | Lenton Project | New Hope Exploration Pty Ltd | 90% | Granted |
| | | MPC Lenton Pty Ltd (JV Partner Formosa Plastics Group) | 10% | |
| EPC 865 | Lenton North Project | New Hope Exploration Pty Ltd | 90% | Granted |
| | | MPC Lenton Pty Ltd (JV Partner Formosa Plastics Group) | 10% | |
| EPC1675 | Lenton West Project | New Hope Exploration Pty Ltd | 90% | Application lodged 27 Jan 2009 |
| | | MPC Lenton Pty Ltd (JV Partner Formosa Plastics Group) | 10% | |

2.6.2 Current Land use and background tenure

The property tenure within the Project area, other than some road reserves, is freehold and is largely located within the pastoral operations of Burton Downs, which is owned by BHP Mitsubishi Alliance. Peabody (Bowen) Pty Ltd (Peabody Energy Australia) possesses two freehold areas which overlay the Project site to a much lesser degree. The Department of Transport and Main Roads is responsible for the Suttor Development Road, which traverses the southern portion of the Project area.

The land within the Project area and surrounds has been used for cattle grazing in the past, with stock handling yards, dips, fencing and stock watering points still evident. Extensive land clearing has previously occurred, with the land maintained primarily as pasture for grazing purposes. No previous signs of cropping are evident within MLA 70456, which can be attributed to the erratic rainfall and climate affecting crop growth, together with a predominance of low potential soils. The Project is located in the Strategic Cropping Land (SCL) management area, within the Western Cropping Zone and the Central Highland Isaac sub-zone, but there are no areas mapped as SCL on MLA 70456.

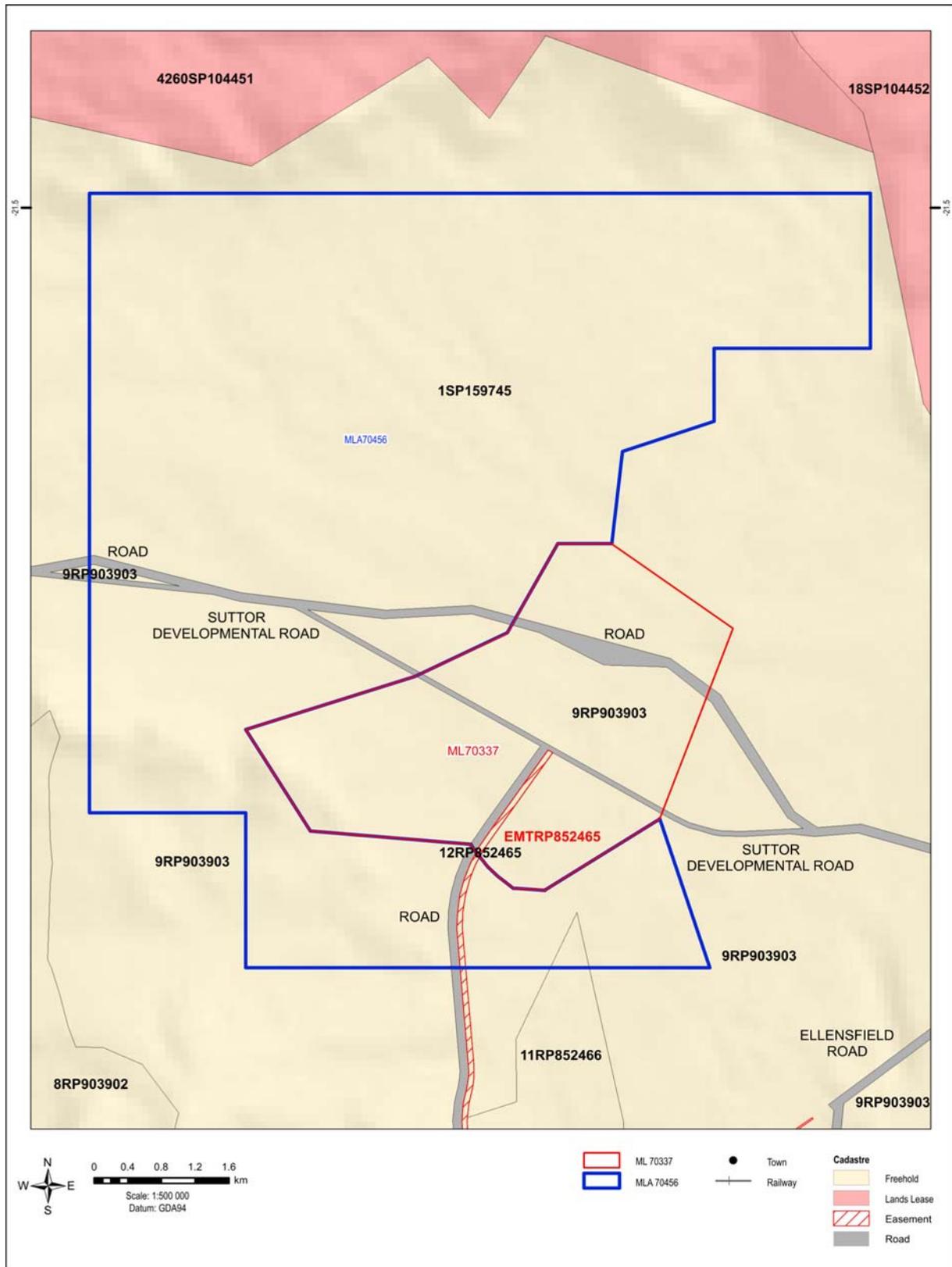


Figure 3 - Project and surrounding land tenure

2.6.3 Native Title

The traditional landowners of the region are the Barada Barna People and the Wiri Core Country People. Both groups have registered Native Title claims over the Project as shown in [Figure 4](#).

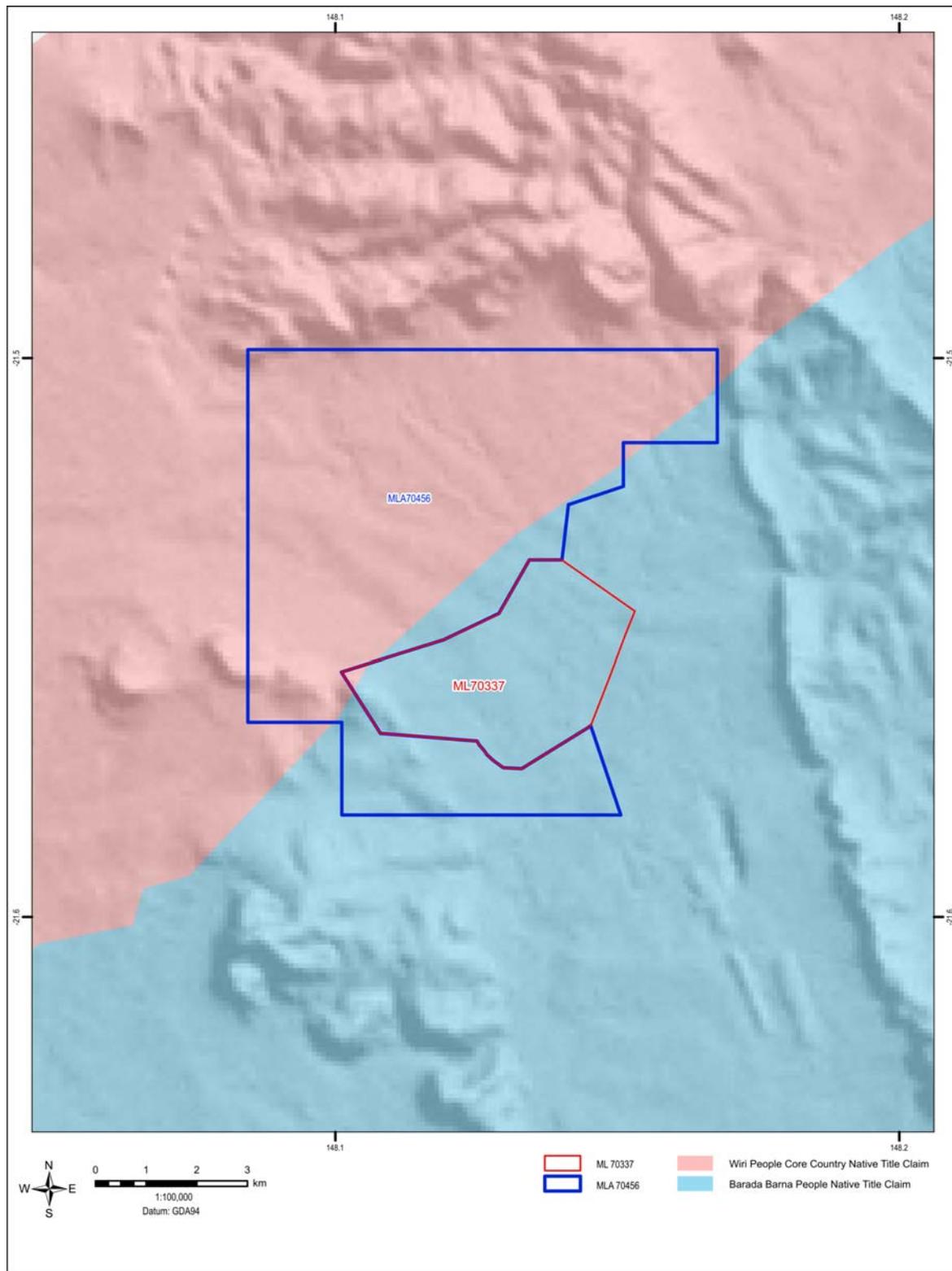


Figure 4 - Project and associated Native Title Claims

2.6.4 Overlapping Tenure

The Project is overlapped by petroleum tenure as detailed in Table 4 and shown in [Figure 6](#). NLC has been in discussions with the overlapping petroleum tenure holder and co-development agreement negotiations are progressing.

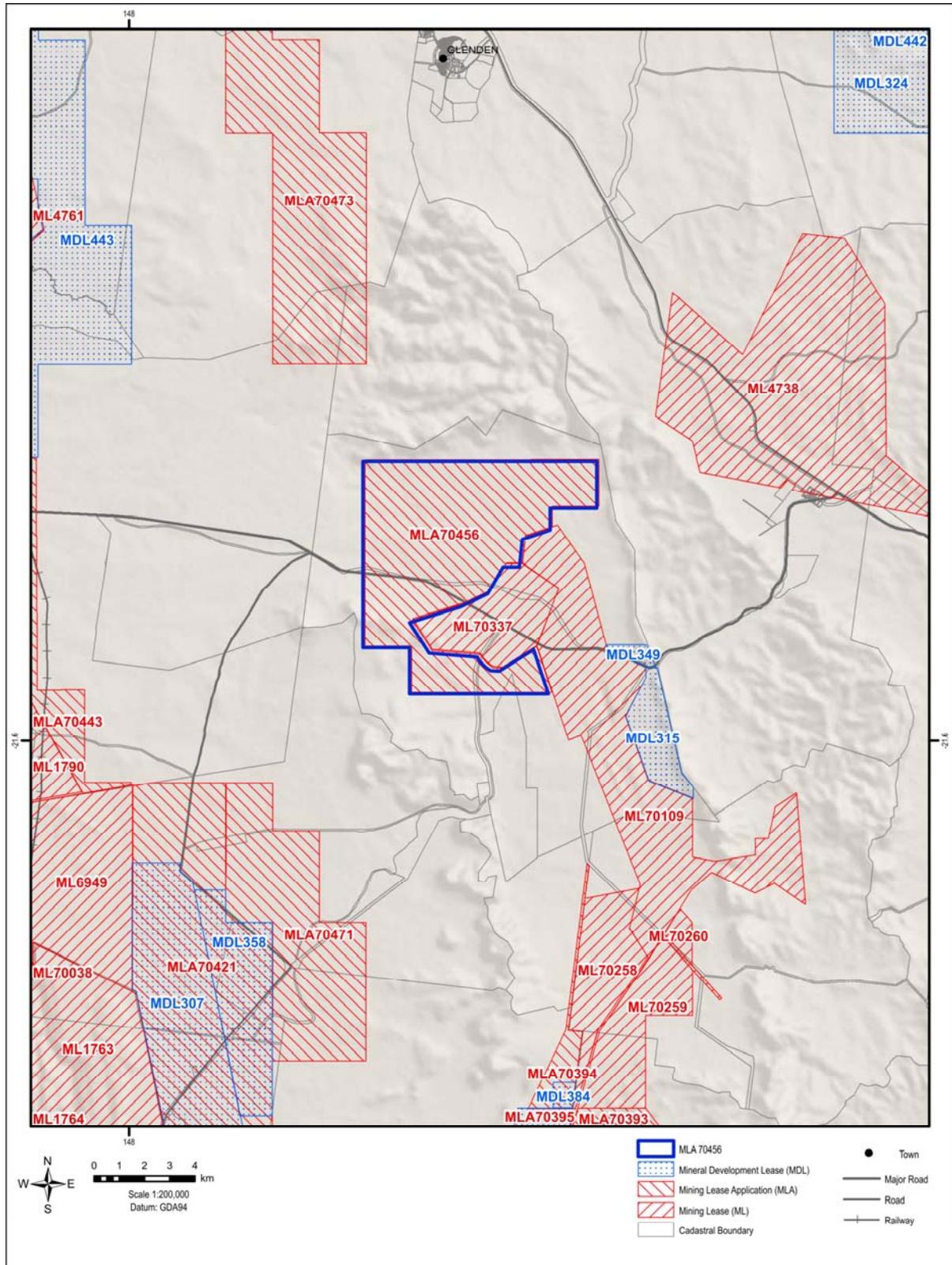


Figure 5 - Project and neighbouring mining tenements

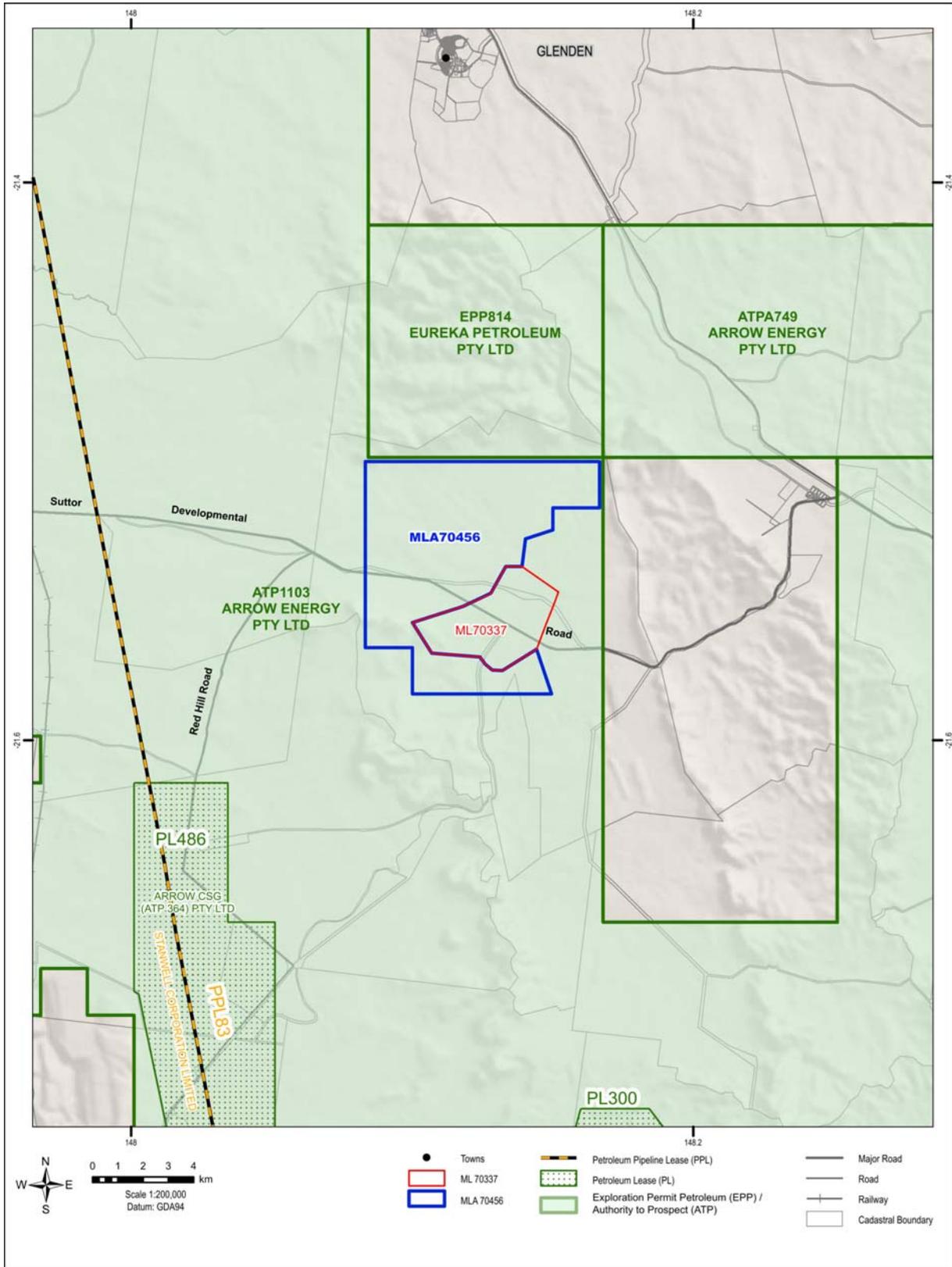


Figure 6 - Project and neighbouring petroleum tenements

Table 4 - Overlapping Tenure

| Tenement | Holding Company | Status |
|----------------|-----------------|-----------------------|
| EPP (ATP) 1103 | CH4 Pty Ltd | Granted on 23/12/2010 |

3. Existing Environment and Potential Impacts

3.1 Climate

The Isaac River catchment falls within the subtropical - distinctly dry winter climatic zone (Bureau of Meteorology, 2012). Temperature data shows that the warmest months are November to February, and the coolest months are June to August. The highest average monthly maximum temperature (30.6 °C) occurs in December, whereas the lowest average minimum monthly temperature occurs in July (11.1 °C). The area experiences a wet and dry season, with approximately 77 % of the average annual rainfall (755.4 millimetres (mm)) occurring in the wet season between November and April (Bureau of Meteorology unpublished data 1972 2012). Evaporation exceeds annual rainfall by a factor of three.

In general, the wind tends to be mostly light to moderate, with an annual average speed of less than 15.4 kilometres per hour. Wind records from the Moranbah climate station show a significant portion of winds from the north-east and easterly sector from October to April and south-east to easterly sector from May to December.

The general climatic information for the Project was sourced from the Bureau of Meteorology Australia (Moranbah Airport: 22.06° South, 148.08° East).

3.2 Land Resources

The Project area comprises gently undulating country with elevated areas and escarpments to the north and east. The Project area and surrounds have been cleared and maintained low intensity grazing activities on native and introduced pastures. Remnant woodland is largely confined to drainage lines. The Project area does not include any major farm structures or homesteads.

The expected Project impacts on land resources will include changes to landform; drainage patterns; land suitability; and land uses.

The impact of the Project on land capability, soil types and remnant vegetation, is currently being evaluated.

Post mining activities, the Project area land use will be returned to grazing. Decommissioning and post-mine land use rehabilitation plans will be developed for the Project.

A weed and pest management plan will be developed and implemented for the operational phase of the Project also taking in consideration Local Council requirements.

3.3 Surface Water

The Project is surrounded by foothills to the north and east of MLA 70456. Surface water sheds to the southeast towards the Isaac River; which flows to Burton Gorge Dam. NLC is conscious that this setting adjacent to the Isaac River, and lies within the Burton Gorge Dam catchment (and the broader Fitzroy Basin). It is likely that a diversion of Hill Creek will be required, design at concept level will be undertaken together with impact assessments during the EIS process. As such, NLC will ensure that surface water management is a high priority

both in terms of safety (e.g. flood protection), and the environment (e.g. protection of the downstream receiving environment).

NLC will implement a range of mitigation strategies to reduce potential impacts to surface water flows and quality.

Potential impacts of the Project on surface water that are to be managed, include deterioration in water quality caused by runoff from disturbed areas (e.g. infrastructure areas, co-disposal dams, creek diversion.), and acceleration of erosion and sedimentation across the site.

A “clean water – dirty water” management system will be implemented to divert clean runoff around disturbed areas, and to direct dirty (sediment-laden) run-off from disturbed areas to retention structures for treatment. Initial studies indicate that the management of excess water will not pose a significant problem for the Project, However, a detailed water balance model and a water management plan will still be developed for the Project, to ensure any water occasionally released off site meets the licensed discharge limits and the water quality objectives for Hill Creek and the Isaac River.

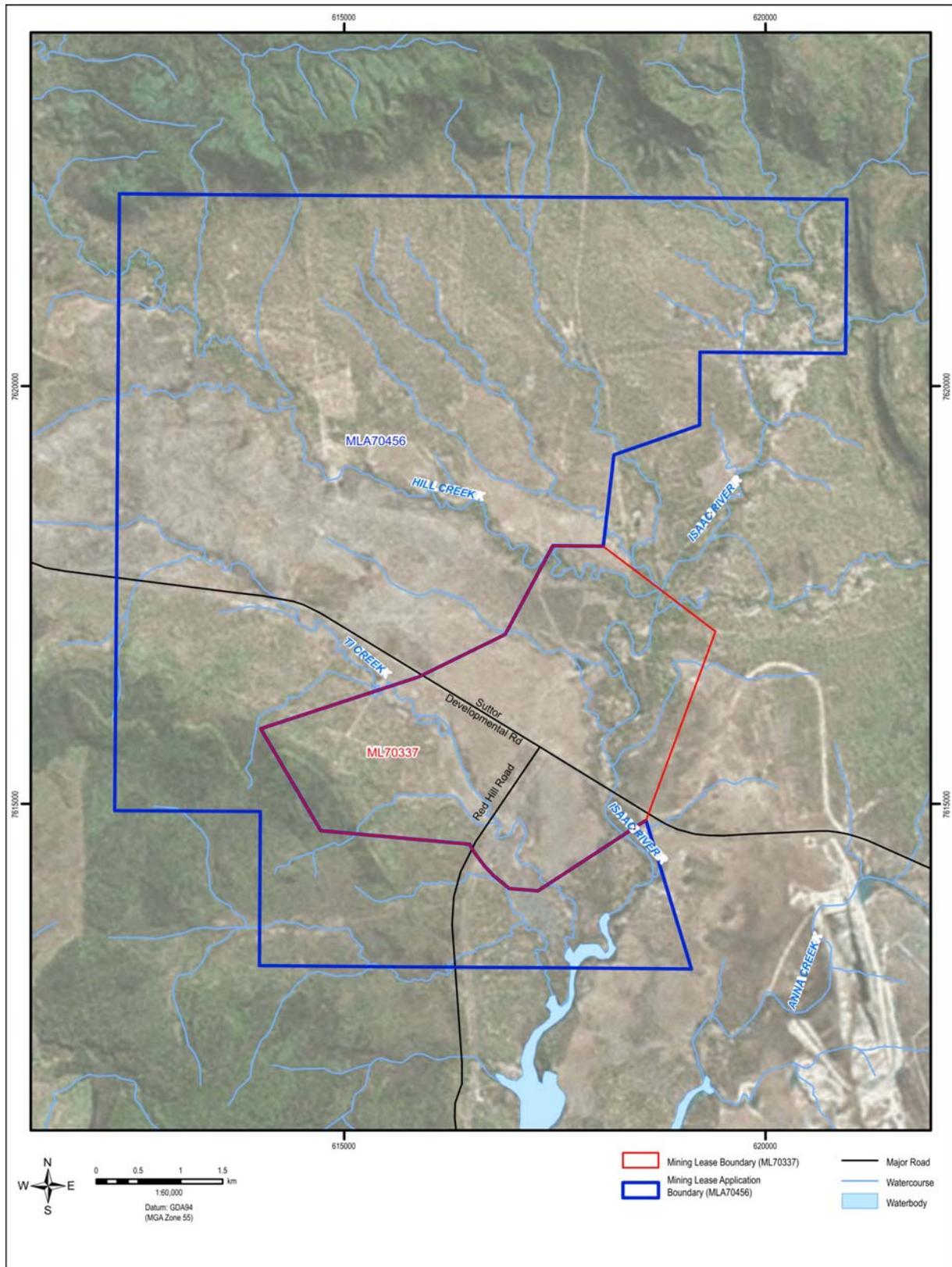


Figure 7 - Project area and associated watercourses

The Project’s water management structures will be conservative in design to reduce the level of risk associated with their operation. Flood management will be a priority issue for the Project, particularly in relation to the close proximity of the Isaac River.

A monitoring regime for surface water quality will be developed for the Project to predict potential impacts and assist impact mitigation strategies.

In regard to existing baseline surface water quality data for the Project, during 2011, NLC completed the monitoring requirements of the Receiving Environment Monitoring Program (REMP) Report for EA No. EPML00475513 (previously MIN100649407) relating to ML 70337. In addition, NLC possesses several years of surface water monitoring data also collected as part of the requirements of EA No. EPML00475513. This data has not been influenced by mining activities and will provide a good summary of baseline conditions.

3.4 Groundwater

Groundwater within the region is typically saline, and may not prove to be a reliable resource for use by the Project.

The groundwater resources of the Project area are currently being investigated, involving the drilling and sampling of a number of water bores across the Project tenements. The results of this sampling and analysis will be used to model the groundwater resources of the area, and assess the possible impacts of the proposed Project. Groundwater modelling will be used to simulate the current groundwater environment, and to assist in predicting regional impacts on groundwater users from mine related groundwater extraction

3.5 Regional Ecosystems and Threatened Ecological Communities

Although a substantial proportion of the Project area has been cleared for grazing purposes, remnant and regrowth communities of native vegetation occur within MLA 70456.

Table 2 lists the endangered regional ecosystems listed under the Queensland's *Vegetation Management Act 1999* (VM Act) and the Threatened Ecological Communities listed under the Commonwealth's *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act), that are likely to occur within the Project area. Accordingly, the Project has been referred under the EPBC Act and deemed a 'controlled action' by the Commonwealth Department of the Environment (DotE) under the controlling provisions of listed threatened species and communities and listed migratory species.

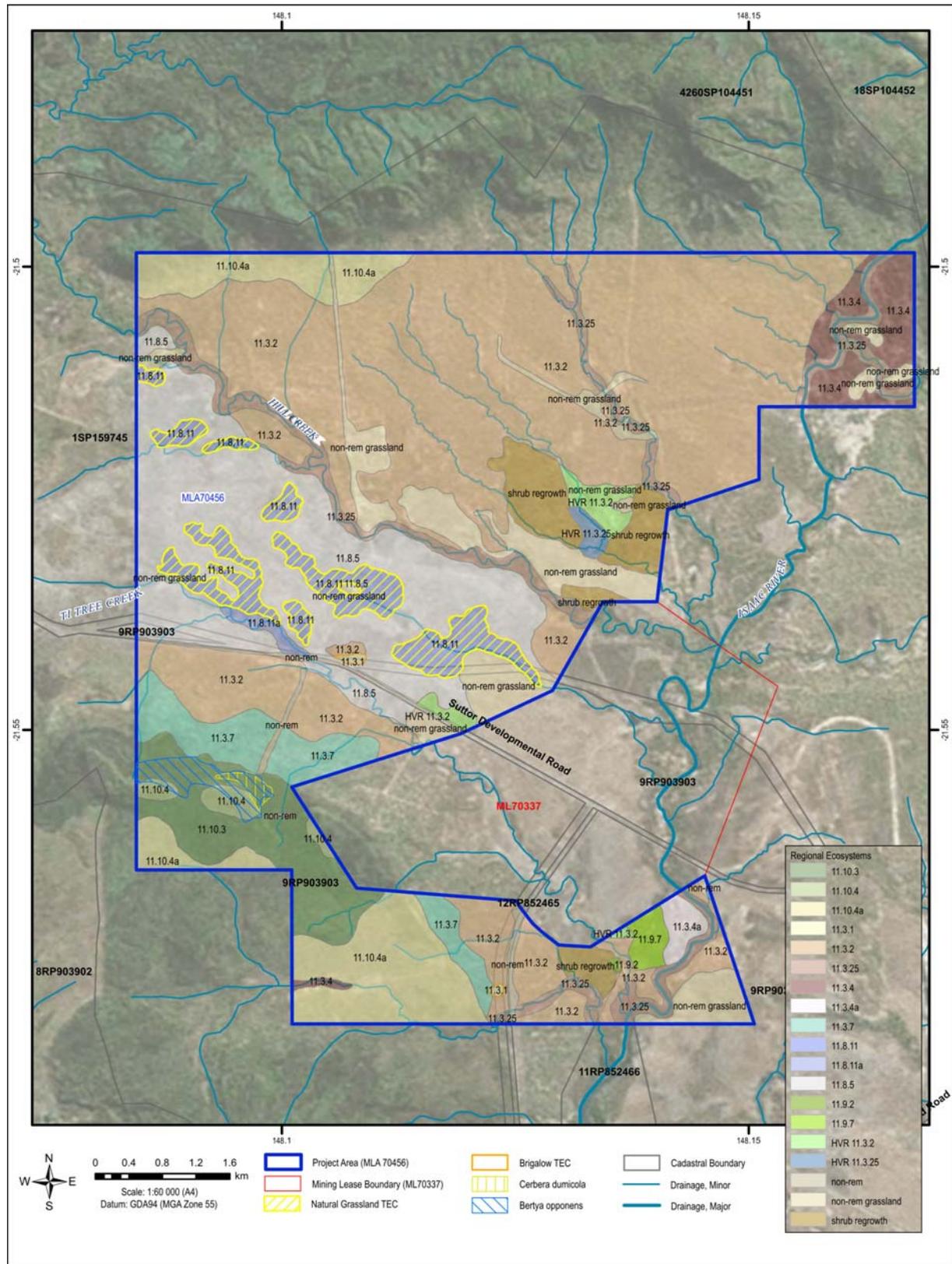


Figure 8 - Project and associated Regional Ecosystems

Table 2 Regional ecosystems and High Value Regrowth mapped within the Project area.

| Regional Ecosystem | RE Description | Land Zone | Conservation Status ¹ | | | Area (ha) | |
|--------------------|--|----------------------------|--|-----|------|-----------|-------|
| | | | EPBC | BD | VMA | | |
| 11.3.1 | Acacia harpophylla open woodland on alluvial plains | Quaternary alluvial soils | E | E | E | 3.1 | |
| 11.3.2 | <i>Eucalyptus populnea</i> woodland on alluvial plains | | NL | OC | OC | 2,001.7 | |
| HVR 11.3.2 | HVR - <i>Eucalyptus populnea</i> woodland on alluvial plains | | NL | OC | OC | 45.1 | |
| 11.3.4 | <i>Eucalyptus tereticornis</i> and/or <i>Eucalyptus</i> spp. woodland on alluvial plains | | NL | OC | OC | 130.3 | |
| 11.3.4a | Floodplain (other than floodplain wetlands). <i>Corymbia tessellaris</i> woodland. On alluvial sand ridges to elevated levees and level terraces adjacent to larger stream channels, which are irregularly flooded or possibly relict. | | NL | OC | OC | 26.4 | |
| 11.3.7 | <i>Corymbia</i> spp. woodland on alluvial plains. Sandy soils | | NL | OC | LC | 182.0 | |
| 11.3.25 | <i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines | | NL | OC | LC | 259.2 | |
| HVR 11.3.25 | HVR - <i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines | | NL | OC | LC | 14.7 | |
| 11.8.5 | <i>Eucalyptus orgadophila</i> open woodland on Cainozoic igneous rocks | | Basalt associated with undulating to gently undulating rises | NL | NCP | LC | 743.7 |
| 11.8.11 | <i>Dichanthium sericeum</i> grassland on Cainozoic igneous rocks | | | E | OC | OC | 216.4 |
| 11.8.11a | <i>Melaleuca bracteata</i> woodland drainage depressions. Occurs in drainage depressions. | NL | | OC | OC | 16.7 | |
| 11.9.2 | <i>Eucalyptus melanophloia</i> +/- <i>E. orgadophila</i> woodland on fine-grained sedimentary rocks | NL | | NC | LC | 2.1 | |
| 11.9.7 | <i>Eucalyptus populnea</i> , <i>Eremophila mitchellii</i> shrubby woodland on fine-grained sedimentary rocks | NL | OC | OC | 25.4 | | |
| 11.10.3 | <i>Acacia catenulata</i> or <i>A. shirleyi</i> open forest on coarse-grained sedimentary rocks. | Coarse grained sedimentary | NL | NCP | LC | 242.3 | |

| Regional Ecosystem | RE Description | Land Zone | Conservation Status ¹ | | | Area (ha) |
|--------------------|---|-----------|----------------------------------|-----|-----|-----------|
| | | | EPBC | BD | VMA | |
| | Crests and scarps | rocks | | | | |
| 11.10.4 | <i>Eucalyptus decorticans</i> , <i>Lysicarpus angustifolius</i> +/- <i>Eucalyptus spp.</i> , <i>Corymbia spp.</i> , <i>Acacia spp.</i> woodland on coarse-grained sedimentary rocks. Crests and scarps. | | NL | NCP | LC | 35.7 |
| 11.10.4a | <i>Eucalyptus crebra</i> , <i>Corymbia aureola</i> , <i>C. clarksoniana</i> and/or <i>Acacia shirleyi</i> woodland. Small areas that occur on conjunction with <i>E. decorticans</i> woodland | | NL | NCP | LC | 404.3 |
| N/a | Non-remnant grassland | N/a | NL | NL | NL | 344.1 |
| N/a | Non-remnant mixed shrubby regrowth | | NL | NL | NL | 168.3 |
| N/a | Cleared | | NL | NL | NL | 38.2 |
| Total | | | | | | 4,899.7 |

1: E – Endangered, OC – Of concern, LC – Least concern, NCP – No concern at present, NL – not listed. 2: T –Tertiary survey location, Q – Quaternary

3.6 Flora

Terrestrial flora assessments of the Project site were undertaken during April and October 2013. These assessments documented the baseline floral values within the Project area, with particular reference to the occurrence of conservation significant vegetation communities and species.

The field survey included 54 survey locations, and identified 255 flora species within the Project area, including the following two flora species of conservation significance:

- *Cerbera dumicola* - near threatened, Nature Conservation Act 1992 (NC Act); and
- *Bertya opposens* - vulnerable, Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Two additional species of conservation significance were identified as having a high likelihood of occurrence within the Project area, given the types of habitat available;

Dichanthium queenslandicum (king bluegrass) and *Digitaria porrecta* (finger panic grass);

A total of 14 Regional Ecosystems (REs) were mapped within the Project area (refer to [Figure 8](#) and Table 2), including one endangered RE (3.1 ha), eight of concern REs (2,858.1 ha) and five no concern at present REs (1,428.1 ha) (biodiversity status).

The field surveys also confirmed the presence of the following two EPBC Act listed threatened ecological communities:

Natural grasslands of the Queensland Central Highlands and the northern Fitzroy Basin (216.4 ha); and

- Brigalow (*Acacia harpophylla* dominant and co-dominant) (3.1 ha).

Of the 35 exotic species recorded during the field surveys, four species were identified as being of management concern (Exotic flora species are signified in this report by an asterisk (*)). These were *Eriocereus martini** (harrisia cactus), *Opuntia stricta var. stricta** (prickly pear), *Opuntia tomentosa** (velvety tree pear) and *Parthenium hysterophorus** (parthenium). These four species are declared as Class 2 pest species under the *Land Protection (Pest and Stock Route Management) Act 2002* (LP Act).

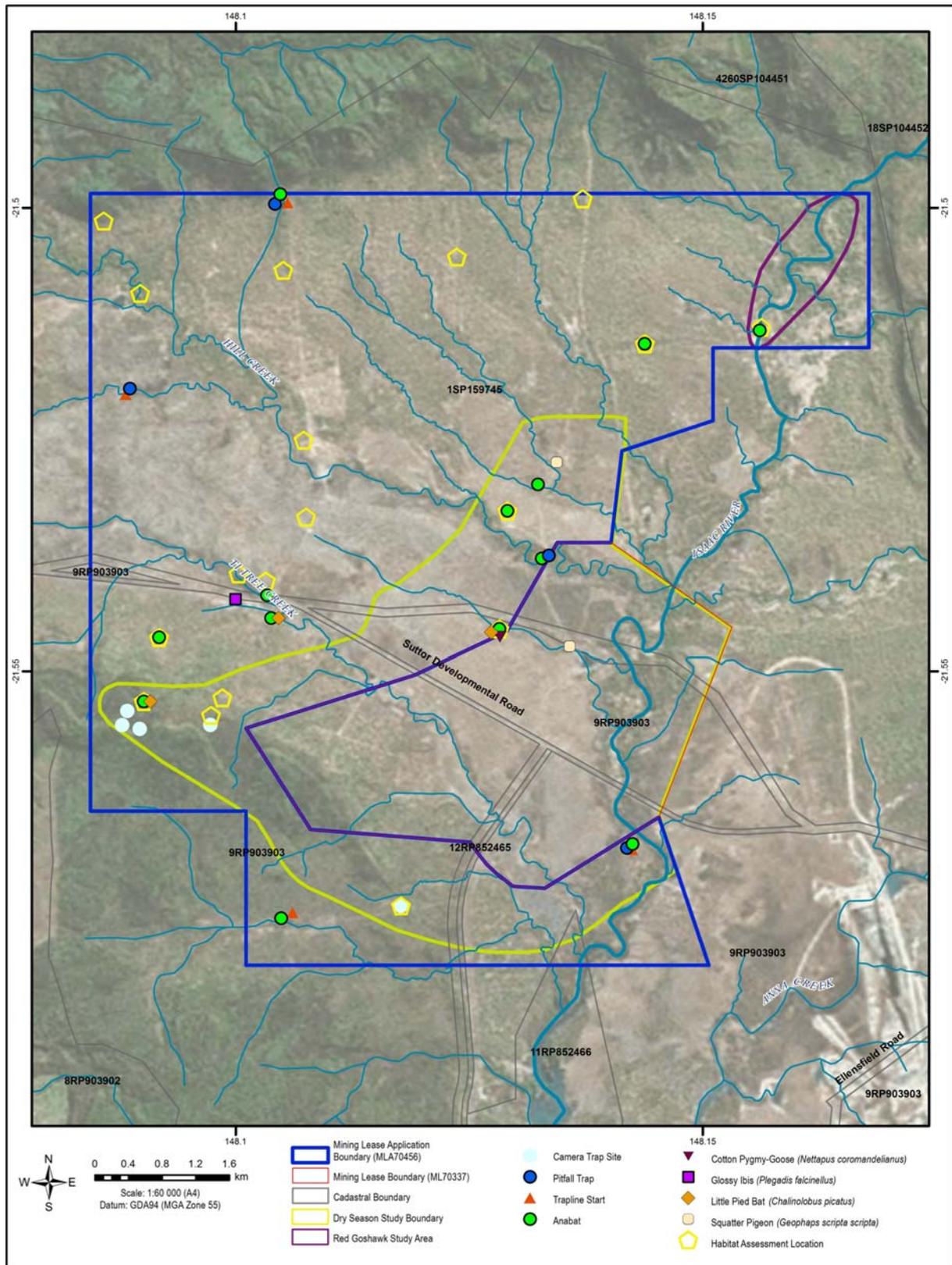
3.7 Fauna

Terrestrial vertebrate fauna studies of the Project area were undertaken in April and October 2013, to determine the fauna assemblages and fauna habitat values present. A literature review identified the potential presence of 22 conservation significant fauna species within the Project area, which formed the basis for design of the field surveys.

The field studies have identified 138 fauna species (including exotic fauna) occurring within the Project area, including 90 bird, 28 mammal, 14 reptile and 6 amphibian species. An additional 14 fauna species were noted as possibly occurring within the Project area, given the presence of potential habitat.

Of the fauna identified during the field study, five are regarded as of conservation significance, being listed under the *Nature Conservation Act 1992* (NC Act) or EPBC Act. These species of conservation significance are:

- Squatter pigeon (*Geophaps scripta scripta*) – Vulnerable, NC Act and EPBC Act;
- Cotton pygmy-goose (*Nettapus coromandelianus*) – Near Threatened, NC Act;
- Little pied bat (*Chalinolobus picatus*) – Near Threatened, NC Act;
- Short-beaked echidna (*Tachyglossus aculeatus*) – Special Least Concern, NC Act; and
- Glossy ibis (*Plegadis falcinellus*) – Migratory, EPBC Act.



3.8 Aquatic Ecology

An assessment of the Project area was undertaken in April 2013. This assessment aimed to document the aquatic flora and fauna species within the Project area, with particular reference to the occurrence of conservation significant species.

The field survey highlighted that ephemeral streams occur across the site, with few pools of permanent water. This aquatic habitat is generally considered to be moderately impacted from prolonged cattle grazing within the catchment, unrestricted stock access to streams, and feral animal impacts. Limited fish habitat and aquatic vegetation was observed. Exotic grasses tended to dominate the groundcover through the riparian zone.

In-situ water quality results indicated elevated electrical conductivity in one ephemeral stream, with all other streams characterised by physico-chemical results consistent with past water quality studies for the Project area. No Groundwater-dependent ecosystems (ie: ecosystems that rely on groundwater for some or all of their water requirements) were identified within the Project area.

A literature review identified the potential presence of one conservation significant fauna species, namely the Fitzroy River turtle (*Rheodytes leukops*). However no species of conservation significance were actually identified during the survey. A total of 10,259 macroinvertebrates from 44 taxa were collected from the seven sites sampled during the survey. A total of 251 fish from six species were collected across the Project area. One species of turtle was also observed, however this was not an example of a Fitzroy River turtle. The aquatic ecologists undertaking the survey determined that the physical characteristics of the watercourses traversing the Project area, made them unsuitable as habitat for the Fitzroy River turtle.

No exotic species were collected in the survey and no fish collected exhibited any signs of disease. The aquatic fauna assemblages surveyed in this study indicate the observed taxa are resilient and opportunistic species. Many of the macroinvertebrates are highly mobile and will readily inhabit newly inundated waters.

3.9 Noise, Vibration, and Air Quality

Mining projects can have potential impacts on the amenity of a surrounding area. A baseline noise monitoring survey of the Project area was undertaken during October 2012, and comprised long-term noise monitoring (unattended logging) and operator-attended monitoring at three monitoring locations. Two of the monitoring locations represent the nearest noise-sensitive locations to the Project, determined by the distance to the open cut and waste dump areas. The third noise logging point was selected to quantify noise generated from the nearby Burton Mine. Additional noise monitoring data at a fourth location has been sourced from publicly available data published for a separate project.

The monitoring was carried out in accordance with the relevant Queensland Department of Environment and Heritage Protection (DEHP) guidelines and Australian Standards. The results of the noise monitoring are summarised in Table 3.

The nearest noise sensitive receptors identified near the project area are:

- Burton Downs (approximately 7 kilometres (km) west-north-west);
- Lenton Downs (approximately 7 km south-southwest); and
- North Goonyella Accommodation Village (approximately 4 km south).

Table 3 Baseline Noise Monitoring Results

| Monitoring Location | Rating Background Noise Level (RBL) – L _{A90} dB(A) | | | Ambient Noise Level (ANL) – L _{Aeq} dB(A) | | |
|--|--|---------|-----------------|--|---------|-------|
| | Day | Evening | Night | Day | Evening | Night |
| L1: Burton Downs | 30 | 26 | 25 | 48 | 41 | 38 |
| L2: North Goonyella Village | 35 | 36 | 34 | 60 | 52 | 52 |
| L3: Burton Mine (not sensitive receptor) | 37 | 34 | 32 | 61 | 61 | 63 |
| L4: Lenton Downs ¹ | 25 ² | 29 | 25 ² | 42 | 47 | 39 |

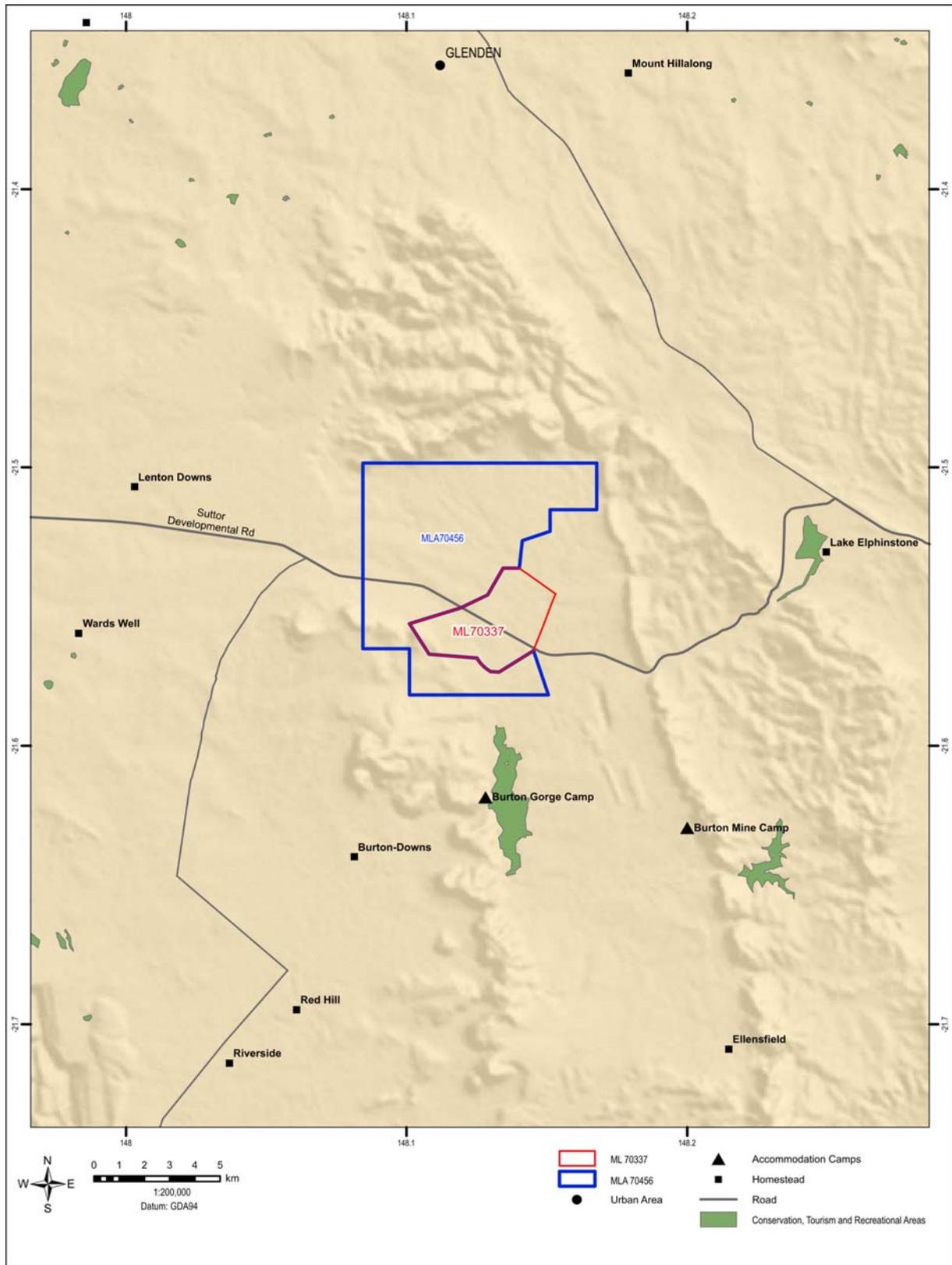


Figure 10 - Project area and nearby sensitive receptors

The outcome of the noise survey shows a typical rural noise profile for the homestead receptors (L1 and L4) and somewhat higher noise levels within the mining accommodation village (L2). Noise levels in close proximity of Burton Mine (L3) being the nearest operational mine to the Project were recorded for future reference of cumulative impact assessment.

Noise impacts from surrounding open cut coal mining operations would be localised to machinery operation (stationary and mobile) and blasting. The level of noise will vary depending on the level of machinery operation, traffic in the area and climatic conditions (e.g. wind direction, etc.). The principal sources of noise from the Project will be surface infrastructure (e.g. CHPP) and mobile mining equipment.

An assessment of the baseline climate and air quality within the Project area was undertaken during 2013 based on the anticipated emissions from the Project. The assessment of the air quality and suitable mitigation methods will be outlined in the Project's EIS. Dust generated by the Project may be managed by the use of water carts for road watering, sprays on crushers and conveyor transfer points, conducting progressive rehabilitation, limiting disturbance to the area required for safe operations, and if appropriate, changing work practices during adverse meteorological conditions.

The potential noise and air quality impacts from the Project will be assessed as part of the Project's EIS.

3.10 Greenhouse Gases

NLC acknowledges the increased levels of CO₂ from the combustion of coal and believes an industry wide response to the issue is the best approach for the Australian coal industry and economy (e.g. development of clean coal technologies, carbon sequestration, etc.).

NHCL is a member of the Coal21 program which is researching advanced technologies to reduce or eliminate the greenhouse gas emissions associated with the use of coal. This program is managed by the Australian Coal association Low Emission Technology (ACALET).

As a controlling corporation, NHCL is required to report annual greenhouse gas emissions under the *National Greenhouse and Energy Reporting Act 2007* (NGER). As a subsidiary of NHCL, NLC's greenhouse gas emissions from the New Lenton Mine will be incorporated into NHCL's annual reporting obligations under this legislation.

NHCL is exploring carbon offset and abatement options to minimise the Company's carbon footprint. NHCL is a registered participant in the Commonwealth's Energy Efficiency Opportunities program, which requires a prescribed process to identify energy savings and their associated greenhouse gas contributions. NLC's future operations will be required to be incorporated into this process.

NLC will continue to explore possible offset and abatement options for greenhouse gas emissions at the Project level.

3.11 Infrastructure

Infrastructure impacted by the Project includes part of the Suttor Development Road. New infrastructure requirements include a diversion of the Suttor Development Road, power supply lines, water pipelines, and accommodation facilities and a rail line connection to the Goonyella-Abbot Point rail network.

NLC will liaise with all relevant stakeholders in relation to relocation of infrastructure, including the Department of Transport and Main Roads and Isaac Regional Council.

3.12 Visual Amenity

The physical features associated with the Project that may have aesthetic impacts include waste rock dumps, co-disposal dams and surface infrastructure (e.g. CHPP, etc.). However, the remote location of the Project and the type of mining proposed are expected to mitigate any adverse impacts.

3.13 Cultural Heritage Values

The traditional landowners of the region are the Barada Barna People and the Wiri Core Country People. Both groups have registered Native Title claims, which each cover part of the Project tenements (ie: ML, MLA and EPCs)

Cultural Heritage Management Plans (CHMPs) will be developed for the Project with the Barada Barna People and the Wiri Core Country People and investigation of Aboriginal cultural heritage values within the Project area will be undertaken in consultation with them. It is also proposed to evaluate the remnants of European settlement.

NLC has a Cultural Heritage Agreement (including a CHMP) with the Traditional Owners for ML 70337. This Agreement also includes protocols for survey activities associated with its surrounding EPCs.

3.14 Socio-Economic Values

A baseline economic study was undertaken in June 2013. The purpose of the study was to establish the context and description of the economic environment for the purpose of assessing the Project's anticipated economic impacts.

The geographic scope of local and regional economies examined in the study was defined as:

- Local economy: Isaac Regional Council (IRC) and Nebo Statistical Local Area (Nebo SLA); and
- Regional economy: the Mackay Isaac Whitsunday region (the MIW Region).

The region surrounding the Project supports both broad-acre agricultural activities and mining activities.

Glenden is the closest town to the Project. This township was purpose built in 1983 to support the Newlands Coal Mine.

Urban centres in the coal mining belt of the Bowen Basin have long had some of the highest recorded median household wages in Australia. Until recently, the mining boom had put pressure on infrastructure and accommodation in the towns of Moranbah and Dysart, and the current situation will be carefully considered as part of the social impact assessment process.

NLC is about to commence investigations into the available accommodation options for the Project's construction and operational phases. Workforce management will be an important issue for the Project. NLC will consult with the Isaac Regional Council, relevant government agencies and other key stakeholders as part of this investigation.

NLC will implement a community consultation program that will involve the local community, Council, applicable State and Commonwealth departments and relevant non-government organisations.

4. Project Approvals

4.1 Commonwealth approvals

NLC has lodged a Referral Application for the Project to the Department of the Environment (DotE), (then DSEWPaC), under the Commonwealth's *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). On 4 September 2012, the Project was determined to be a 'controlled action' for the following controlling provisions:

- Listed and threatened species and communities (Section 18 and 18 A); and
- Listed migratory species (Section 20 and 20 A);

In addition, the Minister for the Environment has decided that the "water trigger" also applies, and therefore the following provisions are also controlling provisions for the Project:

- Water resources (Section 24D and 24E).

4.2 State approvals

NLC has applied for a MLA 70456 under the Mineral Resources Act 1989 (MR Act) and has applied to amend its existing EA for ML 70337 to include the new MLA under the Environmental Protection Act 1994 (EP Act).

NLC has also lodged an application for a Voluntary Environmental Impact Statement under the EP Act which was accepted by DEHP (then DERM) on 17 June 2011. The Project will be assessed under Chapter 3, Part 1 of the EP Act.

NLC proposes to prepare one EIS to satisfy the requirements of both jurisdictions under the Bilateral Agreement between the Queensland and Federal Governments regarding environmental assessment of controlled actions.

As part of the approvals process there may be other secondary approvals required under other legislation.

4.3 Environmental Management

The EIS will describe:

- the Project's existing environmental values;
- the potential adverse and positive impacts to the existing environmental, economic and social values from the Project's construction, operation and decommissioning; and
- NLC's proposed measures and strategies to prevent or mitigate adverse environmental, economic and social impacts to the Project's environmental values.

The EIS will include the development of a set of draft environmental management conditions. On grant of the mining lease for the Project and prior to commencement of operations, NLC will produce a Plan of Operations and submit it to the DEHP describing the proposed activities that will comply with its EA and the proposed schedule of Rehabilitation for Financial Assurance purposes. The Plan of Operations will clearly demonstrate NLC's approach to complying with each condition in the EA and may include specialist management plans for significant Project issues identified during the EIS studies.

5. Community Consultation

5.1 Affected Parties

NLC will undertake negotiations with each landowner to develop separate 'Compensation Agreements' under the *Mineral Resources Act 1989* for access to the Project site. Details of 'the Project's 'affected persons' under the EP Act are listed in **Table 5**.

Table 5 Affected parties and contact details

| Landholders | |
|---|---|
| BMA (Burton Downs) (Lot 1 on SP159745, Lot 9 on RP903903) Also owns adjoining land parcels: (Lot 5311 on PH1655 and Lot 4 on RP852463) | Burton Downs NEBO QLD 4742 |
| Peabody (Bowen) Pty Ltd (Peabody Energy Australia Pty Limited) (Lot 11 & 12 on RP852466) | GPO Box 5101 BRISBANE QLD 4001 |
| Department of Transport and Main Roads (Suttor Development Road) | GPO Box 1412, BRISBANE QLD 4001 |
| Local Council | |
| Isaac Regional Council (CEO) | PO Box 97 MORANBAH QLD 4744 |
| Native Title Claimants | |
| The Barada Barna People | Stacey Budby Lot 1 Powells Road FARLEIGH QLD 4740 |
| The Wiri Core Country People | Wiri Cultural and Business Enterprise PO Box 27 MACKAY QLD 4740 |
| Overlapping Tenure Holders | |
| Arrow Energy (EPP 1103) | GPO Box 5262 BRISBANE QLD 4001 |
| Navaho Gold Limited (exploration permit application EPM 18334) | Level 27, 111 Eagle Street Brisbane QLD 4000 |

5.2 Interested Parties

NLC recognises that several government and private stakeholders will have an interest in the impacts and opportunities generated by the Project (**Table 6**).

Table 6 Interested parties and contact details

| Local, State and Federal Government Departments | |
|---|--|
| Department of Environment and Heritage Protection (Mackay) | PO Box 63 MACKAY QLD 4740 |
| Commonwealth Department of the Environment | GPO Box 787, CANBERRA ACT 2601 |
| Department Natural Resources and Mines | PO Box 15216 CITY EAST QLD 4002 |
| Department of State Development, Infrastructure and Planning | PO Box 15009 CITY EAST QLD 4002 |
| Office of the Coordinator General | PO Box 15517 CITY EAST QLD 4002 |
| Department of Transport and Main Roads | PO Box 673, FORTITUDE VALLEY QLD 4006 |
| Department of Communities, Child Safety and Disability Services | GPO Box 806 BRISBANE QLD 4001 |
| Department of Agriculture, Fisheries and Forestry | GPO Box 46 BRISBANE QLD 4001 |
| Department of Local Government, Community Recovery and Resilience | PO Box 15009 CITY EAST, QLD 4002 |
| Queensland Health | GPO Box 48 BRISBANE QLD 4001 |
| Queensland Health (Mackay and District) | 475 Bridge Road MACKAY QLD 4740 |
| Department of Education, Training and Employment | PO Box 15033 CITY EAST QLD 4002 |
| Skills Queensland | PO Box 15137 CITY EAST QLD 4002 |
| Department of Community Safety | GPO Box 1425 BRISBANE QLD 4001 |
| Queensland Police | <i>(To be advised)</i> |
| Mackay Regional Council | PO Box 41 MACKAY QLD 4740 |
| Businesses / State Authorities | |
| QR Network (Coal) | Level 21, Pipenetworks House, 127 Creek St, BRISBANE QLD 4000 |
| SunWater | Level 9, 120 Edward St BRISBANE QLD 4001 |

| | |
|---|---|
| Qld Electricity Transmission Corporation Limited | c/- Legal Services, PO Box 1193 VIRGINIA BC QLD 4014 |
| Ports Corporation Queensland | GPO Box 409 BRISBANE QLD 4001 |
| Conservation, Resource Management and Social Groups | |
| Fitzroy Basin Association | PO Box 139 ROCKHAMPTON QLD 4700 |
| Mackay Conservation Group | PO Box 826 MACKAY QLD D4740 |
| Adjacent Landholders | |
| Valda Ann Mason, Edward Peter Mason and Mora Ellen Mason (Lot 8 on GV807254) | C/- Post Office NORTH ETON 4741 |
| Ronald Max Gillham (Lot 4260 on SP104451) | C/- Post Office Glenden GLEDEN 4743 |
| Ganra Pty Ltd & Gaffwick Pty Ltd (Lot 18 on SP104452) | 35 Lapraik St ASCOT 4007 |

5.3 Consultation

NLC has developed a formal communication and consultation plan, to ensure all potential stakeholders for the Project are properly consulted. Consultation will be conducted as required during the key phases of the EIS process, such as the Terms of Reference (ToR) and EIS stakeholder/public comment phases.

Additional stakeholders may be identified and consulted during the course of the EIS process for the Project. Consultation may involve newsletters, static displays, site visits, public meetings, and one-on-one discussion with potential stakeholders. Specific advisory body meetings will be conducted during the course of the EIS process for the Project (i.e. during the public comment periods following the submission of the draft Terms of Reference and the draft EIS).

6. Contact Details

6.1 Proponent

For further environmental information concerning the New Lenton Coal Project, please contact:

Kylie Gomez-Gane

Manager – Environment, Policy and Approvals

New Hope Group

Ph: 07 3418 0563

Email: kgomezgane@newhopegroup.com.au

Phillip Bryant

Project Manager - New Lenton

New Hope Group

Ph: 07 3418 0592

Email: pbryant@newhopegroup.com.au

For further information about New Hope Group and New Lenton Coal, please refer to:

www.newhopegroup.com.au

6.2 Project Consultants

URS has been commissioned by NLC for the Project to assist with environmental baseline and engineering studies, and compilation of the EIS. Mine Engineering and other specialist consultants may be engaged as required to assist with specific Project issues.